

JAMES E. HEFFRON

CERTIFIED COPY

SUPREME COURT OF THE STATE OF NEW YORK
EIGHTH JUDICIAL DISTRICT - ASBESTOS LITIGATION

STATE OF NEW YORK
SUPREME COURT: COUNTY OF NIAGARA

ROBERT C. KRIEGER, and
NANCY KRIEGER, his spouse,

Plaintiffs

-vs-

A.C. and S., INC., et al.,

Defendants

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OWENS-ILLINOIS, INC.,
GARLOCK SEALING TECHNOLOGIES f/k/a
GARLOCK, INC.,
NIAGARA INSULATIONS, INC., and
INSULATION DISTRIBUTORS, INC.,

Third-Party Plaintiffs

-vs- Index No. 111155/3

E.I. du PONT de NEMOURS and COMPANY,

Third-Party Defendant

Examination before trial of
JAMES E. HEFFRON, taken pursuant to Notice under
Article 31 of the Civil Practice Law and Rules, at
the law offices of MORRIS & MORRIS, 30 Corporate
Woods, Suite 120, Rochester, New York, taken on
April 17, 2003, commencing at 9:50 a.m. before
VICTORIA SKABRY, Notary Public.

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16
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18
19
20
21
22
23
24
25

WITNESS INDEX

JAMES E. HEFFRON

PAGE

EXAMINATION BY MR. ZUYDHOEK..... 8

EXAMINATION BY MR. COMERFORD..... 255

EXHIBIT INDEX

HEFFRON EXHIBITS

PAGE

1, a CV..... 8

2, a document entitled Worker's Compensation
Claims..... 823, a document regarding product liability
committee minutes..... 1164, Defendant Garlock Inc.'s objections,
Answers and Responses to Plaintiff's
Master Set of Interrogatories and Request
for Production..... 135

1	HEFFRON EXHIBITS (CONT.)	
2		
3	5, a document containing a listing of	
4	styles that Garlock manufactured that	
5	contained asbestos.....	143
6		
7	6, the Hemeon report by the Industrial	
8	Hygiene Foundation.....	179
9		
10	7, a document that was distributed to	
11	Garlock employees who worked in the	
12	manufacturing area	198
13		
14	8, a document entitled Berkeley Occupational	
15	Medicine Associates.....	203
16		
17	9, a document consisting of a timeline that	
18	shows the various gasketing forms that	
19	Garlock manufactures.....	207
20		
21	10, one of a series of ads developed by	
22	Garlock in the late 1980s.....	210
23		
24		
25		

1 MR. ZUYDHOEK: The same stipulations
2 we've had at the prior depositions? They've
3 all been the same.

4 MR. COMERFORD: They have been, but
5 he has the right to read and sign.

6 MR. CONNOR: Do you want to read?
7 It's going to be a long one. Do you want to
8 read and sign? It's up to you.

9 THE WITNESS: I probably should.

10 MR. CONNOR: If you want to, sure.
11 And then what is it, everything reserved but to
12 the form of the question?

13 MR. ZUYDHOEK: Yes.

14

15 (Whereupon, the following stipulations
16 were entered into by all parties.)

17

18 It is hereby stipulated by and among
19 counsel for the respective parties that the
20 oath of the Referee is waived, filing and
21 certification of the transcript are waived, and
22 that all objections, except as to the form of
23 the questions, are reserved until the time of
24 trial.

25

1 JAMES E. HEFFRON, 1624 County Road 4, Geneva,
2 New York, after being duly called and sworn,
3 testified as follows:
4

5 EXAMINATION BY MR. ZUYDHOEK:
6

7 Q. Mr. Heffron, my name is Paul Zuydhoek.
8 I represent du Pont. I'm going to be the first
9 one to question today. If you do not
10 understand any question I ask, if you tell me
11 that, I'll rephrase it so that you do. Is that
12 all right?

13 A. Yes.

14 Q. Mr. Heffron, what is your date of
15 birth?

16 A. 10/25/50.

17 Q. And what is your education?

18 A. I have a high school education. I
19 have an Associate's degree from Finger Lakes
20 Community College, and I have a Bachelor's
21 degree from Roberts Wesleyan.

22 Q. I'm going to mark as the first exhibit
23 this document.

24 (Whereupon, Heffron Exhibit 1, a CV,
25 was then received and marked for

1 identification.)

2 BY MR. ZUYDHOEK:

3 Q. Mr. Heffron, I show you Heffron Number
4 1. Have you seen this document before?

5 A. Yes.

6 Q. And can you tell me what it is?

7 A. It's commonly referred to as a CV. It
8 is a compilation of my professional and
9 educational experience.

10 Q. And I don't know exactly when this was
11 originally prepared, but is it accurate to
12 date?

13 A. No.

14 Q. Okay. And what would you add to it to
15 make it accurate to date?

16 A. From approximately July of 2000 to the
17 present I am the senior marketing manager for
18 industrial gasketing.

19 Q. And that is not reflected -- that
20 position is not reflected on this exhibit?

21 A. That's correct.

22 Q. Okay. Was this exhibit originally
23 prepared by you?

24 A. Yes, I believe so.

25 Q. For what purpose?

1 A. A CV was requested. It was explained
2 to me that that would be again a compilation of
3 my educational experience and my professional
4 experience to act as the company corporate
5 witness for asbestos litigation.

6 Q. Okay. You have been described by your
7 counsel, and I just want to get the exact
8 wording here, as the singular Garlock employee
9 with knowledge of asbestos-related matters.
10 Would you agree with that characterization?

11 A. The singular meaning the most
12 knowledgeable currently employed by the
13 company, I would agree with that, yes.

14 Q. Are you the only current Garlock
15 employee with knowledge of asbestos-related
16 matters?

17 A. I don't know.

18 Q. Do you know of any other current
19 employees who are knowledgeable with respect to
20 asbestos-related matters?

21 A. Not specifically, no.

22 Q. And let me ask you some specific names
23 of people who I believe were at least at one
24 time Garlock employees, and, and I'll ask you
25 some specifics about them. G. Elwood Houghton.

1 Do you recognize that name?

2 A. Elli Houghton. Yes, I know who he is
3 or was.

4 Q. Is he no longer employed by Garlock?

5 A. No, he's no longer employed by
6 Garlock. He's deceased.

7 Q. What was his position at Garlock?

8 A. Well, Mr. Houghton had several
9 depositions, so I'm sure he was able to
10 identify all of his responsibilities better
11 than myself, but I've reviewed them and I did
12 know him, so his responsibilities I think
13 involved primarily textile manufacturing
14 operations in Palmyra, New York, and he would
15 have been a supervisor dealing with the textile
16 manufacturing.

17 Q. And how long has he been -- how long
18 has it been since he died?

19 A. I don't know.

20 Q. Harold Hughes, do you recognize that
21 name?

22 A. Yes, I do.

23 Q. And is he still alive?

24 A. I believe so, yes.

25 Q. Is he still employed by the company?

1 A. No, sir.

2 Q. Do you know where he lives?

3 A. I don't know specifically. I'm
4 certain he lives in this area.

5 Q. Is he -- was he retired from the
6 company?

7 A. Yes, sir.

8 Q. Would he be a pensioner from the
9 company?

10 A. I would think so. He would be a
11 retiree, yes.

12 Q. What was his position with the
13 company?

14 A. Chief chemist I believe is the last
15 position that he had with Garlock.

16 Q. And do you know of any prior positions
17 that he had before becoming chief chemist?

18 A. No, I don't.

19 Q. Do you know how long he was employed
20 by Garlock?

21 A. Not specifically. I'm sure he had
22 many years with the company.

23 Q. Was he there when you started with the
24 company?

25 A. Yes, he was.

1 Q. And that was in 1972?

2 A. Yes, sir.

3 Q. What was his position in 1972? Do you
4 remember?

5 A. I'm not certain. I don't think I had
6 any contact with him when I first started with
7 the company.

8 Q. Clayton Jewett. Is he still alive?

9 A. Yes, he is.

10 Q. Is he still employed by the company?

11 A. No, he is not.

12 Q. Is he retired?

13 A. Yes, he is.

14 Q. Is he a pensioner?

15 A. When you say pensioner, I don't know
16 the details. He's a retiree.

17 Q. Okay. Do you know where he lives?

18 A. He lives in Reno, Nevada, I believe.

19 Q. How long has it been since he's been
20 employed by the company?

21 A. Gosh, I've, I've lost track. It could
22 be as many as fifteen years, but I really am
23 not certain.

24 Q. Do you know that he has testified on
25 behalf of the company since being retired?

1 A. Oh, yes, I believe so, yes.

2 Q. And what was his position at the time
3 of his retirement?

4 A. At the time of his retirement I think
5 he was the marketing manager for industrial
6 gasketing; a title similar to that.

7 Q. Okay.

8 A. I'm not sure of his title is what I'm
9 saying.

10 Q. I'm not going to pronounce this right
11 but let me take a shot. Kanwal Kapur.
12 K-A-P-U-R.

13 A. Dr. Kapur.

14 Q. Dr. Kapur?

15 A. Yes.

16 Q. Is he still employed by the company?

17 A. No.

18 Q. Was he ever employed by the company?

19 A. I don't think he was ever -- when you
20 say employed, he was not a full-time Garlock
21 employee to my recollection. I believe we've
22 answered the physicians who have been employed
23 by Garlock over the years. I'm certain his
24 name is on there. So he would have been like
25 the company physician, but not -- I'm certain

1 that he wasn't full time employed by Garlock.

2 Q. He was a plant physician who would
3 visit the plant for physicals and things of
4 that nature?

5 A. Yes.

6 Q. Would Lee Reichman, R-E-I-C-H-M-A-N,
7 have a similar position?

8 A. The name is not familiar to me, sir.

9 Q. Dr. Kapur, is he still a plant
10 physician?

11 A. No, not with Garlock. I have no idea
12 what he may be doing.

13 Q. Do you know if he still lives in the
14 area?

15 A. I don't.

16 Q. Is there a current plant physician for
17 Garlock?

18 A. I actually don't know. I know we have
19 a, a company nurse but as to whether we have a
20 company physician, I'm unsure.

21 Q. Wilbur Klotz, K-L-O-T-Z?

22 A. Yes.

23 Q. Still employed?

24 A. No, sir.

25 Q. What was his position?

1 A. His last position was probably -- last
2 position with Garlock I would think might have
3 been an OEM salesman.

4 Q. OEM meaning?

5 A. Original equipment manufacturers.

6 Q. And so that would be the nature of the
7 customer that he sold to?

8 A. That's correct.

9 Q. And is he still alive?

10 A. Yes, he is.

11 Q. Do you know where he lives?

12 A. Philadelphia, Pennsylvania.

13 Q. Alexander Kuzmuk, K-U-Z-M-U-K?

14 A. I'm familiar with Alexander, yes.

15 Q. Is he still alive?

16 A. I don't know. I think he may be, but
17 I don't know.

18 Q. Do you know where -- if he is alive
19 where he'd be living?

20 A. No, I don't.

21 Q. How long has he been -- did he retire
22 from the company?

23 A. Yes.

24 Q. When did he retire?

25 A. I don't know. Many years ago.

1 Q. What was his position? Do you
2 remember? Last position?

3 A. Last position, I'm not sure. He --
4 no, I guess I'm not sure.

5 Q. Would it have been in sales or
6 marketing?

7 A. Most of the time he was manufacturing
8 management, so I don't think it would have been
9 sales and marketing.

10 Q. Gordon Leroy?

11 A. Yes.

12 Q. And is he still employed?

13 A. No.

14 Q. Is he retired from the company?

15 A. I don't know if he retired. He left
16 the company. He was -- and I know he was
17 working after he left, so I don't believe he
18 was old enough to retire from the company.

19 Q. Can you give me your best estimate of
20 when he left the company?

21 A. Oh, it was many years ago. It might
22 be twenty years ago.

23 Q. And the last position he held?

24 A. He was in engineering, but I'm not
25 sure of his title.

1 Q. Do you know what company he left your
2 company for?

3 A. They were a reciprocating pump
4 manufacturer, but the name doesn't occur to me
5 right now.

6 Q. Thomas Mills?

7 A. Yes.

8 Q. Still employed?

9 A. Yes.

10 Q. What is his position?

11 A. He would be an area manager which is a
12 sales position.

13 Q. Covering a specific territory?

14 A. Yeah. I'm not sure of his exact
15 territory, but I believe he -- I believe he
16 lives somewhere in the area of Wilmington,
17 South Carolina and operates out of that area.

18 Q. And can you describe generally his
19 responsibilities?

20 A. Well, generally his responsibilities
21 would be calling on end users, and to get
22 Garlock products specified, also to perform
23 training and associated activities. He would
24 also support our independent distributors that
25 exist in the area -- the geographic area that

1 he covers.

2 Q. And do you know how long he worked for
3 the company -- has worked for the company?

4 A. Not specifically. I think he probably
5 began with the company in the late 1970s. I'm
6 not sure if his employment with the company has
7 been continuous throughout that period or not,
8 but he is currently employed by Garlock.

9 Q. Has the sales area that he covered
10 always been that area that you mentioned,
11 Wilmington, South Carolina?

12 A. I don't believe so, no.

13 Q. Can you tell me what prior other areas
14 he covered?

15 A. I believe Tom covered portions of New
16 Jersey, and beyond that I'm not certain, but
17 when I first met him, I believe that he covered
18 that area of the country.

19 Q. Is Walter Rooney still employed?

20 A. No, sir.

21 Q. Dead?

22 A. Quite possibly.

23 Q. When was the last time you remember
24 him being employed?

25 A. I don't believe he was employed by

1 Garlock when I started in 1972.

2 ✓ Q. Was he retired from the company in
3 1972?

4 A. I think so. He may have been -- he
5 may have been an employee of the company in
6 1972. In my position I wouldn't have dealt
7 with him, but I don't recall him being with the
8 company at that point in time, no.

9 Q. Do you remember any of the positions
10 that he held?

11 A. Not specifically, no.

12 Q. Herbert Schaefer?

13 A. Yes.

14 Q. Still employed?

15 A. No.

16 Q. Still alive?

17 A. Yes, I believe so.

18 Q. Do you know where he lives; what area?

19 A. I believe he lives in Florida.

20 Q. Would you have an estimate of his age?

21 A. I would think that Mr. Schaefer would
22 be in his '70s, perhaps late '70s. I couldn't
23 guess beyond that.

24 Q. What position did he hold with the
25 company when he was employed?

1 A. I'm sure he had many positions. When
2 I first met him, I believe he was -- he had
3 manufacturing responsibility but perhaps not.
4 I'm certain he spent time in sales or
5 marketing, as well.

6 Q. George Townsend?

7 A. Yes.

8 Q. Still employed?

9 A. No.

10 Q. Still alive?

11 A. Yes.

12 Q. Area where he lives?

13 A. Florida.

14 Q. How long has he been retired?

15 A. Oh, gosh, probably since the late
16 1980s.

17 Q. Last position held?

18 A. I'm not sure -- I would think
19 president of Garlock.

20 Q. Your estimate of his age?

21 A. I don't know.

22 Q. Roy Whittaker?

23 A. Yes.

24 Q. Still alive?

25 A. Yes.

1 Q. Still employed?

2 A. No.

3 Q. How long has he been retired?

4 A. I think he retired in 1995.

5 Q. Do you know where he lives?

6 A. He lives in this area. I can't tell
7 you specifically where, no. Probably the
8 Canandaigua area.

9 Q. What was his last position with the
10 company?

11 A. Probably a title something like
12 director of engineering, and he also had
13 quality responsibilities, so I'm not sure how
14 the title read specifically. Director of
15 engineering for industrial gasketing.

16 Q. Was he employed in 1992 when you
17 started with Garlock?

18 A. 1972?

19 Q. 1972.

20 A. Yes, he was.

21 Q. What was his position in 1972?

22 A. I don't know specifically. It might
23 very well have had something to do with
24 quality. Much of his career was spent in
25 quality.

1 Q. Are you aware of any other current
2 employees of Garlock with knowledge of
3 asbestos-related matters?

4 A. I'm not certain what knowledge of
5 asbestos-related matters might encompass.
6 Certainly there are employees who currently
7 work for the company in sales, for instance,
8 that sold products that contained asbestos, but
9 their level of knowledge, I have no idea what
10 their level of knowledge is.

11 Q. And would you give me the names of
12 those people, please?

13 A. Those people?

14 Q. Current employees who sold
15 asbestos-related products.

16 A. Well, asbestos -- compressed asbestos
17 sheet was not discontinued until December 31st
18 of 2000, so potentially anyone who was in sales
19 at that time sold product. I don't know what
20 their level of knowledge would be.

21 Q. Okay. Let me take you back a ways.
22 Let's go back to 1955 to 1960. Are you aware
23 of any current employees at Garlock who would
24 have been employed at that time by Garlock?

25 A. No.

1 Q. Are you able to say there are none?

2 A. Time frame again, sir?

3 Q. 1955 to 1960.

4 A. And would it be any employees, sir?

5 Q. Are you aware of any employees of
6 Garlock still employed who would have been
7 employed at that time?

8 A. No, I'm not aware of any employee.

9 Q. Okay. Let's talk a little bit about
10 your CV and job history at Garlock. If you
11 need to refer to Exhibit 1, please do.

12 You started in 1972 which I take it
13 would be the last reference on the exhibit.

14 A. Yes, sir.

15 Q. Okay. Prior to, prior to joining
16 Garlock were you employed?

17 A. Prior to joining Garlock I was in
18 college, but yes, I was employed.

19 Q. Okay. So since leaving college has
20 Garlock been your only full-time job?

21 A. No. I believe after I graduated from
22 college I continued to be employed for -- by
23 Mobil Chemical, that was the name at the time,
24 Mobil Plastics until January of '72. So
25 probably about a six-month period or something

1 like that.

2 Q. And what did you do for Mobil
3 Plastics?

4 A. I worked in the production line
5 producing plastic extrusion.

6 Q. Who hired you to work for Garlock?

7 A. I believe it would be Charlie Terr,
8 Charles Terr. T-E-R-R I think would be the
9 spelling.

10 Q. I presume that Mr. Terr no longer
11 works for the company?

12 A. He does not.

13 Q. Is he still alive?

14 A. I believe so.

15 Q. Do you know where he lives?

16 A. Wisconsin, I believe.

17 Q. Okay. And the position that you were
18 hired for, it's a little bit hard to read this,
19 is it MHO?

20 A. MRO, sales correspondent.

21 Q. Okay. And is that an accurate
22 description of what your, your duties were?

23 A. Yes.

24 Q. Would that have been -- you said
25 responsible for all product lines.

1 A. Yes.

2 ✓ Q. And would you delineate what those
3 product lines were?

4 A. Garlock used to refer to the products
5 it manufactured by product line. It doesn't
6 tend to do that anymore.

7 Product line one would be hydraulic
8 seals. Product line two would be oil seals,
9 lip-type seals for oil service. Product line
10 three would be gasketing, both sheet and head
11 gaskets. Product line four would be
12 compression packing also known as braided
13 packing.

14 Product line five would be various
15 rubber products; not rubber sheet, but molded
16 rubber products, primarily sold to an OEM
17 market. Product line six was I believe Teflon
18 products. Product line seven would be
19 mechanical seals. I had very little
20 involvement in mechanical seals. Product line
21 nine -- I'm not sure if there ever was a
22 product line eight.

23 Q. Okay.

24 A. Product line nine was and is expansion
25 joints, flexible rubber connectors that go

1 between pipe flanges. There were a few other
2 products that were sold at that time.

3 Garlock had an industrial paint line
4 which it sold some years later. I believe
5 there was a, a coatings -- not paint coatings
6 but a metallic or plasma-type coatings that I
7 had almost no dealings with, but I think it
8 would be accurate to say I had some.

9 Q. Did some of those product lines that
10 you delineated contain asbestos?

11 A. Yes.

12 Q. Which ones?

13 A. In 1972 hydraulics product line one
14 would have contained asbestos. Product line
15 two would not. Product line three would have
16 included asbestos products. Product line four
17 would have included asbestos-containing
18 products.

19 I'm not certain that I can say that
20 there were no products in product line five
21 that had asbestos, but it would have been very
22 unusual. Product line six, if I've accurately
23 portrayed it as Teflon products, would not have
24 any asbestos in it. And product line nine,
25 probably in 1972 there may have been some

1 asbestos-containing expansion joints, but again
2 that would be relatively unusual.

3 Q. You may have skipped inadvertently
4 product line seven, mechanical seals.

5 A. Mechanical seals would not contain
6 asbestos.

7 Q. When you started with the company in
8 1972 how did you become familiar with the
9 product lines?

10 A. Well, there would be a variety of
11 methods. We had a, a training program. I'm
12 not sure if I can say it was a formal training
13 program, but we had a training program. And
14 each of the product lines met with us and
15 conducted training over a multi-week period.

16 I think one night a week we would have
17 had training one night each -- with each
18 product line. The course -- when I started
19 with the company there was pretty extensively
20 published information we called product
21 manuals. I think that's the correct name, and
22 I think they had last been updated in 1971.

23 So the people that I trained under
24 believed very strongly that the information
25 that I needed to understand about our product

1 was published in the product manuals, and so we
2 were encouraged and expected to review those
3 product manuals, and to seek out information
4 when we had a question first in those.

5 Of course, Garlock published various
6 catalogs and brochures which we used as part of
7 your day-to-day job which wouldn't be a formal
8 method of training, but would be training. And
9 probably some other types of training, but that
10 was --

11 Q. Were the -- you were not the only
12 salesperson that was hired at this time? There
13 were other people that were going through the
14 program with you?

15 A. Yes, there were.

16 Q. And how many of those were there?

17 A. I think there may have been three or
18 four new employees all hired at the same time
19 in that time frame.

20 Q. Are any of them still employed?

21 A. No.

22 Q. And at that time in 1972 where did you
23 get your training?

24 A. Well, some of the training took place
25 in Philadelphia. We had a warehouse in

1 Philadelphia that was closing down, and I
2 traveled to Philadelphia and spent, I believe,
3 approximately three weeks there training with
4 the people who were doing the job at that point
5 in time, some of whom did transfer to Palmyra,
6 a small group of two or three people. And I'm
7 sorry.

8 Q. And -- okay. And the remainder of the
9 time you spent in training would have been in
10 Palmyra?

11 A. Yes.

12 Q. Okay. And was your home in Palmyra or
13 near Palmyra at that time?

14 A. It was near Palmyra, yes.

15 Q. Have you continuously lived in the
16 Palmyra area since starting with the company?

17 A. No.

18 Q. At what points in time in your career
19 were you outside the Palmyra area?

20 A. Well, if by Palmyra area if you mean
21 Upstate New York, if you mean within driving
22 distance of the plant --

23 Q. You had an office of some sort in the
24 plant or telephone number or telephone
25 extension in the plant?

1 A. Yes.

2 Q. Okay. And there was a period of time
3 when you were elsewhere?

4 A. Yes.

5 Q. And what periods of time were they
6 and, and where were you?

7 A. The only time that I was employed by
8 the company outside of -- without a desk, an
9 office in Palmyra would have been, as the CV
10 indicates, from approximately the spring of
11 1981 until August of 1982 when I was a
12 southwest regional manager and I was living in
13 Houston, Texas.

14 Q. Okay. And let's go back to your
15 training program. The product manuals, were
16 you given your own copies of those?

17 A. I would think so, yes. I don't recall
18 but I'm certain that I had my own copy.

19 Q. Do you still have them?

20 A. No.

21 Q. Were they periodically updated?

22 A. Well, Garlock went from -- I'm not
23 certain. Garlock went from a centralized form
24 of management when I was first hired, to a, a
25 product line philosophy in 1975 or thereabouts.

1 So I don't believe that the product manual
2 survived that transition, and I'm not certain
3 that they were ever updated after that. I
4 don't recall ever seeing an updated copy beyond
5 1971.

6 Q. Do you know if the 1971 product manual
7 still exists?

8 A. I think so.

9 Q. If they exist, where would they be?

10 A. Well, if they exist, I'm quite certain
11 that Garrison Litigation may have a copy or
12 perhaps there is one in -- well, I think
13 there's -- there may be one there.

14 Q. What is Garrison Litigation?

15 A. Garrison Litigation is a wholly-owned
16 subsidiary of EnPro that manages our asbestos
17 litigation.

18 Q. What is EnPro?

19 A. EnPro is a parent company of Garlock
20 Sealing Technologies.

21 Q. So there's a separate affiliated
22 company that manages the asbestos litigation?

23 A. I'm not sure what you mean by separate
24 affiliated, but my understanding is they are a
25 wholly-owned subsidiary of -- probably of

1 EnPro.

2 Q. Do you know why that structure exists?

3 A. I know that the -- I know that they're
4 there to manage our asbestos litigation.

5 Q. Do you know if there would be product
6 manuals that would go back to the time period
7 1955 to 1960?

8 A. Not that I've ever seen.

9 Q. Have they been looked for?

10 A. Well, I routinely look for
11 information, so I would say that I'm pretty
12 familiar with most all information that we
13 have. I never recall in my entire tenure with
14 the company having seen a manual that went past
15 1971.

16 And as to specifically whether I have
17 looked for them, I guess I can't honestly say
18 that I specifically looked other than I've
19 looked through all the information we have and
20 have never seen one.

21 Q. If they exist, do you know where they
22 would be?

23 A. No, I don't.

24 Q. So as far as you can tell right now,
25 the, the earliest product manuals that you

1 would have would be in 1971?

2 A. Yes, sir.

3 Q. You also mentioned catalogs and
4 brochures. I take it to some extent they would
5 describe the products.

6 A. Yes, they would.

7 Q. And do you know if catalogues and
8 brochures prior to 1971 exist?

9 A. Yes, they do.

10 Q. Where would they be?

11 A. In our -- perhaps in our public
12 warehouse, but also I'm sure Garrison
13 Litigation has either the original or copies of
14 those old catalogs such as they exist.

15 Q. Can you tell me -- describe the
16 difference between a catalog and brochure and a
17 product manual? What would be the substantive
18 difference in a general way between those
19 documents?

20 A. In a very general way a brochure, to
21 me, suggests a fairly limited, you know --
22 perhaps a two-page, perhaps a multipage
23 document that is primarily used to provide
24 information on products that you offer.

25 A catalog would be -- certainly the

1 way they have been published in the past would
2 attempt to be a complete source of information
3 for all products that were offered at that time
4 by Garlock, typical information that a customer
5 would want; what is the product, what are the
6 specifications of the product, what materials,
7 medias, fluids and gases would that product be
8 suitable for use with or the base materials in
9 that product, those type of -- those -- that
10 type of information as well as -- well, that,
11 and perhaps some other technical data.

12 A product manual was a document that
13 was for internal use only that assisted people
14 probably at various levels, but certainly in
15 inside sales in understanding the proper code
16 to apply so that the order could be processed,
17 the various forms that the material was
18 available in, if it was available as a butt
19 cut, ring or double-cut ring, any critical
20 information about tolerances that the product
21 was manufactured to; perhaps the finishes of
22 the equipment that it was designed to go in and
23 information such as that.

24 Q. Is it a fair characterization that
25 brochures and catalogs were intended for

1 customers, and product manuals were intended
2 for internal use?

3 A. I believe that's fair, yes, sir.

4 Q. Would there have been in the 1971
5 product manual any specific reference to
6 asbestos as it was used in the product lines?

7 A. Specific reference. If the, if the
8 product in the product manual contained
9 asbestos, it would have been referenced in the
10 manual, if you mean that as an example.

11 Q. Because it was a part of the product
12 itself?

13 A. Yes, sir.

14 Q. Would there have been any specific
15 reference in terms of dealing with health
16 aspects of asbestos in the product manuals in
17 1971?

18 A. I certainly wouldn't expect so, no,
19 sir.

20 Q. Okay. How about the catalogs and
21 brochures in 1971? Would there have been any
22 health references to asbestos in the catalogs
23 and brochures?

24 A. I wouldn't think so, no, sir.

25 Q. And would that be an accurate answer

1 for any of the prior catalogs and brochures
2 that you have seen before 1971?

3 A. What would be?

4 Q. Okay. Would there have been any
5 specific health reference to asbestos in any
6 catalog or brochure prior to 1971?

7 A. I don't believe so, no.

8 Q. And you've actually seen some of
9 those?

10 A. Absolutely.

11 Q. And you know from having seen them
12 that there are no such references?

13 A. I believe so, yes.

14 Q. Would there have been any type of
15 warnings at all in the catalogs and brochures
16 in 1971 of any kind?

17 MR. CONNOR: You're not limiting it
18 to asbestos?

19 MR. ZUYDHOEK: No. Any warnings at
20 all in the catalogs or brochures intended for
21 customers of any kind.

22 THE WITNESS: Well, warnings has kind
23 of taken on a different meaning to me since my
24 involvement in asbestos litigation, but
25 certainly there is information in the catalog

1 that might have -- I don't know if I'd
2 characterize it as a warning, but would talk
3 about the proper way to install a product and
4 check for -- to make sure that the sealing
5 surface was proper and so forth. I wouldn't
6 characterize those as warnings, however, but
7 you might.

8 BY MR. ZUYDHOEK:

9 Q. Well, when you say warnings has taken
10 on a different meaning for you, what is your
11 current meaning of warning?

12 A. I don't know if I have a meaning for
13 it, but it tends to refer to things such as
14 warning labels or caution labels, so that's the
15 context when I generally think about it.

16 Q. Okay. In 1971 in the catalogs or
17 brochures were there any warning labels or
18 caution labels at all?

19 A. Not that I recall, sir.

20 Q. And would that be true of anything
21 that you have seen prior to that time, as well?

22 A. Yes.

23 Q. And the products themselves are --
24 were contained in some kind of packaging when
25 they were delivered to the customer?

1 A. Yes.

2 Q. Would there have been any warnings at
3 all on the outside of any of those packaging
4 products -- of the products?

5 MR. CONNOR: What time frame are we
6 talking about?

7 MR. ZUYDHOEK: 1971 when you started
8 with the company.

9 THE WITNESS: I don't believe so.

10 BY MR. ZUYDHOEK:

11 Q. And would that be true for any
12 packaging that you're familiar with prior to
13 1972 when you started with the company?

14 A. Yes, sir.

15 Q. And you've actually looked at some of
16 the earlier packaging and you know for a fact
17 that there are no warnings on that packaging?

18 A. Well, there is no packaging that I'm
19 aware of that exists prior to my employment
20 with the company. I'm not sure what packaging
21 still exists, but certainly the packaging
22 tended to remain pretty consistent over the
23 years or for a long period of time.

24 Q. What types of statements would be on
25 the packaging when you first started selling,

1 selling this -- these product lines other than
2 I assume you'd have an identification of
3 Garlock of some sort?

4 A. Well, typically packaging would vary
5 from one type of product to the next, but many
6 products were shipped in a box and the box
7 generally would have, of course, the Garlock
8 name and other logo, and often would have -- if
9 the, if the packaging was specific to that
10 product, it would have some information on the
11 product itself in terms of the temperature and
12 pressure rating of the product, perhaps a very
13 limited explanation of the types of equipment
14 that it might go into, et cetera.

15 Q. Okay. Let's talk about the product
16 lines where you mentioned there was some
17 asbestos. Hydraulic seals. Would there have
18 been instructions for use of hydraulic seals
19 enclosed with the package?

20 A. I'm not certain.

21 Q. Okay. Would there have been -- there
22 would have been a label of some sort on the
23 outside of the package?

24 A. Generally, yes.

25 Q. Would the seals inside a box of

1 hydraulic seals, would they be packaged
2 separately?

3 MR. CONNOR: I'm not sure. You might
4 want to rephrase. Object to the form.

5 BY MR. ZUYDHOEK:

6 Q. How would, how would hydraulic seals
7 be shipped to a customer? What form would the
8 shipment take?

9 A. I believe there would be a variety of
10 forms that could take place depending on the
11 product and the size of the product. If the
12 product -- most shipments -- when I began with
13 the company in 1972 most of our customers were
14 independent distributors, and they were not
15 ordering -- generally speaking they weren't
16 ordering a single product at a time.

17 Generally, generally they would place
18 an order that covered a variety of items
19 perhaps a cross product line, perhaps within a
20 product line, and of course we would try to
21 consolidate and ship the material in the most
22 sensible method, which could be as many
23 different products as we could fit inside a
24 large shipping container or box.

25 So hydraulic seals were often sold as

1 Chevron sets which would be a top and bottom
2 adaptor and a varying number of center rings or
3 Chevron rings, and they would be held
4 together -- I'm not sure if we were using
5 plastic ties at that point in time or not.
6 Then they might have been placed in the
7 situation I'm describing them. They might be
8 placed in a box with paper around it or wrapped
9 in paper.

10 So there could be in one box a number
11 of different sizes. Other sets were quite
12 large. And might have been in a box all by
13 themselves or perhaps -- I'm not certain of
14 this, but perhaps shipped without being in a
15 box, but I can't tell you that for certain.

16 Q. How many distributors were there in
17 1972 when you started with the company?

18 A. I really don't know.

19 Q. Was there a specific distributor whose
20 territory would have included Western New York?

21 A. Yes.

22 Q. And was that the only distributor in
23 Western New York?

24 A. I don't know. I don't believe so. I
25 think even in 1972 there may have been more

1 than one distributor covering Western New York.

2 ✓ Q. Okay. Who was the -- what are the
3 names of the distributors covering Western New
4 York that you can remember in 1972?

5 A. In 1972 I can remember Queen City
6 Rubber.

7 Q. Any others?

8 A. Well, there have been other
9 distributors who -- we had a classification
10 where we had distributors that we considered
11 general line. They handled all of our
12 products. And other distributors who may have
13 only offered certain products.

14 So there may have been other
15 distributors handling certain products whose
16 names are not familiar to me. I believe
17 Buffalo Rubber may have been a distributor, but
18 I'm not certain of that.

19 Q. Is Queen City in Buffalo?

20 A. The Greater Buffalo area, yes.

21 Q. Do you know when you started in 1972
22 how long this distributor network had been in
23 use by Garlock?

24 A. Well, I think it's generally correct
25 to say that in the late '60s, perhaps 1968,

1 Garlock began to go from direct sales to sales
2 through independent distribution. By the time
3 I started in 1972, that activity was -- that
4 transition was complete.

5 Q. Okay. And between 1955 and 1960,
6 would it have been direct sales as opposed to
7 through distributors?

8 A. Yes, sir.

9 Q. Do you know who would have been --
10 would there have been a specific person inside
11 of Garlock assigned to the Western New York
12 area for sales between 1955 and 1960?

13 A. I don't know if that individual would
14 have been assigned to the western area of New
15 York exclusively, but I'm certain that there
16 would have been an individual who provided
17 coverage to that area.

18 Q. Do you happen to know who it would
19 have been?

20 A. No, I don't.

21 Q. Is there any way to find that out?

22 A. There are no records that go back that
23 far, so I believe no.

24 Q. When you say no records that go back
25 that far, you mean there are no company

1 documents at all between 1955 and 1960?

2 A. I'm not sure that I could say that
3 because there are documents that I review
4 periodically that could be in that time frame.
5 I'm not -- I don't recall anything
6 specifically, but I'm saying in terms of sales
7 records, the oldest sales records go back to
8 1974.

9 Q. Okay. And so you are able to say
10 right now that there are no sales records
11 existing of Garlock between 1955 and 1960?

12 A. That's correct.

13 Q. And you've specifically looked for
14 sales records in that time frame and
15 ascertained that there are none?

16 A. I've looked for sales records. I
17 wouldn't say that when I searched for the
18 records that I was necessarily looking for '55
19 to '60, but part of my responsibilities have
20 been to familiarize myself with the records
21 that exist, particularly sales records, and
22 what the oldest such records are, and the
23 oldest such records go back to 1974.

24 Q. When you say part of your
25 responsibilities, you mean part of your

1 responsibilities as a company witness?

2 A. Yes, sir.

3 Q. In asbestos litigations?

4 A. Yes, sir.

5 Q. Let's go back to packaging the other
6 product lines. Gaskets product line number
7 three. How would they have been packaged when
8 you started with the company?

9 A. Well, in all cases I guess I want to
10 say my memory as far as specific detail on how
11 the product was shipped in 1972 probably is not
12 as accurate as I would like it to be or as
13 detailed, but certainly --

14 Q. I remember everything that happened in
15 1972.

16 A. Yeah, but in 1972 if it was -- I think
17 you said gaskets. So if it was a gasket,
18 anything from being shipped again in a box, you
19 know, a cardboard box along with other gaskets,
20 perhaps along with other products because again
21 we were trying to, to -- the word we used was
22 consolidate and consolidate our shipments to
23 the distributors and try to get them the best
24 freight possible by combining it with whatever
25 else was on the order or whatever else from

1 other orders that was due to ship. But it
2 would also be -- I would think they would
3 almost always be in a box.

4 Q. And sheet gaskets, would they be part
5 of product line number three?

6 A. Yes, sir.

7 Q. And would they be in a box, as well?

8 A. Well, it depends. No. Generally
9 sheet gaskets, product line three includes
10 rubber material, both homogeneous and fabric
11 reinforced. They would typically be shipped in
12 a roll. They would be considered rolled goods.

13 Some sizes and thicknesses of some
14 compressed asbestos sheet could be rolled and
15 shipped in a roll form. Generally the product
16 would be in a flat form and shipped perhaps on
17 a pallet, a wooden pallet.

18 Q. When shipped on a pallet, would they
19 be wrapped in some kind of container?

20 A. In 1972, I, I honestly don't know. I
21 certainly recall in later years when plastic
22 overpacking became popular seeing skids wrapped
23 in plastic. I don't recall in 1972 what may
24 have been done.

25 Q. Okay. The sheet -- the rolled sheet

1 itself, would it have labels on it on the
2 outside of the, the roll?

3 A. The sheet -- if you're referring --
4 there were several rolls. One would be a
5 rolled rubber good, but if -- regardless of
6 whether it was a rolled rubber good or a rolled
7 sheet of compressed asbestos, our products
8 typically were branded, so it would have
9 information -- I'm certain that the detail on
10 the brand name may have changed over the years,
11 but certainly it would have Garlock's name, the
12 style number, the thickness of material.

13 Currently it ships -- other gasketing
14 material ships with the quarter of production,
15 the quarter of the year in which the production
16 occurred, but -- so I think you asked if there
17 was a label on there. I don't believe there
18 would be a label on the product, if we're
19 talking about 1972. But the product would be
20 branded on its outside surface.

21 Q. And, and rolled rubber goods, they
22 would have no asbestos in it?

23 A. Not to my knowledge, no, don't recall.

24 Q. And the other type would be
25 asbestos-containing rolled sheet gaskets?

1 A. Could be non-asbestos. We make
2 compressed asbestos gasketing, or we did.
3 There were other sheet goods that were not
4 rubber that were sold in rolls or could have
5 been shipped in rolls that were not pure
6 rubber, nor were they -- did they contain
7 asbestos. They were vegetable fiber, cork
8 fiber are two typical ways of referring to that
9 product.

10 Q. And do you know why a customer would
11 want one type rather than another?

12 A. Well, the customer, in fact, is the
13 one that makes the decision typically on what
14 they purchase. All products have
15 specifications that are published for them,
16 whether it's the amount of surface speed that
17 they can -- they're suitable for or the media
18 that they're resistant to, the types of
19 equipment, rotating versus reciprocating, for
20 instance, so the customer would choose a
21 product based on their application and their
22 needs.

23 Q. And part of being a salesman would be
24 to anticipate what the needs might be depending
25 on who the customer was?

1 A. When you say anticipate the needs, if
2 you mean anticipate what product they needed,
3 perhaps not. But certainly part of our -- any
4 salesman's responsibility is to try to
5 understand what the customer's needs are in
6 general in a generalized manner or specific to
7 an application should they ask for our input.

8 Q. What type of application would call
9 for asbestos sheet gaskets as opposed to rubber
10 sheet gaskets?

11 A. Well, I can't give you -- we didn't
12 sell it specific for applications. We sold our
13 products based on the temperature, the pressure
14 capability, perhaps the general media
15 resistance.

16 Again, as we look at the products,
17 they're designed for various types of
18 applications, so in rotary applications,
19 surface speed would be a consideration, so --
20 but asbestos -- I can say asbestos is obviously
21 a very, very versatile product, so it, it
22 covered a wide range of temperature
23 capabilities, a wide range of fluid resistance
24 and was used for a lot of, a lot of different
25 applications but not sold just for one specific

1 application.

2 Q. And how would the expense compare
3 between a roll of asbestos sheet gaskets and a
4 roll of rubber sheet gaskets? Which would be
5 more expensive?

6 A. I don't honestly know. I think the --
7 within all of the product groups, Garlock tried
8 to make a wide range of products available, so
9 we would make commercial grade rubber
10 products -- utility grade might be another word
11 that would be used -- all the way up to very
12 premium grade materials of silicone or viton.

13 Likewise with compressed gasketing
14 including compressed asbestos there was a --
15 product was offered in a range from commercial
16 grade to, to more premium grades. So I don't
17 think I can really do a very accurate portrayal
18 of one price level versus the other.

19 Q. I take it the premium grade would be
20 more expensive.

21 A. Yes, I would think so.

22 Q. And did you say the commercial grade?

23 A. Commercial or utility grade. Both
24 terms have been used.

25 Q. And that would be the least expensive?

1 A. Yes, sir.

2 Q. And it would vary? Depending as
3 between asbestos and rubber you couldn't say
4 one was more expensive than the other?

5 A. No, I couldn't, no.

6 Q. I take it part of your sales training
7 was to, to know pricing?

8 A. Yes, sir.

9 Q. And to deal with customers?

10 A. Yes, sir.

11 Q. And in fact, after you were trained as
12 a salesperson you did deal with customers?

13 A. Yes, I did.

14 Q. Did you ever deal with du Pont?

15 A. I believe so, yes.

16 Q. Did you ever deal with du Pont in
17 Niagara Falls?

18 A. I don't specifically recall. I
19 believe I have been to that plant, but it would
20 be many years ago, and I don't specifically
21 recall it.

22 Q. And can you tell me what your
23 responsibilities were when you went to the
24 plant?

25 A. Well, if I was there, it would have

1 been in my capacity as MRO salesman from 1976
2 to 1979, so Queen City Rubber was one of my
3 distributors.

4 Often I would call on accounts at the
5 request of our distribution, although I
6 obviously called on customers by myself. Du
7 Pont is a name, of course, that's very familiar
8 to me because they have been a supplier to
9 Garlock and a -- they're a very well-known
10 company throughout the world so --

11 Q. And what is it that du Pont supplied
12 to Garlock?

13 A. Elastomer, the rubber compound or the
14 raw elastomer powders and so forth that are
15 used both in the rubber sheet, the homogeneous
16 rubber as well as the, the elastomers that are
17 used as binders in compressed gasketing.

18 Certainly they have sold us over the
19 years Teflon resin, I'm sure, at various types
20 and grades. I'm not sure what their
21 terminology is, but what I would call Teflon
22 suspensoid or something like that. It would be
23 Teflon that is in solution that is used as a
24 lubricant that's added to braided packing.

25 Those are a few I can think of. There

1 may be other chemicals and so forth that
2 they've supplied that I'm not familiar with.

3 Q. Okay. Have you specifically looked to
4 ascertain what it was that du Pont supplied?

5 A. No, I have not specifically looked.

6 Q. You just know that based on your
7 experience in sales?

8 A. And in customer service, and in
9 manufacturing and my other responsibilities, I
10 understand that du Pont -- I recognize them as
11 a supplier and someone that we have purchased
12 product from.

13 Q. In your work with Garlock, have you
14 also dealt with suppliers specifically?

15 A. Yes, not as extensively but certainly
16 I've dealt with suppliers, yes, sir.

17 Q. Let's talk first about what you recall
18 about dealing with du Pont as a customer as
19 opposed to a supplier. Can you describe the
20 Niagara Falls plant of du Pont?

21 A. No, I cannot.

22 Q. So you know no recollection of, of
23 anything about the facility itself?

24 A. I really don't, no, sir.

25 Q. Can you describe any du Pont plant

1 that you have visited?

2 A. When you say describe it, for
3 instance, there is a plant called the
4 Washington Works I believe which is in West
5 Virginia that I probably have been at some time
6 in the last twenty years. I know that they
7 make Teflon.

8 Beyond that, du Pont typically doesn't
9 escort you throughout their plant to show you
10 everything that they're doing. You generally
11 meet in a purchasing area or somewhere else
12 that's not generally, at least to my
13 recollection, out in the plant itself.

14 Q. Did you visit the West Virginia plant
15 for the purpose of du Pont as a customer or the
16 purpose of du Pont as a supplier?

17 A. Du Pont as a customer.

18 Q. Okay. How about the, the du Pont
19 plant in Tonawanda, New York? Did you ever
20 visit that?

21 A. I think so, yes, sir.

22 Q. Can you describe it?

23 A. Well, I'm not sure which one I'm
24 describing now, but there was a du Pont plant
25 in the Greater Buffalo area that I recall at

1 that time making a -- like an artificial
2 marble.

3 Q. Corian?

4 A. Sounds right, and I'm not sure if
5 that's Tonawanda, if I've got that correct or
6 not, but that would be a plant that I
7 specifically remember -- I remember calling
8 there. I don't remember the details of the
9 call, but I do remember calling there.

10 Q. In the vicinity of the General Motors
11 plant?

12 A. That sounds right.

13 Q. And you have a specific recollection
14 of, of calling at that plant?

15 A. Well, I remember the, I didn't
16 remember the name but I remembered the Corian
17 material, yes.

18 Q. Okay. And is that -- would you
19 distinguish that from a lack of a recollection
20 of the details of the Niagara Falls plant?

21 A. Would I distinguish it --

22 Q. You said you specifically remember
23 going to the plant where they manufactured
24 Corian. That's not the Niagara Falls plant.
25 Can you be as specific with respect to any

1 visitation to the Niagara Falls plant?

2 A. No, I can't.

3 Q. Okay. Do you remember the name of any
4 individual at the Niagara Falls plant who
5 worked for du Pont that you dealt with?

6 A. No, sir.

7 Q. Do you remember the name of any
8 individual at the Corian plant that you dealt
9 with?

10 A. No, sir.

11 Q. Do you remember the name of any
12 individual at du Pont at the West Virginia
13 plant that you dealt with?

14 A. No, sir.

15 Q. Can you give me the name of any
16 individual that you dealt with at du Pont on
17 any basis right now other than me?

18 A. Well, Jim Alexander called me last
19 week, or this week actually. No, it was last
20 week Friday. There's a -- Arnie Francis is a
21 name that I remember.

22 Q. Who's Jim Alexander?

23 A. Well, he has something to do with
24 du Pont elastomers, and I met him previously in
25 the fluid sealing association. But the

1 question that he had was not in my area and I
2 referred him to someone else.

3 Arnie Francis I recall from meeting
4 with him. I think I probably met with him as
5 in a supplier relationship, du Pont to Garlock.

6 There are several individuals whose
7 names I don't remember right now. Tom was the
8 gentleman's first name who handled the Kevlar
9 products for you and several other individuals
10 that I've dealt with on either elastomers,
11 probably not, you know -- my dealing generally
12 would not have been in depth with them as a
13 supplier, but perhaps brought in when
14 engineering was meeting with them or purchasing
15 was meeting with them.

16 And Ludman was the -- John Ludman or
17 something like that is -- I'm not sure of the
18 spelling -- used to be responsible for
19 du Pont's specifications, the SU specifications
20 is the best way I can come up with it. It
21 describes the various materials generically
22 that are approved by du Pont and specifically
23 lists the suppliers whose products meet those
24 specifications.

25 There are other individuals over the

1 years, but I don't recall their names.

2 Q. Are you talking -- with respect to all
3 of these individuals are you talking in terms
4 of the supplier relationship of du Pont or are
5 you also talking about the customer
6 relationship?

7 A. Both.

8 Q. Okay. And who would be the
9 individuals who you dealt with as on the
10 customer side with du Pont as a customer?

11 A. Tom Flynn -- with du Pont as a
12 customer. I'm sorry. John Ludman. He may be
13 retired, but only recently I would think in the
14 last five years or so.

15 Q. Where was he located?

16 A. Wilmington, I believe.

17 Q. And do you remember the product that
18 you would be talking to Mr. Ludman about?

19 A. I think I've talked to him in the past
20 probably, probably about compression packing;
21 what we call compression packing, product line
22 four.

23 There are other people I'm sure over
24 the years, but generally the salesman in that
25 area has the intimate knowledge with the

1 customer often in the capacities that I was in.
2 For instance, in marketing or in management I
3 would be brought in to assist with some
4 function, some call on the customer, but the,
5 the real relationship and the personal
6 knowledge existed either with our distributor
7 or with our sales representative.

8 Q. And when you were talking to
9 Mr. Ludman, were you talking to him about
10 specific purchases or some other aspect?

11 A. I think it would be probably a very
12 generalized conversation about products that
13 Garlock manufactured that -- and their status
14 in terms of approval by du Pont to the
15 specifications I referred to earlier.

16 Q. As opposed -- he wasn't actually
17 purchasing individual items but he was looking
18 for specification information so that Garlock
19 could be specified by du Pont?

20 A. I would say that would be correct,
21 yes, sir.

22 Q. Let's go back to packaging now and
23 talk about product line four. Compression
24 packing and you mentioned braid. What does
25 braided mean?

1 A. Braided packing is -- there's a number
2 of terms that are used or have been used in the
3 past fairly extensively throughout the
4 industry. The compression packing really kind
5 of describes the way braided packing works.

6 It works by being compressed by the
7 gland follower. Braided packing tends to
8 describe the method that's used to manufacture
9 the product which is to place spools of
10 material on a braiding machine. And as the
11 machine turns, the spools spin and braids the
12 product in some respects similar to the method
13 a woman would use to braid her hair but
14 obviously a little more sophisticated than
15 that.

16 Q. For example, interweaving strands
17 would be the braiding?

18 A. That's a, that's a type of terminology
19 that's used, yes. Interweaving tends to
20 suggest a more -- a stronger but flexible
21 braid. We refer to it as interlock -- I mean
22 as Lattice Braid. That's the Garlock trade
23 name, and I believe that would be analogous to
24 interlocking.

25 Q. Now, what would a customer use

1 compression packing or braided product for?

2 A. The most typical applications would be
3 to seal the stuffing box area of a centrifugal
4 or rotary pump. It would also be used
5 extensively to seal a stuffing box area of a
6 valve, sealing against the stem of the valve
7 and the ID of the stuffing box. There are
8 other applications, but those would be the, the
9 vast majority of the applications.

10 Q. And how would the product line four be
11 packaged?

12 A. Well, it was available in a variety of
13 materials and constructions. And even though
14 we generally referred to it as braided packing,
15 all the packings were not braided.

16 For instance, even today we sell
17 flexible graphite die form rings that are made
18 out of the pure graphite as a compression
19 packing item, but it's not a braided packing.

20 Likewise we sold fabric and rubber
21 materials that are slit essentially from a slab
22 of fabric and rubber. So depending on the type
23 of product we're talking about, generally since
24 most of the product was braided, it would be
25 placed on a spool. A spool would be a cylinder

1 with two ends to it, like a spool of thread,
2 let's say, and the packing would be wound
3 around like you would wind up a hose, a
4 gardening hose, around a spool, but it also
5 could be placed inside a box and coiled rather
6 than spooled.

7 I mentioned the fact that the product
8 could be made into rings. In a case like that
9 the material would be formed into a ring set
10 and would be held together with paper, perhaps
11 waxed paper, or perhaps plastic nowadays.

12 Q. And there would be labels on the -- if
13 they were packed in boxes, there would be
14 labels on the boxes?

15 A. And on the spools, as well, yes, sir.

16 Q. Okay. The other asbestos-containing
17 line you mentioned was expansion joints.
18 Describe that, please.

19 A. Well, I mentioned I believe that there
20 probably -- in '72 there may have still been
21 some expansion joints that used -- that had
22 asbestos in them, but that wasn't very typical.

23 But an expansion joint is either made
24 completely out of rubber, but generally it is
25 made out of fabric and rubber, and the fabric

1 might be nylon or dacron. It could be cotton
2 years ago, not used very much today. It might
3 be a Kevlar, reinforced fiberglass cloth.

4 In all cases the cloth has a rubber
5 added to it. It's either frictioned in, which
6 means that it's driven into the product, or
7 it's calendared onto the product into whatever
8 thickness it needs to be, but we're talking ten
9 to fifteen thousandths I would think, and that
10 material is wound around a mandrel along with
11 rubber until a flexible rubber connector is
12 made.

13 The product or expansion joint
14 typically has two flanges that look like the
15 flanges that they mate up against that are
16 generally made out of the metal, and therefore,
17 they have holes in them. And the bolts from
18 the flanges go through the flange of the rubber
19 expansion joint.

20 And then there is generally an arch
21 that's built into the expansion joint or a
22 bridge, if you will, and the purpose of that is
23 to provide flexibility, compression or
24 elongation to allow for any deflection that
25 occurs in the pipeline to be absorbed or

1 transmitted.

2 Q. Okay. And you mentioned du Pont
3 supplied I think you mentioned Teflon and
4 Kevlar. Do you have any knowledge of any
5 asbestos that du Pont supplied to Garlock?

6 A. I don't believe they were an asbestos
7 supplier, no. They -- to my knowledge they
8 never supplied Garlock any asbestos-containing
9 materials.

10 Q. And in, in -- when you started in
11 1972, who did supply Garlock with
12 asbestos-containing materials?

13 A. There's three major suppliers. Bell,
14 JM and Lake. Those probably are not their full
15 names, but --

16 Q. JM being Johns-Manville?

17 A. Yes.

18 Q. And how did they -- let me start back
19 with your training program. Did you get any
20 kind of tour of the manufacturing operation of
21 Garlock when you started with the company?

22 A. Yes, sir.

23 Q. Were you ever involved in
24 manufacturing? Was manufacturing ever a
25 responsibility?

1 A. Yes, sir.

2 Q. Okay. When did you first become
3 involved in manufacturing?

4 A. In terms of responsibility?

5 Q. Yeah.

6 A. Approximately October of 1987.

7 Q. Okay. But could you -- are you able
8 to describe the manufacturing operation that
9 went on when you started in 1972?

10 A. I think so, yes, sir.

11 Q. Was it fundamentally different than
12 the manufacturing operation that was -- you
13 became familiar with once you had that
14 responsibility in the late '80s?

15 A. Fundamentally I would say no, sir. It
16 was fundamentally the same.

17 Q. Was it fundamentally different than it
18 would have been ten years prior to when you
19 started?

20 A. Well, Garlock had three quarters of a
21 million square feet of manufacturing space, so
22 that encompasses an awful lot of different
23 operations, but if you were to look at things
24 like the manufacturing of compressed
25 non-asbestos or asbestos sheet, generally that

1 process is the same today as it was many years
2 ago.

3 Braided packing would be another
4 example. Although the equipment has changed
5 somewhat over the years, the basic process
6 that's used to create a braided packing
7 remained, to my knowledge, pretty much the
8 same.

9 Q. Okay. You mentioned how many million
10 square feet does Garlock have?

11 A. Seven hundred fifty thousand is what I
12 should have said. I'm not sure, but I meant
13 seven hundred fifty thousand square feet.

14 Q. Is that just at Palmyra or is that
15 Palmyra and other places, as well?

16 A. That was just Palmyra.

17 Q. Were there any other manufacturing
18 facilities of Garlock other than Palmyra?

19 A. Yes.

20 Q. And who would they have been?

21 MR. CONNOR: '72 or anytime?

22 BY MR. ZUYDHOEK:

23 Q. In 1972.

24 A. There was a plant in Canada, a
25 manufacturing facility in Canada; essentially

1 Toronto, Canada. There was a manufacturing
2 facility in Sydney, Australia. There was a
3 manufacturing facility in Mexico City, Mexico.
4 Any Garlock operation?

5 Q. Right.

6 A. Because there were operations that
7 were Garlock -- known as Garlock but were not
8 involved in manufacturing packing of gaskets, I
9 believe.

10 Q. Warehousing, for example, I take it
11 would be something different.

12 A. Yes.

13 Q. And you would have warehousing in many
14 different places depending on where your
15 customers were.

16 A. There have been warehouses throughout
17 our history to the best of my knowledge, yes,
18 sir.

19 Q. Okay. But let's just focus on
20 manufacturing facilities when you started.
21 You've got Palmyra was that the largest?

22 A. Yes.

23 Q. And, and in terms of size, how would
24 you characterize Palmyra as compared to the
25 others?

1 A. Palmyra would kind of be the mother
2 ship. All of the -- virtually all of the
3 products, if not all the products that were
4 offered by Garlock were manufactured in
5 Palmyra.

6 The other operations were smaller.
7 Some of them, like Mexico City, manufactured
8 most of the same products that we do. Canada
9 was a bit smaller than Garlock of Mexico. They
10 would have made fewer products but many of the
11 products that we manufacture.

12 We had a plant in Gastonia, North
13 Carolina that made spiral wound gaskets in
14 1972, and I'm not certain of the size. I have
15 visited the plant, but I don't recall
16 specifically their size. They would be smaller
17 than Palmyra.

18 And there was an operation in Camden,
19 New Jersey that manufactured Teflon products;
20 molded machined valves that were made out of
21 Teflon. Those were the other operations that I
22 can recall right now.

23 Q. And, and the mother ship is what you
24 called Palmyra. How long had the mother ship
25 existed when you started in 1972?

1 A. Well, Garlock was formed first in I
2 believe 1887. I'm not sure what -- I think it
3 was in Port Gibson at the time, and I'm certain
4 that whatever structure no longer exists, but I
5 believe as early as 1905 when Garlock was
6 incorporated in Palmyra, New York that some of
7 the buildings that exist today existed at that
8 point in time.

9 Q. How many buildings are there in
10 Palmyra?

11 A. Well, that gets a little tricky
12 because there are, there are numbers assigned
13 to what you and I would appear to be a single
14 building. There might be one more number, but
15 I think generally it would be correct to say
16 there's somewhere in the neighborhood of
17 twenty-six buildings.

18 Q. Is that currently?

19 A. Yes, sir.

20 Q. In 1972 the same, more, less?

21 A. I think in 1972 I don't recall us
22 having -- other than building an annex which
23 then, of course, may, in fact, carry a
24 different building number, to my knowledge I
25 believe in 19 -- the, the facility as it exists

1 today and the number of buildings is unchanged
2 since 1972.

3 Q. Any of those buildings have asbestos
4 in them?

5 A. How so?

6 Q. Involved in the construction of the
7 building. Any of them asbestos-containing?

8 A. I don't know if any of them contain
9 asbestos today, sir, no.

10 Q. Are you aware of, since you've been
11 employed with the company of any asbestos
12 removal that's gone on in those buildings?

13 A. Yes.

14 Q. And was that asbestos removal
15 conducted by Garlock or others?

16 A. The only time I can think of it was an
17 outside contractor.

18 Q. Okay. And what time can you think
19 that that was done?

20 A. I think I saw a notice -- I guess I
21 should say that I'm not certain that was the
22 only time, but I think I saw a notice as
23 recently as the last two years of a building
24 that I entered that may have had asbestos
25 removal taking place at that time.

1 Q. So we're talking in Palmyra about
2 twenty-six buildings in 1972?

3 A. Yes, sir.

4 Q. Would that have been any different in
5 1955 and 1960?

6 A. I don't know.

7 THE WITNESS: May I take a break?

8 MR. ZUYDHOEK: Sure. That means I
9 get one, too.

10 (Whereupon, a recess was then taken.)

11 MR. ZUYDHOEK: Back on the record.
12 Mr. Heffron, anytime you need a break just
13 mention it and we'll be happy to accommodate
14 you.

15 (Whereupon, the above-requested
16 question was then read by the reporter.)

17 BY MR. ZUYDHOEK:

18 Q. In 1972 in the Mexico plant how many
19 buildings would there have been?

20 A. I don't know.

21 Q. Would you know that for any of the
22 other plants?

23 A. Not accurately, no, sir.

24 Q. And I think you mentioned all of the
25 products were manufactured in -- at the mother

1 ship in Palmyra; is that correct?

2 A. Yes.

3 Q. And did that -- has that continued as
4 you've worked for the company, all of the
5 products have continued to be manufactured in
6 Palmyra?

7 A. The, the manufacture of compression
8 packing or braided packing was moved from
9 Palmyra to Sodus, New York, S-O-D-U-S, in 1975
10 or 1976. So compression packing was
11 manufactured in Sodus until 2002, and it has
12 since been moved to Sherbrooke, Quebec, Canada.

13 Q. Okay. I think you said that expansion
14 joints, you stopped using asbestos in them at
15 some point in time?

16 A. Yes. I believe that asbestos was used
17 at one time as the fabric and rubber
18 construction that's -- that typical
19 construction, and I know that the use of
20 asbestos cloth as a reinforcement was
21 discontinued. I can't really pinpoint
22 specifically when.

23 Q. Do you know why?

24 A. Other cloths were available. Other
25 types of materials were available, man-made

1 fibers that -- generally expansion joints are,
2 are not in high temperature service. The
3 limitation is the rubber or the elastomer
4 itself.

5 It's typically there for noise
6 dampening, vibration elimination, to be able to
7 take the compression elongation that occurs in
8 a pipeline as temperatures rise and fall or as
9 pressure is increased or decreased.

10 So it really -- many of the attributes
11 of an asbestos material are its temperature
12 resistance, its, its media resistance and so
13 forth, and they're really not that appropriate
14 or required in an expansion joint.

15 Q. Would it, though, have been more
16 expensive to use asbestos expansion joints than
17 alternative expansion joints without asbestos?

18 A. I really don't know.

19 Q. Do you know of any specific reason for
20 eliminating asbestos from the expansion joint?

21 A. Specific reason? No, sir.

22 Q. Were -- was asbestos eliminated at
23 some point time from the compression packing
24 line?

25 A. Yes, sir.

1 Q. When?

2 A. The conversion or the, the elimination
3 of asbestos-containing compression packings
4 pretty much took place in -- starting in 1980.
5 I believe it would be accurate to say that
6 we're talking about the Palmyra manufacturing
7 facility, actually, or the Sodus manufacturing
8 facility, and I think my -- sometime in 1982
9 there were no asbestos-containing graded
10 packings being manufactured.

11 Q. Can you tell me why?

12 A. There were more substitutes. There
13 were -- substitutes were more readily available
14 in the compression packing area than they were
15 in some other areas.

16 Q. Was there any health reason at all
17 having to do with asbestos that was part of the
18 decision to eliminate it from compression
19 packing?

20 A. No, sir.

21 Q. Asbestos in gaskets, product line
22 three. Has that been eliminated?

23 A. Yes, sir.

24 Q. When?

25 A. December 31st of 2000, I believe.

1 Q. You have a specific recollection of
2 that being the date?

3 A. Well, I was the -- in September of
4 2000 I took on the responsibility of the sales
5 and marketing -- the marketing for industrial
6 gasketing which includes compressed gasketing
7 and included compressed non-asbestos gasketing.
8 So I, I wrote the letter of cancellation, so I
9 think that's a pretty accurate date.

10 Q. What were all of the reasons for the
11 elimination of asbestos from, from the gasket
12 product line?

13 A. It was a very small part of our
14 business by 2000.

15 Q. Did any part of that reason have to do
16 with health?

17 A. I don't believe so, no, sir.

18 MR. COMERFORD: Did you say health?

19 MR. ZUYDHOEK: Health.

20 MR. COMERFORD: Okay. I'm sorry.

21 BY MR. ZUYDHOEK:

22 Q. Has asbestos been eliminated from
23 hydraulic seals, product line one?

24 A. Yes, sir.

25 Q. When?

1 A. The dates of all of the
2 asbestos-containing products that we
3 manufactured and the date that we ceased to
4 manufacture them is in a document that's been
5 prepared previously, so I don't have the dates
6 specifically memorized for hydraulic
7 components. It was a -- it was a smaller
8 portion of our sales and, and so I can't really
9 give you an exact date.

10 Q. Why was it eliminated?

11 A. Other materials were available. Other
12 synthetic materials were available that made
13 their substitution possible.

14 Q. It had nothing whatever to do with
15 health?

16 A. I don't believe so, no, sir. All of
17 our products were encapsulated products.

18 Q. Were you part of the decision-making
19 team to eliminate asbestos from these product
20 lines?

21 A. The decision-making team, I would say
22 no. I was part of the group that worked on
23 evaluating substitute materials specifically in
24 compression packing.

25 I was in compression packing from 1979

1 until the spring of 1981, and so it was in that
2 time frame that we discontinued the
3 manufacturing of asbestos-containing braided
4 packing. So I was actively involved in the
5 development of substitutes and their evaluation
6 and introduction and so forth, but the
7 decision-making process, I would say no.

8 Q. And, and who would have been part of
9 the decision-making process to eliminate
10 asbestos from the product lines?

11 A. Well, I don't think there was any --
12 there was never any formal announcement or any,
13 or anything such as that, but I'm certain that
14 the management of our company would have been
15 involved in that decision, I assume.

16 Q. Did you ever discuss with anyone
17 specifically in the management of the company
18 the elimination of asbestos from the product
19 lines?

20 A. Well, not using the terms that you're
21 using. What we did -- certainly I did discuss
22 with the, the vice-president, general manager
23 that I reported to in compression packing. I
24 would have discussed it with him.

25 Q. Who was that?

1 A. Ernest Kunhen.

2 Q. How do you spell that?

3 A. K-U-N-H-E-N, I think.

4 Q. Is he still alive?

5 A. I believe so.

6 Q. Still employed?

7 A. No, sir.

8 Q. Still lives in the area?

9 A. Not to my knowledge, no, sir.

10 Q. Do you know where he lives?

11 A. He may have live in Indiana.

12 Q. Let's go back to the discussion. What
13 was the discussion you had with him on that
14 subject?

15 A. Well, the -- I don't remember anything
16 very specific, but I reported to Mr. Kunhen,
17 and I was responsible for the introduction of
18 the -- all the non-asbestos products that were
19 developed in that time frame.

20 So discussions from -- my, my belief
21 is our discussions would have been around how
22 we're doing, do we have -- what's the schedule
23 for introduction, how are the field evaluations
24 of the product going, because typically we
25 would send the product out -- products out to a

1 customer that we're developing, new products
2 for evaluation. Those type of, those type of
3 discussions I'm certain took place.

4 Q. And at any point in time when any of
5 these products were eliminated were there
6 lawsuits pending against the company for
7 asbestos-related injuries?

8 A. Well, I really wasn't aware of any,
9 but my, my understanding is that the first
10 lawsuits alleging exposure to or disease from
11 exposure to Garlock products occurred somewhere
12 in the '70s, middle to late '70s, so if your
13 question is were there any lawsuits, I don't
14 know of any, but I assume that there would be.

15 Q. Had you already testified in any
16 lawsuits involved with asbestos-related
17 injuries at the point in time when the asbestos
18 product lines were eliminated?

19 A. No, sir.

20 Q. How about Workers' Compensation
21 claims? Were there any Workers' Compensation
22 claims pending before the 1970 -- before 1971,
23 1972?

24 A. Any Workers' Compensation of any type?

25 Q. Claiming asbestos-related injuries.

1 MR. COMERFORD: You said pending.

2 BY MR. ZUYDHOEK:

3 Q. I'm sorry. Were there any Workers'
4 Compensation claims that claimed
5 asbestos-related injuries prior to 1971 that
6 you've become aware of?

7 A. The first Workers' Compensation case
8 that fits that description I believe would have
9 been in 1947.

10 Q. And who would that have been?

11 A. The name escapes me right now. I do
12 know it.

13 MR. COMERFORD: It's a woman.

14 THE WITNESS: Vera Clemons. I'm
15 sorry.

16 BY MR. ZUYDHOEK:

17 Q. How did you find out about Vera
18 Clemons' compensation claim?

19 A. I'm certain it didn't take place until
20 my involvement -- my beginning of my
21 involvement to act as the company corporate
22 representative in asbestos litigation, so
23 sometime since, since 1997, I believe.

24 Q. Okay. So you've been the company
25 corporate representative in asbestos litigation

1 since 1997?

2 A. No.

3 Q. Okay. When did you first testify as a
4 witness in connection with asbestos claims?

5 A. September of 1999, I believe.

6 Q. Okay. Vera Clemons' claim, was that
7 successful or unsuccessful?

8 MR. CONNOR: Object to the form.

9 MS. CATALANA: Object to the form with
10 respect to that.

11 BY MR. ZUYDHOEK:

12 Q. I don't if he'd recognize it but was
13 any money awarded as a result of Vera Clemons'
14 claim?

15 A. Again, I don't know the answer to
16 that. I do believe that it was found that Vera
17 Clemons, who worked with the raw fiber in the
18 asbestos textile department, did have
19 asbestosis. So that the -- what the proper
20 terminology is and what monetary exchange may
21 have taken place, I don't know.

22 Q. Maybe I can help you out with a
23 document.

24 (Whereupon, Heffron Exhibit 2, a
25 document entitled Worker's Compensation Claims,

1 was then received and marked for
2 identification.)

3 BY MR. ZUYDHOEK:

4 Q. Mr. Heffron I show you Exhibit Number
5 2. Is that a document that you're familiar
6 with?

7 A. Yes, sir.

8 Q. When was the first time you saw this?

9 A. I can't tell you for certain, but it
10 would have been sometime after 1997 when I was
11 advised of my -- the decision to have me act as
12 the company corporate witness.

13 Q. Did you have any role in the
14 preparation of this document?

15 A. No, I don't believe so.

16 Q. Have you --

17 MR. COMERFORD: I'm sorry. I didn't
18 hear the last question.

19 MR. ZUYDHOEK: Did he have any role
20 in the preparation of it.

21 MR. COMERFORD: Thank you.

22 BY MR. ZUYDHOEK:

23 Q. And it mentions that it's updated
24 September 22nd, 1999. Do you see that?

25 A. Yes, I do.

1 Q. Has it been updated after that?

2 A. I don't know, sir.

3 Q. Do you know who did prepare this
4 document?

5 A. Specifically, no, I do not.

6 ✓ Q. Do you know what it was based on; how
7 it was -- the information that's contained in
8 it was found?

9 A. I think -- generally I think I'm
10 generally familiar with it. It comes from the
11 Workers' Compensation records, but how
12 specifically it's -- the information is
13 gathered, I do not know.

14 Q. Do you know if the records are the
15 records of Garlock or the records of an
16 insurance company?

17 A. I don't know.

18 Q. Do you know whether or not the
19 records -- the document is accurate?

20 A. Well, I believe it to be accurate
21 through the date that it was updated, yes, sir.

22 Q. And you do not know who prepared it?

23 A. Specifically, no. I believe it was
24 prepared by Garrison Litigation, but that's --
25 no, I don't know specifically.

1 Q. Okay. Do you know any of the
2 individuals that work for Garrison Litigation?

3 A. Do I know any of them?

4 Q. Yeah.

5 A. Yes, sir, I do.

6 Q. How many, how many employees of
7 Garrison Litigation are there?

8 A. Somewhere in the neighborhood of
9 eleven or twelve, I believe.

10 Q. And who was in charge of Garrison
11 Litigation?

12 A. Paul Grant, Jr.

13 Q. Brand?

14 A. Grant, G-R-A-N-T.

15 Q. Where is he located?

16 A. Here in Rochester, New York.

17 Q. And what, what facility or what
18 location?

19 A. Garrison has a, an office in the HSBC
20 building here in Rochester.

21 ✓ Q. I recognize those initials. Okay.
22 Are you familiar with any of the claims that
23 are itemized here; any of the individual
24 claims?

25 MR. CONNOR: I just want to object to

1 the term familiar.

2 BY MR. ZUYDHOEK:

3 Q. Do you know any of the -- any details
4 at all about any of the claims that are
5 itemized on this document, Heffron Number 2?

6 A. I wouldn't say that I'm -- when you
7 say am I familiar with them, I believe that
8 some of -- I have reviewed some documents that
9 pertain to some of the claims. I've made no
10 attempt to memorize or remember anything
11 specifically, but for instance with Vera
12 Clemons, I'm certain that particularly early in
13 my involvement I'm, I'm pretty certain that I
14 looked at some documents that pertained to the
15 Vera Clemons' compensation case.

16 Q. And what types of documents did you
17 look at for her?

18 A. I really don't recall specifically
19 what they were.

20 Q. Anyone else who's, who's on the list
21 you can recall?

22 A. I believe that I may have looked at
23 documents pertaining to others on this list,
24 but I don't recall specifically who they would
25 have been.

1 Q. Have you ever testified with respect
2 to any of the individuals, either in
3 compensation court or in litigation, that are
4 itemized on this list?

5 A. Not to my recollection, no, sir.

6 Q. Okay. The, the column headed dates,
7 what is meant by the -- looking at Vera
8 Clemons, for example, 1918 to 1943, what does
9 that mean?

10 A. Well, in the Vera Clemons case I'm
11 certain that that refers to the beginning --
12 the first year of her employment and the last
13 year of her employment.

14 Q. Okay. Any of the individuals here, do
15 you know any of them?

16 A. I knew David Thurley. I wouldn't say
17 that I knew him well, but I knew him by sight.
18 I knew Sam West, again, probably by sight. I
19 knew Omar Bailey. Those are the only
20 individuals that I believe that I knew.

21 Q. How many employees were there of
22 Garlock in 1971 when you joined the company at
23 Palmyra, for example?

24 A. I'm not certain. I believe at that
25 time that the number of employees would have

1 been in the area of two thousand, I believe.

2 Q. Now, is that total for the company or
3 just Palmyra?

4 A. I honestly don't know, sir.

5 Q. That's kind of a number that was out
6 there when you joined the company?

7 A. I believe so, yes.

8 Q. And how about currently?

9 A. I'm not -- the only numbers that I
10 would be familiar with would be the Palmyra
11 numbers, and even those I really don't deal
12 with anymore, but I would guess that the, the,
13 the head count would be somewhere in the area
14 of seven hundred fifty and perhaps less. That
15 number may have included the employees in Sodus
16 and that operation has since moved to Canada.

17 Q. Let's talk about Omar Bailey. How did
18 you happen to be familiar with him?

19 A. He was a compression packing
20 supervisor as is indicated under his job or
21 workplace, and so I worked specifically in our
22 compression packing department. We referred to
23 it as a division. It really wasn't, from a
24 legal standpoint, a division but the operation
25 in Sodus that made braided packing, he was a

1 supervisor, and I worked there from 19 -- 1975
2 and then '76 and then again from '79 to '81, so
3 that's when I would have had contact with him.

4 Q. Sam West, how did you know him?

5 A. I believe just through my involvement
6 over those years walking through the plant,
7 and, and as I said, I really didn't know him
8 well, but I knew who he was.

9 Q. With respect to Mr. West, it says
10 currently denied in litigation, and then that
11 would be, I presume, as of 9/22/99. Do you
12 know what the current status of that matter is?

13 A. No, sir.

14 Q. David Thurley, how did you happen to
15 know him?

16 A. He was -- one of the last jobs that he
17 had was a maintenance yard worker which means
18 he did anything from removing snow in the
19 wintertime to trimming trees in the spring. So
20 he was someone who was very visible when you
21 drove in and out of the plant.

22 Q. Do you know at what point in time in
23 his years -- and I take it it's '68 to '96 with
24 the company -- where he would have been exposed
25 to asbestos?

1 A. It identifies the fact that he worked
2 with raw asbestos fiber. It doesn't say that,
3 but he worked in fiber prep which I believe is
4 an operation associated with asbestos textile
5 manufacturing, and --

6 Q. Do you know what the current status of
7 this particular claim is?

8 A. I do not.

9 Q. Raw asbestos, under what circumstances
10 would he have been dealing with raw asbestos?

11 A. In the manufacturing of asbestos
12 textiles prior to making them into a cloth or a
13 tape or a yarn. Raw asbestos fiber is the base
14 material that you work with before you produce
15 a yarn.

16 Q. Okay. And you buy raw asbestos fiber
17 from those three companies that you mentioned?

18 A. We did, yes, sir.

19 Q. And is this in the textile department
20 that, that he would have done this?

21 A. That's my understanding, yes, sir.

22 Q. Okay. And what is done in the textile
23 department?

24 A. Well, there is no textile in Palmyra.
25 It was closed in 1975 or 1976. So I'm, I'm not

1 really that familiar -- it was my first two or
2 three years with the company. I had been in
3 the textile department, but did not work in
4 that area.

5 Q. So you saw what they did.

6 A. Yes, sir.

7 Q. What did they do?

8 A. Well, again, I didn't -- I wouldn't
9 pretend to be able to explain each operation
10 that occurs in textile manufacturing.

11 There was textile manufacturing that
12 included asbestos fibers that continued at our
13 plant in Sherbrooke Canada, and I saw that
14 probably on a closer basis. But essentially,
15 the fibers are going through a carding
16 operation, and it is where the fiber -- this is
17 my understanding in not having worked in that
18 area -- the fiber is being oriented, and it is
19 then being made into a, a yarn typically where
20 another fiber, often cotton, could even be
21 Teflon, could be fiberglass, but another,
22 another carrier, is typically the term that's
23 used, is being added to the asbestos fiber
24 itself to create strength and to put it in a
25 form where the material can be worked with

1 further.

2 Q. You said carding. Is that the term
3 you used?

4 A. I believe that's the correct term,
5 yes, sir.

6 Q. And is this part of the process of
7 getting raw asbestos fiber mixed in with other
8 things so that it can be made into the sheet
9 gaskets?

10 A. No, sir.

11 Q. Where does -- what -- when you're
12 doing the textile department, when they're
13 mixing those, where does it eventually go in
14 terms of your products?

15 A. I don't know if I would refer to as a
16 mixing, but in that the by-product of the
17 textile production would be either to take the
18 yarn and make it into a tubing, make it into
19 a -- weave it into a cloth or probably the
20 singlemost largest consumption for Garlock
21 would be to make it into a yarn from which a
22 packing could be braided.

23 Q. What is the process by which raw
24 asbestos gets manufactured and ultimately into
25 sheet gaskets?

1 A. The process is to somehow transport
2 the asbestos fiber to a mixer, and I say
3 somehow because there's various methods that
4 have been used.

5 The most recent method was a vacuum
6 de-bagging process which I believe was
7 installed in the 1980s, where a bale of
8 asbestos wrapped in plastic, contained by
9 plastic is placed into a hopper. The lid
10 closes. The machine removes the bag.

11 The fiber is then -- I don't know if
12 it's fluffed up, but certainly the bale of
13 material is made into -- is broken down and
14 it's transported through an auger system to the
15 sheet mixers.

16 The mixers and the material is then
17 deposited in a mixer along with other
18 ingredients that are used to produce a
19 compressed asbestos sheet. Those ingredients
20 would be other fibers, perhaps other fillers,
21 elastomers or rubber. We use those words
22 pretty much interchangeably.

23 Things such as clay, accelerants and
24 curatives that are required for the elastomer,
25 and generally before the asbestos would be

1 dumped or deposited into the mixer, the other
2 ingredients have been mixed with a solvent to
3 solvate the rubber and to mix up the
4 ingredients prior to depositing asbestos fiber.

5 Q. And the, the process that Mr. Thurley
6 was involved in was what part of that
7 operation, if any part of that operation?

8 MR. CONNOR: Are you talking about
9 the gasket operation?

10 MR. ZUYDHOEK: Right.

11 MR. CONNOR: I don't think that's
12 what he described. Maybe you want to clear it
13 up.

14 BY MR. ZUYDHOEK:

15 Q. Did you just describe the process by
16 which you get to a compressed asbestos sheet?

17 A. I described a portion of it, yes, sir.

18 Q. Right. Was Mr. Thurley involved in
19 that process or was he involved in some other
20 process?

21 A. I believe he was involved in the
22 manufacturing of textiles which is a different
23 process.

24 Q. Would that have involved using this,
25 this mixer to, to -- this contained mixer to

1 get to before you go to the textile?

2 A. No, sir.

3 Q. What was that process then that he
4 would have been involved in?

5 A. I don't, I don't think -- I'm certain
6 that I can't accurately describe specifically
7 what Mr. Thurley did, but I'm certain that it
8 did involve the manufacturing of asbestos
9 textiles. What a fiber prep machine operator
10 was specifically, I'm unable to tell you.

11 Q. Did he deal with raw asbestos?

12 A. I believe so, yes, sir.

13 Q. As it came from the manufacturer?

14 MR. CONNOR: Manufacturer or --

15 BY MR. ZUYDHOEK:

16 Q. As it came from Johns-Manville.

17 A. It came from the mine, but I don't
18 know, I don't know where in the sequence of
19 working with the fiber he worked specifically.
20 For instance, there could have been a job that
21 worked with the raw fiber prior to it being in
22 his area, but I believe he worked with the raw
23 fiber.

24 Q. And how do you know that? How do you
25 know -- what do you base your belief on; just

1 this work description or based on something
2 somebody may have told you about his job?

3 A. Well, again, I, I know a little bit
4 about the textile operation because it was
5 there. I've tried to learn a little bit more
6 in my area of responsibility. I believe it's
7 part of what I have been told perhaps. I would
8 say that some of my knowledge would be based on
9 what I have been told.

10 Q. Told by whom?

11 A. I believe told by Garrison Litigation.

12 Q. About Mr. Thurley's role particularly
13 or just that process that --

14 A. About his role specifically, I
15 believe.

16 Q. And what do you remember being told by
17 Garrison Litigation about his role?

18 A. Nothing specifically other than that
19 he worked with our asbestos textile.

20 Q. Did they tell you where he worked?

21 MR. CONNOR: You mean which location?
22 Which plant?

23 BY MR. ZUYDHOEK:

24 Q. Which location of which plant in which
25 building.

1 A. If they did, I don't recall, sir.

2 Q. Do you recall if they told you whether
3 it was ventilated or unventilated where he
4 worked?

5 A. I don't recall that being discussed,
6 sir.

7 Q. Let's go back to when you started in
8 1972 and when you had your tour of, of the
9 manufacturing operation. Was the manufacturing
10 operation classified with certain names; for
11 example textiles? Was that part of the
12 manufacturing operation, the textile area?

13 A. Yes, sir.

14 Q. Okay. What are the others?

15 A. Hydraulics, high pressure sheet, the
16 press room. Since then it includes the gylon
17 department, G-Y-L-O-N, the expansion joint
18 department, did you say the -- any area, not an
19 area that was --

20 Q. Right.

21 A. Whether it used asbestos or not?

22 Q. Right.

23 A. Cut gasket, shipping, Banbury, tubing,
24 and injection molding, Kloxures, starts with a
25 K, K-L-O-Z-U-R-E-S. It's a Garlock trade name.

1 Those are the -- I believe the manufacturing
2 locations.

3 Q. You anticipated my next question.
4 Which of those involved asbestos?

5 A. I don't know whether Banbury would
6 have ever included asbestos, or tubing, but I
7 mentioned previously I believe at one time
8 there were expansion joints that utilized
9 asbestos as a fabric reinforcement.

10 The hydraulics area, the press room.
11 High pressure sheet, cut gasket -- compression
12 packing of course wasn't located -- was located
13 in Palmyra when I first started. Did you say
14 1972?

15 Q. Yes.

16 A. Compression packing. I think that's
17 it. If I said cut gasket -- I should have said
18 cut gaskets.

19 Q. You did. And I take it the, the -- in
20 each of those -- in each of those areas would
21 be separate facilities or separate areas where
22 the process went on; the manufacturing process
23 went on?

24 A. Separate, but many of the buildings
25 were joined. That's why it's difficult perhaps

1 to come up with the same count that we do
2 because it's very difficult -- while there's a
3 wall between high pressure sheet and the press
4 room, but they're adjoined to one another.

5 Q. But there would be a definite area
6 where there were machines that were devoted to
7 that particular manufacturing process?

8 A. That's correct.

9 Q. And calling it manufacturing process,
10 is that an apt description?

11 A. Yes. We tended to talk about the
12 products from a sales standpoint as a product
13 group.

14 Q. Right.

15 A. But more than one type of
16 manufacturing could be used to make a product
17 group, so in the plant itself we tended to talk
18 about the manufacturing process in that area.

19 Q. And I presume that the way in which
20 asbestos was used in each of these areas where
21 it was used would be different in terms of the
22 manufacturing process.

23 A. The method to produce the product was
24 different.

25 Q. Right. And the, the gasket -- the

1 gasket line, would that have been in the high
2 pressure sheet?

3 A. That would be the area that we used to
4 produce both compressed asbestos and compressed
5 non-asbestos sheet. We called that high
6 pressure sheet.

7 Q. Okay. And would you describe what you
8 recall about that manufacturing process? What
9 did it involve?

10 A. Well, I described some of it earlier.
11 It's the -- it's taking asbestos fiber as its
12 received typically in a bale, and it's then
13 adding that fiber, in the case of compressed
14 gasketing, to other raw materials that have
15 already been somewhat mixed and solvated.

16 The solvent that is used to break the
17 rubber down is toluene, and the asbestos would
18 then be dumped into the mixer.

19 The mixer was a large device on a
20 stand, a work stand that would be kind of a
21 clam shell design. In other words, it was
22 hinged in the top -- in the back and had a top
23 and a bottom. And it was designed to rotate
24 forward so that the dough, after having been
25 mixed, could be dumped into a dough cart.

1 The inside of the mixer would have
2 stainless steel, I believe, mixing blades which
3 are opposed blades that pass around the inside
4 and contact the outside of the mixer itself
5 that is used to, to mix the ingredients
6 together until you form a homogeneous blend of
7 material that is the fibers and the fillers and
8 the elastomer into a dough-like material.

9 That material is then dumped into a
10 dough cart. That's a metal container on wheels
11 that transports the material from the mixer to
12 the sheeter. The sheeter is a, a large
13 rotating press. There are two large cylinders
14 that are rotating, and they have a small gap in
15 between them, and the dough is deposited
16 between those two rotating cylinders.

17 One of the cylinders is heated to
18 approximately -- several hundred degrees, and
19 the other cinder is cooled with water inside
20 internally. The dough sticks to the heated
21 roll. The material continues to be added to
22 the sheeter as the operator watches the
23 thickness gauge that is showing what the
24 current thickness of the material is on the
25 roll. Once the material has been properly

1 formed on the roll to the proper thickness for
2 the proper period of time, then the machine is
3 stopped.

4 A non-scoring knife like a brass tool
5 would be used to scribe across the sheet which
6 is now one solid piece on the roll, and it is
7 then removed from the roll and placed on a --
8 usually on a skid and transported to an area
9 close by where the material is then passed
10 through a, a brander, which puts the brand on
11 the product.

12 It's a -- I'm not sure how you would
13 refer to it from a printing standpoint, but
14 it's a metal mat which has rubber attached to
15 it that picks up ink and adds it to the surface
16 of the sheet. And then that sheet then goes
17 through a drying operation.

18 Well, it goes through an anti-stick
19 treatment. There's various types of anti-stick
20 that have been used over the years. That is
21 sprayed onto the sheet on both the top and the
22 bottom. It goes through a drying process, and
23 then it may be slit up into smaller sheets, cut
24 up into smaller sheets or it can be shipped or
25 it can be sent to the gasket shop.

1 Q. And did that process change from the
2 time you started until recently; that
3 manufacturing process that you just described?

4 A. If you look at the process itself,
5 some of the equipment is different. We have
6 different mixers in some cases. In fact, all
7 the mixers I believe are different today than
8 they were in 1972, and most of the sheeters are
9 different, but the -- if you were to look at
10 either an old mixer and a new mixer or an old
11 sheeter and a new sheeter they would look to
12 the layman I think to be pretty much the same.

13 Q. And when were the different mixers
14 added to the process?

15 A. I don't know specifically, but I think
16 in general it's true that in 19 -- about 1980
17 Garlock introduced a line of compressed
18 non-asbestos sheet.

19 As our sales grew as a result of that
20 product, we produced smaller -- we utilized
21 smaller equipment to mix the material because
22 the -- we needed more perhaps precise mixing
23 capabilities. And the sheeters themselves, we
24 began to purchase new sheeters, and that began
25 somewhere in that same time frame and continued

1 into the early '80s, I believe.

2 Q. And the mixers and the sheeters, are
3 they machines -- pieces of equipment integrated
4 or separate?

5 A. They're separate.

6 Q. And you actually call one a mixer and
7 another a sheeter?

8 A. Yes, sir.

9 Q. Okay. And who makes the mixers?

10 A. I know that some of the mixers are
11 Erich mixers, and I believe that's an E-R-I-C-H
12 or K. I'm not sure. I don't know who made --
13 I believe I've heard the name, but I can't
14 recall it right now, the name of the larger
15 mixers that were typically used when we were
16 producing more asbestos.

17 Q. What goes into the mixer on the, on
18 the front end? That operation, is that raw
19 asbestos or has that been mixed with something
20 before it gets to the mixer?

21 A. Well, there's other ingredients that
22 are involved in making a compressed gasketing.
23 Those materials have been deposited in the
24 mixer before the asbestos is deposited. Those
25 materials are thoroughly mixed and solvated

1 with toluene prior to the asbestos fiber being
2 added.

3 Q. But it's the raw asbestos that goes
4 into the mixer?

5 A. Yes, sir.

6 Q. And that gets in there mechanically or
7 by somebody doing it by hand or without
8 automation?

9 A. I described that operation a little
10 bit earlier. We added a vacuum de-bagging
11 process. I think it was in the early 1980s,
12 but I'm not positive.

13 Prior to that, I believe that the
14 material would have been received at the mixer
15 in a bale form. And I believe the method of
16 holding the bale together has changed over the
17 years. Burlap was a -- I believe was typical
18 through many of the years and that -- to the
19 best of my knowledge that bale would have been
20 deposited in the mixer --

21 Q. So --

22 A. -- manually.

23 Q. Opened by hand and deposited in the
24 mixer?

25 A. I don't know whether it was opened by

1 hand, but I believe that's correct.

2 Q. When you put the bag -- do you call it
3 a bagging system?

4 A. De-bagging system.

5 Q. De-bagging system?

6 A. Yes.

7 Q. That makes sense. So that means that
8 a machine actually opened the bale and
9 deposited the asbestos in there?

10 A. Yeah. A machine opened the bale under
11 vacuum, broke the bale down, and then I believe
12 it was an auger system that would then
13 transport the asbestos fiber to -- through a
14 pipeline to the individual sheeters directly --
15 I'm sorry, to the individual mixers, directly
16 into the mixer itself.

17 Q. And under vacuum meaning it would, it
18 would make sure all of the asbestos fiber got
19 into the mixer?

20 A. I was describing the de-bagger. The
21 de-bagger is under a vacuum, and I believe that
22 it would be just pulling a slight vacuum to
23 make sure that, that there was no release
24 outside of the bagger -- de-bagger itself.

25 Q. And that was introduced when?

1 A. I believe in the 19 -- early 1980s.

2 Q. And the de-bagger, would that have
3 been manufactured by Eric or Erich?

4 A. I don't believe so, no, sir.

5 Q. Do you know who manufactured that?

6 A. I don't.

7 Q. It would not have been something that
8 was made by Garlock?

9 A. No, sir, it would not have been.

10 Q. Okay. I think we've gotten through
11 the first area here. January '72 to October of
12 '74. In October of '74 your job changed?
13 We're now looking at Heffron 1.

14 A. Yes.

15 Q. And what did you do?

16 A. In October of '74 until August of 1975
17 I left the employment of Garlock and worked for
18 Metropolitan Life Insurance.

19 Q. Oh. And you sold life insurance?

20 A. Yes, I did.

21 Q. Okay. And you left Metropolitan to
22 come back to Garlock?

23 A. Yes, sir.

24 Q. Why did you leave Metropolitan?

25 A. I didn't want to be an insurance

1 salesman.

2 Q. Good choice. All right. When you
3 came back to Garlock what did you do?

4 A. A very similar responsibility to what
5 I had previously in that I was working in what
6 was often referred to as inside sales, but
7 rather than handling all of our products and
8 their sale through our distribution network, I
9 was working as what we called an OEM sales
10 correspondent handling just a single product
11 line.

12 So I would have been responsible for
13 dealing with manufacturers who purchased
14 braided packing from Garlock for use in the
15 equipment that they manufactured.

16 Q. So this involved braided packing?

17 A. Yes, sir.

18 Q. Okay. And your next job then after
19 that would have been October of '76 to
20 September of '79?

21 A. Yes, sir.

22 Q. Would you describe that, please?

23 A. That was an MRO sales position. Well,
24 it's an outside sales position. It was
25 covering Upstate New York from Buffalo to

1 Utica, Massena down to Binghamton, and I would
2 be responsible for calling on end users in that
3 geography as well as supporting our independent
4 distributors in that area providing training,
5 either at the customer or the distributor
6 level, introducing new products, making -- at
7 the customer's request sometimes getting
8 involved in reviewing their equipment in their
9 plant, the specifics of that and making a
10 product recommendation by myself or with the
11 support of engineering. Those types of
12 activities.

13 Q. Your distributors at this time, did
14 they distribute exclusively for you or did they
15 distribute competitors' products, as well?

16 A. Well, they usually distributed a
17 complementing line of products that generally
18 did not include our competitors, but rarely did
19 a distributor handle only Garlock. Garlock
20 might have been -- might have received
21 prominence, but perhaps not exclusivity.

22 Q. Who were the competitors for Garlock
23 when you started in sales?

24 A. AW Chesterton, Johns-Manville,
25 Klinger, Nicolette, Raybestos Manhattan,

1 probably Darko, Green Tweed, Hercules, Parker.
2 There were a lot of different competitors, and
3 they varied from one product group to another.

4 Q. Okay. Let's refine that a little bit.
5 On the gasket product line who were the
6 competitors?

7 A. JM was probably our biggest single
8 competitor, I believe. Nicolette was a
9 competitor. Durabla, who I think I failed to
10 mention earlier, was and is a competitor. RM
11 but to a lesser degree. Klinger. There were
12 other -- certainly other manufacturers, but
13 those are some of the major ones when it comes
14 to compressed gasketing.

15 Q. Okay. September '79 to April -- each
16 time within the company you go from one job to
17 another was it a promotion?

18 A. Sometimes yes, sometimes no.

19 Q. Okay. So sometimes it involved just
20 different responsibilities with the same --
21 either the same title or the same salary?

22 A. Usually the salary was increased, but
23 the, but the -- for instance, MRO sales
24 correspondent is, is essentially the same job
25 as an OEM sales correspondent. I just handled

1 one line and dealt with one particular
2 customer. A sales position is obviously
3 something quite different than that.

4 Q. September of '79 to April of '81 would
5 you describe what you did?

6 A. I was responsible for the sales and
7 marketing. That was actually the title at that
8 time. We tend to refer to those positions now
9 strictly as marketing.

10 I would be responsible for working
11 with customers to identify their needs that
12 resulted either in the sale of existing
13 products or the development of new products,
14 the pricing associated with all of the products
15 that were considered compression packing, the
16 development of literature, training that we
17 would do for our sales force or for our
18 distributor network as it pertained to that
19 area.

20 Sometimes it did involve travel,
21 calling on end users, sometimes doing public
22 seminars, sometimes very small groups of
23 maintenance people at a particular location.
24 But it -- those type of activities.

25 Q. And, and your training role in '79 to

1 '81, how would you describe that in some more
2 detail? What did you do?

3 A. Well, Garlock was -- Garlock believes
4 that parts of its success has always been being
5 close to customers and developing products that
6 specifically fit -- met their needs.

7 So a large part of that training then
8 would revolve around the -- how a new product
9 differed from an existing product either in
10 terms of the installation techniques that were
11 used or the adjustment of the product or the
12 performance parameters of the product.

13 ✓ So a lot of the training would revolve
14 around -- and of course our distributors were
15 adding people on a fairly regular basis as we
16 were. So it could be anything from working
17 with a new employee to providing them with an
18 in-depth understanding of the various types of
19 materials that we use, the constructions that
20 we used to produce our products, blocking
21 agents or lubricants that were added to the
22 product and what those attributes those
23 provided to the customer, to the product and
24 what, what value that brought to the customer,
25 how those products perhaps compared to the

1 composition, what markets might use those type
2 of products or specific applications within a
3 market where there would be a very specific
4 need for a product.

5 ✓ Q. At some point in time were specific
6 warnings pertaining to asbestos added to the
7 product line of Garlock?

8 A. The first warnings on any Garlock
9 asbestos-containing product I believe was added
10 in approximately 1972. And that would have
11 been to the asbestos textile line which was a
12 very small portion of our sales because most
13 asbestos textiles became, with the yarn that we
14 produced, our braided packing from -- or the
15 cloth that we treated with rubber to produce
16 another product.

17 Q. Was that warning added at that point
18 in time when you were going through training in
19 1972?

20 A. It may have been, but I don't recall
21 it whatsoever.

22 Q. What were you told -- as a salesman
23 you would be dealing with, with people that
24 were receiving those warnings, correct?

25 A. Well, of course, in 1972 I wasn't a

1 salesman.

2 Q. Okay.

3 A. That's when the first warnings were
4 applied, so I really don't really recall
5 anything at that point in time. In 1977 we
6 added warnings to all of our
7 asbestos-containing products, and at that point
8 in time I was in sales.

9 Q. And were you given certain
10 instructions as to how to deal with those
11 warnings?

12 A. I don't recall any specific
13 instructions. Certainly it was communicated to
14 our sales force that we were -- that while we
15 were exempt, that Garlock had chosen to use the
16 existing OSHA warning and was going to apply it
17 to all of our asbestos-containing products.

18 The products that were required to
19 have a warning had a label applied to them in
20 1972. So we were told that the products that
21 we currently manufactured were encapsulated
22 products, that they were exempt from the OSHA
23 warning, but that regardless, Garlock was going
24 to provide a warning on those products. I
25 think that's probably about the extent of the

1 discussion at that point in time.

2 Q. And told by whom?

3 A. I don't really recall whom, but I
4 would think it would have been as a sales
5 individual. Most of my communication about the
6 products either came to me through the inside
7 sales correspondent that I worked with, like
8 the position that I had held early in my
9 career, or from the marketing department, so I
10 honestly don't recall specifically who told us,
11 but I believe we were told by either my sales
12 manager or the marketing department of the
13 product lines.

14 Q. Who was your sales manager at that
15 time?

16 A. Bill Klotz, Wilbur Klotz.

17 Q. Was there a products liability
18 committee of Garlock?

19 A. Yes.

20 Q. Did they have some role in connection
21 with, with warnings of -- pertaining to
22 asbestos?

23 A. Well, I've reviewed some of those
24 meeting minutes. I was never part of that
25 committee. I believe it is accurate to say

1 that they were formed somewhere in
2 approximately 1976, but shortly thereafter
3 products liability became a national issue, and
4 it was required by Colt, and I have reviewed
5 some of their meeting minutes, and I believe it
6 was discussed, but I can't tell you the
7 context.

8 Q. Who's Colt?

9 A. Colt Industries was the company that
10 acquired Garlock, Incorporated in 1976.

11 MR. ZUYDHOEK: Would you mark that?

12 (Whereupon, Heffron Exhibit 3, a
13 document regarding product liability committee
14 minutes, was then received and marked for
15 identification.)

16 BY MR. ZUYDHOEK:

17 Q. Before we get to Heffron Number 3, who
18 did Colt acquire Garlock from?

19 A. Garlock was a publicly-traded
20 corporation at that time, so it was not held by
21 any other company at that point in time. It
22 acquired it from the shareholders of Garlock.

23 Q. Okay. And does Colt still own the
24 stock of Garlock?

25 A. No, sir.

1 Q. How long did Colt continue to own the
2 stock of Garlock?

3 A. Colt Industries went private in the
4 late 1980s, I believe; approximately 1988. I
5 may not be correct, and it became Coltec
6 Industries. It was first -- it was one -- it
7 was during the time frame when leveraged
8 buyouts were popular.

9 And it was private for several years
10 and in approximately 1990, and I may not be
11 correct with that date either, Coltec
12 Industries became a publicly-traded company
13 again.

14 And then Coltec Industries was
15 acquired by B.F. Goodrich in July of 2000, I
16 believe. And B.F. Goodrich, of course, changed
17 its name to Goodrich and formed a wholly-owned
18 subsidiary called EnPro, and -- in 2002 I
19 believe, and Garlock is now a wholly-owned
20 subsidiary of EnPro Industries since
21 approximately July of 2002.

22 Q. Okay. Just so I understand, Goodrich
23 owns EnPro and EnPro owns Garlock?

24 A. No.

25 Q. Okay.

1 A. Goodrich does not own EnPro.

2 Q. Did Goodrich spin EnPro off?

3 A. Yes, sir.

4 Q. So EnPro now just owns itself?

5 A. Yes.

6 Q. And other than Garlock what else does
7 EnPro have?

8 A. Many of the non- -- all of the
9 non-aerospace-related segments of Coltec
10 Industries. B.F. Goodrich, then Goodrich,
11 later Goodrich acquired Coltec Industries.
12 Manasco Landing Gear was part of Coltec
13 Industries as was Delavan Fuel Delivery
14 Systems, a name such as that.

15 And those two businesses continue to
16 be part of Goodrich in their aerospace
17 business. All other businesses, Fairbanks,
18 Morris Engine would be an example, Garlock
19 Bearings would be another example, Walbar would
20 be another example, there are other -- anything
21 that was part of Coltec Industries that wasn't
22 aerospace related is part of EnPro Industries.

23 Q. Okay. And the relationship between
24 EnPro and Garrison Litigation, EnPro owns
25 Garrison, as well?

1 A. Garrison is a wholly-owned subsidiary
2 of EnPro.

3 Q. Okay. And does Garrison perform
4 services for anyone other than Garlock?

5 A. I believe so.

6 Q. Are they also -- those others, are
7 they also EnPro subsidiaries?

8 A. To the best of my knowledge, yes, sir.

9 Q. Are all of them involved in asbestos
10 litigation?

11 A. I don't know.

12 Q. Okay. Let's go to Heffron Exhibit 3.
13 You mentioned you had reviewed some of the
14 minutes of the product liability committee. Is
15 this one of the sets of minutes that you
16 reviewed, Heffron Exhibit 3?

17 A. Well, I'm not certain, but it could
18 very well be.

19 Q. There is in this, on the first page,
20 a, a warning with respect to asbestos
21 specified. Is that the warning that you were
22 referring to previously?

23 A. It looks like the, the OSHA warning,
24 and that is the warning that we used, so I
25 believe this is the same warning.

1 Q. Okay. Now, I think you also mentioned
2 that you were using a warning for a few years
3 prior to 1977. Was that right from, from '72
4 on?

5 A. Yes, sir.

6 Q. And that was on what?

7 A. That would have been on any -- on our
8 asbestos textiles.

9 Q. Okay. And was that warning in terms
10 of language similar to this one or was it
11 different?

12 A. I believe it was identical. It's --
13 this, I believe, is the standard OSHA warning,
14 and although the encapsulated products were
15 exempt from it, this is the warning that would
16 apply to products like textiles, and it's the
17 same warning used for both groups of products.

18 Q. And was it your understanding that it
19 was the products liability committee that
20 decided to put the warning on in 1977?

21 A. I don't honestly know. It was more my
22 perception that ultimately the decision was
23 made by the president of the company who at
24 that time was George Townsend, but it's also my
25 perception that he received input from the

1 members of this committee, but there was --

2 Q. I see that he's not -- well, I'm
3 sorry. He's not listed as in attendance at
4 this particular meeting.

5 A. No, he is not.

6 Q. Was he a member? Do you know?

7 A. I don't know.

8 Q. The individuals that are listed, could
9 you tell me what, what positions they held?

10 MR. CONNOR: In 1977?

11 MR. ZUYDHOEK: In 1977.

12 THE WITNESS: I don't know who

13 G. Barlis was.

14 BY MR. ZUYDHOEK:

15 Q. Or is?

16 A. Or is. Michael Burdulis was at that
17 point in time -- I believe he was the manager
18 of accounting in compression packing. And John
19 Guffey probably was responsible for our
20 compression packing division.

21 Rick Guild was in accounting for the
22 Palmyra operations. Mr. Holmes I believe was
23 also in the finance department. Mr. Keep was
24 in the expansion joint department. Mr. Kunhen
25 I believe at that time was in Palmyra, possibly

1 responsible for hydraulics. Mr. Leroy was in
2 engineering. Mr. Lynn I believe was an
3 attorney, a Garlock attorney.

4 Mr. Panarites was in human resources.
5 Mr. Schaefer, I'm uncertain whether he had
6 sales or marketing, but given the fact that
7 Mr. Stay was there, I would say Mr. Schaefer
8 probably had manufacturing responsibilities,
9 and Mr. Stay was responsible for sales and
10 marketing.

11 Q. And I see near the bottom of the page
12 it says Mr. Stay was assigned the
13 responsibility of seeing this label was on all
14 advertising of asbestos products. That would
15 be consistent with his marketing role, I take
16 it.

17 A. Yes, sir.

18 Q. And Mr. Stay, is he still employed?

19 A. No, sir.

20 Q. Are any of these individuals still
21 employed?

22 MR. CONNOR: When you say still
23 employed, by Garlock?

24 THE WITNESS: No, none of them are
25 employed by Garlock.

1 BY MR. ZUYDHOEK:

2 Q. Do you know whether any of them are
3 still alive?

4 A. Well, some of them are individuals I
5 think that we talked about earlier. Perhaps
6 not. Certainly Mr. Burdulis. Mr. Guffey is.
7 Mr. Guild is not. Mr. Holmes, I don't know. I
8 believe Mr. Keep is. Mr. Kunhen I believe is.
9 Mr. Leroy is. I don't think Mr. Lynn is.
10 Mr. Panarites is. I believe Mr. Schaefer is.
11 And I believe Mr. Stay is.

12 Q. Looking over on page two, paragraph B
13 small D says it was suggest that letters be
14 sent to all our distributors stating the
15 following, quote, enclosed please find caution
16 labels which we strongly recommend that you, as
17 our distributor, pass on to all end users of
18 our products containing asbestos, unquote. Do
19 you know whether that was done?

20 A. I believe it was done, yes.

21 Q. Would you have been part of the
22 process of doing that?

23 A. No, but I would have been a salesman
24 at that point in time, and I do believe that
25 the caution labels were provided to our

1 distributors, as well.

2 Q. There are two alternatives for, for
3 labels; one caution, two danger. And then it
4 says, quote, from a marketing point of view it
5 was suggested that the number one phrase be
6 used for all labeling. Do you remember that
7 decision?

8 A. Well, I wasn't part of the decision.
9 No, I don't remember it. I do know that we
10 chose to use the, the approved OSHA caution
11 label. I do recall that we were exempt from
12 it, and I believe that may have been -- I was
13 not part of the decision-making process
14 certainly.

15 Q. Do you recall being exempt -- do you
16 recall that at the time or do you recall that
17 now that you've been designated as a company
18 representative in litigation?

19 A. I've known it for so long, certainly
20 my knowledge has not been simply since I've
21 been designated as the responsible person. I
22 believe it goes back to the period of time in
23 which we first added it or shortly thereafter
24 when I was in marketing, but I can't really put
25 a time frame on it, but I do know that it isn't

1 just since I've had responsibility.

2 Q. What is your understanding of why
3 Garlock was exempt from it?

4 A. Because the products that we were
5 manufacturing were encapsulated and that the
6 OSHA regulations were such that they
7 specifically identified those products as being
8 exempt.

9 Q. Specifically identified encapsulated
10 products or specifically identified Garlock
11 products?

12 A. Encapsulated products.

13 Q. And by encapsulated what is your
14 understanding of that?

15 A. Well, my understanding is
16 encapsulation refers to a variety of methods
17 that can be used to, to coat or treat or
18 enclose or encapsulate the product.

19 It could be a Teflon suspension. It
20 could be grease or graphite. It could be
21 rubber. It could be a product that had a metal
22 jacket that completely covered it. But those
23 are some of the methods.

24 Obviously in the, in the case of a
25 compressed gasketing, it's the rubber. The

1 product looks a lot like linoleum when you're
2 done, so there's a -- very much a rubber, a
3 rubber finish to it, and all those would
4 describe encapsulation as I understand it.

5 Q. And am I right, is encapsulation meant
6 to prohibit the release of asbestos fibers?

7 A. Well, the encapsulation -- the, the
8 product is manufactured to perform a certain
9 function. And in order to perform that
10 function, it has to have a specific
11 construction.

12 And for instance, in rotating packing
13 it's very typical to have an outside surface
14 lubricant on the product when you -- because
15 the whole object of the packing is to install
16 it with the stuffing box and then compress it
17 with a gland and prevent fluid from leaking out
18 between the rotating shaft and the impeller
19 into the pump.

20 So there is a lot of heat that's
21 generated in attempting to do that, and that
22 frictional heat is dissipated by lubricant. So
23 the encapsulation is a by-product of the
24 manufacturing process. It happens that as a
25 result of having done that, the fibers are

1 encapsulated, but that, at least from my
2 vantage point, isn't the purpose of that
3 construction. The purpose is to make a product
4 that will work in the applications that it's
5 designed for.

6 Q. So in terms of the manufacturing
7 process you made an encapsulated product?

8 A. Yes.

9 Q. And all of your asbestos was
10 encapsulated?

11 A. No, I don't believe all of them were.

12 Q. Okay.

13 A. The asbestos textiles that we produced
14 which we primarily consumed ourselves, some of
15 those were not encapsulated. Most of them were
16 because they were treated with rubber compound
17 so that they could be made into a gasket, but I
18 wouldn't say all of our products were
19 encapsulated.

20 Q. All of the gasket products were
21 encapsulated?

22 A. Yes, sir.

23 ✓ Q. Now, the, the textile production that
24 you consumed yourself, tell me about that
25 process. What, what was involved there?

1 A. Well, textiles describes -- at least
2 from my layman's understanding, the textile
3 describes taking a fiber and making it into
4 something; cloth, yeah, a shirt, tape, tubing.

5 So -- and actually the method used for
6 asbestos I believe was the woolen process, and
7 it was originally developed for wool. So those
8 are pretty typical in the textile manufacture
9 of cloth and so forth.

10 And in the case of a braided packing,
11 in order to produce a packing you needed to
12 have a spool of yarn which, for all practical
13 purposes, is thread, but obviously it's a
14 much -- much thicker than a sewing thread and
15 often made up of a number of strands of
16 material.

17 So a textile operation would produce
18 yarn in a form that it could be put on a spool
19 or a bobbin which I believe is what it was
20 probably put on to begin with. Often that
21 material was then soaked in lubricant,
22 dissipating the heat and reducing frictional
23 heat at start-up, and having a blocking agent
24 in the body of the product so that it
25 controlled leakage was very important.

1 So usually asbestos braided packings
2 had a -- but not always, had a lubricant added
3 to them while they were in the yarn stage.
4 The, the cloth would be weaving cloth like
5 typical textile operation, and then that cloth
6 eventually was treated with rubber. It might
7 be a neoprene or SBR or nitro rubber, and those
8 products were intended to have enough rubber on
9 the surface so that they were tacky.

10 And that term simply means that they
11 will stick together so that the product can
12 then be made into other things such as Chevron
13 packing where cloth is folded and formed so
14 that it can be placed in a mold. It has rubber
15 treatment on the surface which is providing the
16 encapsulation, and it gets heated under
17 temperature and pressure and formed into a ring
18 which is used for sealing.

19 That same cloth could be wrapped
20 around on itself over and over again and then
21 calendared so that it makes a, a packing that
22 consists of fabric and rubber, and then again
23 it's usually treated with an elastomer or, I
24 mean, a lubricant. That same fabric could be
25 used as reinforcement in an expansion joint,

1 although as I mentioned earlier it was not that
2 typical. Those are some of the uses of a
3 textile.

4 ✓ Q. Okay. So your textile cloth comes out
5 of the textile department and gets used in the
6 compression packing area?

7 A. Could be.

8 Q. Okay. Or the expansion joint area?

9 A. Could be.

10 Q. But not the gasket area?

11 A. Well, there were a few -- there was a
12 popular form of gasket called a boiler gasket
13 which was asbestos textile treated with
14 neoprene rubber. So it was encapsulated, and
15 that was sometimes formed or folded into a
16 gasket, a handhole gasket or a manhole gasket.
17 A boiler inspection plate would be where it
18 might go.

19 So that would be the only example I
20 can think of where an asbestos textile would
21 form a gasket, and that was not a very
22 popular -- it was not a product that Garlock
23 sold very much of. There were other
24 manufacturers who were much more significant in
25 that area.

1 ✓Q. Okay. I think what, what I hear you
2 saying is that no product left Garlock that
3 wasn't encapsulated. No asbestos-containing
4 product.

5 A. Essentially.

6 Q. So the encapsulation process with
7 respect to braided product occurred in the
8 compression packing area?

9 A. Yes, sir.

10 Q. And the encapsulation process with
11 respect to expansion joints occurred in the
12 expansion joint process?

13 A. Or perhaps earlier because the cloth
14 was treated with rubber, and there was an area
15 that did that called mill and calendar. So the
16 dry cloth would have rubber added to it in that
17 department and then be used by the expansion
18 joint department.

19 Q. So the products leaving Garlock being
20 encapsulated were -- there was no asbestos
21 fibers, as you understand encapsulation, coming
22 off of them once they were shipped; is that
23 correct?

24 A. Yes, as I understand it, yes, sir.

25 Q. And you talked about encapsulation in

1 terms of the manufacturing process, and you
2 also talked about encapsulation in terms of
3 OSHA. And I take it that OSHA is referring to
4 encapsulation meaning they're not releasing
5 asbestos fibers to the air.

6 MR. CONNOR: I'm object to what OSHA
7 thinks.

8 THE WITNESS: Yeah. I quote honestly
9 have never actually read the OSHA regulation.
10 I've been around it many times. So it's my
11 understanding that OSHA identified friable
12 materials and materials that were encapsulated.

13 There may be other categories as well
14 that I'm not knowledgeable of, and that the
15 compressed gasketing production that Garlock
16 manufactured and the braided packings, for
17 instance, were encapsulated forms that fell
18 under that designation that was developed by
19 OSHA.

20 BY MR. ZUYDHOEK:

21 Q. And what do you mean by friable
22 material?

23 A. Well, Garlock made no friable
24 materials, but my layman's understanding is
25 simply that a friable material is something

1 that will create or release dust in the
2 handling of product. I don't know if that's
3 the technical term or not, but that's my
4 perception.

5 Q. And is the reason that Garlock
6 products were not friable because they were
7 encapsulated?

8 A. I don't know if those two things go
9 together. I know that our manufacturing
10 process resulted in the encapsulation, but my
11 perception of a lot of the friable products are
12 they are completely different types of asbestos
13 and they're different, like building materials
14 and insulation materials, none of which Garlock
15 ever manufactured.

16 So I wouldn't want to get caught up in
17 trying to characterize or identify friable very
18 accurately because I have no experience or
19 knowledge in that area.

20 Q. Okay. When did you first hear the
21 term friable?

22 A. I don't honestly know.

23 Q. When your mother was cooking fish?

24 A. I don't know.

25 MS. CATALANA: Lunch is here.

1 MR. ZUYDHOEK: That's fine.

2 MS. CATALANA: If this is a natural
3 breaking point.

4 MR. ZUYDHOEK: I'd just as soon stay
5 in here.

6 (Whereupon, a recess was then taken.)

7 BY MR. ZUYDHOEK:

8 Q. Back on the record. Mr. Heffron, did
9 you review any documents to prepare yourself to
10 testify today?

11 A. Yes.

12 Q. Would you tell me what you reviewed?

13 A. I reviewed the deposition notice. I
14 reviewed -- there were several letters that had
15 been exchanged between Morris & Morris and the
16 plaintiff's firm. I believe I saw a couple of
17 those.

18 MR. COMERFORD: That had to take
19 hours to get through.

20 MS. CATALANA: If I can just state to
21 counsel that they were letters supplementing
22 our disclosures to your firm.

23 BY MR. ZUYDHOEK:

24 Q. Okay.

25 A. I briefly reviewed some of our

1 previous answers to interrogatories, not on
2 this case but in other cases or on another
3 case, I guess I should say; the standard
4 interrogatories. I think that's it probably.

5 Q. Okay. Did you bring any documents
6 with you specifically to disclose at the
7 deposition?

8 A. I didn't, no, sir.

9 Q. Okay.

10 MR. ZUYDHOEK: Why don't you mark
11 that.

12 (Whereupon, Heffron Exhibit 4,
13 Defendant Garlock Inc.'s objections, Answers
14 and Responses to Plaintiff'S Master Set of
15 Interrogatories and Request for Production, was
16 then received and marked for identification.)

17 BY MR. ZUYDHOEK:

18 ✓ Q. Let me show you Exhibit 4. You said
19 you reviewed answers to interrogatories. Is
20 that a copy of the document that you reviewed
21 to prepare yourself to testify?

22 A. No, I don't believe so.

23 Q. Would the substance of that particular
24 document be similar to what you reviewed to
25 prepare yourself to testify?

1 MR. CONNOR: Object to the term
2 similar. You might want to -- okay.

3 MR. ZUYDHOEK: Off the record.
4 (Discussion off the record.)

5 MR. CONNOR: Just so the record is
6 clear, obviously counsel has marked as Heffron
7 4 according to the title it's Defendant Garlock
8 Inc.'s objections, Answers and Responses to
9 Plaintiff'S Master Set of Interrogatories and
10 Request for Production, and this is in the
11 District Court of I think it's Bexar,
12 B-E-X-A-R, County, Texas.

13 THE WITNESS: Without taking a lot of
14 time, they would appear to be a -- Texas to me
15 always seems to have some additional complexity
16 or detail that may not be, so there's -- I
17 certainly have reviewed previously other
18 answers to interrogatories that were in the
19 State of Texas.

20 MR. ZUYDHOEK: I'll ask for
21 production right now of the answers to
22 interrogatories that he reviewed to prepare
23 himself to testify today.

24 MR. CONNOR: Okay.

25 MR. ZUYDHOEK: Okay.

1 MR. CONNOR: I mean, I can tell
2 you -- I don't know. I have what's in this
3 case, but --

4 MS. CATALANA: I was going to say the
5 only thing I provided him with is our, our
6 responses in this case as well as some letters.

7 MR. ZUYDHOEK: I meant -- I must have
8 misunderstood you, Mr. Heffron.

9 MS. CATALANA: This is what we went
10 over.

11 MR. COMERFORD: I'll be back.

12 MR. CONNOR: We can attempt to clear
13 it up.

14 MS. CATALANA: That was something that
15 we produced to du Pont. There you go. That's
16 what it is.

17 MR. CONNOR: I thought it was all
18 this case, but that's not the title in this
19 case.

20 MS. CATALANA: Right.

21 MR. ZUYDHOEK: Okay. Now I know
22 what, now I know what you referred to. That's
23 fine.

24 MR. CONNOR: It was given to him in
25 this case, but it's titled -- just to make it

1 clear, what we're referring to now, it's from
2 the Supreme Court of the State of New York,
3 County of Erie. It's from the Eric Spangenburg
4 case, Erie County, plaintiff's notice to take
5 deposition with document production, and this
6 apparently was produced.

7 MS. CATALANA: Well, actually these
8 were not produced along with that deposition,
9 but they were brought to the deposition by
10 plaintiff's counsel and used in that manner.
11 These were not produced at that deposition by
12 Garlock.

13 MR. ZUYDHOEK: At what deposition?

14 MR. CONNOR: Spangenburg. That's why
15 I'm referring to them as Spangenburg because
16 these were exhibits that were reviewed during
17 the course of that deposition with Mr. Heffron.

18 MR. ZUYDHOEK: Okay.

19 BY MR. ZUYDHOEK:

20 Q. But now let's focus on Exhibit 4, and
21 if you turn to page five, please. In terms of
22 the answer, do you see, Mr. Heffron, it says,
23 these interrogatories answers have been
24 reviewed and signed by James Heffron? That's
25 you.

1 A. Yes, sir.

2 Q. And do you remember reviewing and
3 signing interrogatory answers to
4 interrogatories in a Texas case?

5 A. Sir, there have been several occasions
6 in which I have reviewed and signed, so I don't
7 have any specific recollection of this, or when
8 it was produced, but I have no question that I
9 reviewed it.

10 Q. Okay. In, in -- on page five in that
11 answer there's a sentence in the middle of the
12 page that says, quote, the documents reviewed
13 by Mr. Heffron in conjunction with the
14 preparation of these interrogatory answers
15 include, one, previously filed discovery
16 responses filed by Garlock including answers to
17 interrogatories and responses to requests for
18 production of documents; two, deposition and
19 trial testimony previously provided by Garlock
20 employees in asbestos-related litigation. And
21 then there's some more itemizations, as well.

22 Focusing on two for the moment, I take
23 it you have, in the past, reviewed deposition
24 transcripts in conjunction with your role as
25 the designated corporate representative in

1 asbestos litigation.

2 A. Other depositions, other employees'
3 depositions?

4 Q. Right.

5 A. Yes, sir.

6 Q. And I presume you also reviewed your
7 own deposition transcripts, have you not?

8 A. A few times, yes, sir.

9 Q. Have you reviewed a deposition
10 transcript of Mr. Thurley?

11 A. Not that I recall.

12 Q. Okay. Have you -- tell me about the
13 cases that you've actually testified in either
14 in deposition or trial. How many are there?

15 A. Well, I can't give you any absolute
16 detail because I don't tend to retain that, but
17 I can tell you that generally I would say that
18 I've probably testified in six to eight trials
19 and probably an equal number of depositions
20 starting in September of 1999.

21 Q. Has anybody testified as the corporate
22 representative other than yourself since that
23 time?

24 A. I'm not certain. I believe that there
25 has been -- there has been one or two instances

1 where I'm not sure whether or not Mr. Whittaker
2 or Mr. Jewett testified, but I know -- I recall
3 a couple of times when I was unavailable or
4 something like that, so it's, it's possible. I
5 can't tell you specifically.

6 Q. When was the last time you
7 testified --

8 A. In --

9 Q. -- in an asbestos case.

10 A. A deposition, for instance?

11 Q. Yes.

12 A. Approximately two weeks ago.

13 Q. Where was that?

14 A. Here in Rochester.

15 Q. In what case?

16 A. I believe it was Caffey, which I
17 believe is spelled C-A-F-F-E-Y. That may not
18 be the correct name. Again, I don't attempt to
19 memorize that kind of information, but it was,
20 in fact, two weeks ago. I believe on the 1st
21 of April is the actual day that I testified.

22 MS. CATALANA: If I can help you out
23 counsel, he said it was in Rochester. He
24 testified in Rochester, but I do not believe
25 that that was a New York State or Rochester

1 case. I believe it was an out-of-state case.

2 THE WITNESS: That's correct.

3 BY MR. ZUYDHOEK:

4 Q. Where was the case pending?

5 A. Texas, but I'm not sure what county.

6 Q. Have you received the transcript from
7 that deposition?

8 A. No, sir.

9 Q. Are you going to sign it and -- review
10 and sign it when you receive it?

11 A. I don't recall being asked, so I would
12 say that not to my knowledge.

13 Q. Do you maintain your own copies of
14 transcripts where you've testified?

15 A. No.

16 Q. The time before that when did you give
17 testimony, either trial or deposition?

18 A. Probably in November of last year in
19 Newport News, Virginia.

20 Q. And the name of that case?

21 A. I don't know.

22 MR. CONNOR: I can help you out. I
23 tried that case. It was a mass consolidation
24 of twelve hundred and ninety-six plaintiffs, so
25 there was no specific plaintiff.

1 MR. ZUYDHOEK: I bet it started with
2 an A.

3 MR. CONNOR: Twelve hundred and
4 ninety-six names were read to the jury to make
5 sure no one was related to them. It's on the
6 Newport News shipyard. All cases were out of
7 there.

8 MR. ZUYDHOEK: This document on page
9 seven refers to an Exhibit B to the answers to
10 interrogatories. In the exhibit that has been
11 marked there is no Exhibit B, but if I could
12 find it, I'll dig it out.

13 ✓ (Whereupon, Heffron Exhibit 5, a
14 document containing a listing of styles that
15 Garlock manufactured that contained asbestos,
16 was then received and marked for
17 identification.)

18 BY MR. ZUYDHOEK:

19 Q. Mr. Heffron, I show you Exhibit 5.
20 Are you able to identify it?

21 A. Yes.

22 Q. What is it?

23 A. It's a listing of styles, styles that
24 Garlock manufactured that contained asbestos.
25 It lists a style number, the type of product,

1 the type of asbestos used in that product, a
2 calculation of the percentage of asbestos made
3 by weight of the product, the type of binder.
4 We've been talking about elastomers and rubber,
5 and they are used to bind the product together
6 in a compressed sheet form, and the last -- the
7 date or the year rather when it was last
8 manufactured.

9 Q. Okay. Now, when would this exhibit
10 have been prepared? Are you able to say that?

11 A. I can't tell you specifically, but I
12 can tell you based on just a cursory review of
13 it that it was prepared prior to December 31st
14 of 2000 because it, it that says style 7021 is
15 still being manufactured, and that's no longer
16 the case.

17 Q. And so with respect to this exhibit,
18 wherever it designates still manufacturing an
19 asbestos-containing product, that's no longer
20 true as of the current time?

21 A. That's correct.

22 Q. And for example, the very first one
23 listed compressed sheet, asbestos type
24 chrysotile, that's still manufactured and I
25 take it that's no longer true?

1 A. That's correct, it is no longer
2 manufactured.

3 Q. What does SBR stand for?

4 A. Styrenebutadiene rubber.

5 Q. And the reference and the style, I
6 take it that that's an internal product number
7 that is used by -- was used by Garlock?

8 A. Yes, sir.

9 Q. And then the product type, compressed
10 sheet, is -- and is that a gasket?

11 A. Yes, sir. It's a sheet that is used
12 in -- for gasketing purposes.

13 Q. And then asbestos type, chrysotile.
14 What is that?

15 A. That's commonly referred to as white
16 asbestos. That's the type of fiber that was
17 used.

18 Q. And as I understand it, then,
19 seventy-five to eighty-five percent of a
20 compressed seat of style 7021 would be made up
21 of chrysotile asbestos?

22 A. Yeah, by weight comparing it to all
23 the other ingredients, yes, sir.

24 Q. And then the second one, 7705,
25 compressed sheet, crocidolite. Did I pronounce

1 that correctly?

2 A. Yes.

3 Q. That's -- that was discontinued in
4 1983?

5 A. Yes, sir.

6 Q. It was made up until then of
7 eighty-five to eighty-six percent asbestos?

8 A. Yes, sir.

9 Q. And it had the same type of binder?

10 A. Yes, sir.

11 ✓ Q. Now, what's the difference between
12 chrysotile and crocidolite?

13 A. Chrysotile is commonly referred to as
14 white asbestos. Crocidolite is commonly
15 referred to as blue asbestos, and blue asbestos
16 was specifically recommended for its resistance
17 to hot and cold mineral acids and used pretty
18 much exclusively for that purpose.

19 Q. Is one of these types of asbestos also
20 associated with mesothelioma?

21 MR. CONNOR: Objection. He's not a
22 medical expert. He's not being offered for
23 that either.

24 BY MR. ZUYDHOEK:

25 Q. Are you aware of that fact, that there

1 is a claim that is made in this litigation that
2 one of these types of asbestos are associated
3 with mesothelioma?

4 A. I'm not aware of it specifically being
5 alleged in this case. I have heard previously
6 that there are -- there is believed or alleged
7 to be a linkage between crocidolite and
8 mesothelioma.

9 Q. And when did you hear that?

10 A. Probably sometime since 1997.

11 Q. Okay.

12 A. Perhaps before.

13 Q. Can you tell me why Garlock stopped
14 manufacturing 7705 in 1983?

15 A. Well, asbestos has proven to be an
16 extremely difficult product to develop
17 substitutes for because of its temperature
18 resistance, chemical resistance, durability, it
19 doesn't oxidize, it's non-flammable.

20 Blue asbestos was offered for use in
21 hot and cold mineral acid service, a very
22 narrow portion of the total sealing market.
23 And products such as graphite and more
24 specifically PTFE, which I referred to several
25 times as Teflon, typically is able to operate

1 in that same environment.

2 Q. And so are you saying that in 1983 the
3 removal of crocidolite 7705 was for --

4 A. To a large degree because -- if not
5 exclusively, because there was a satisfactory
6 substitute for the limited number of
7 applications that product was designed for.

8 Q. Okay. And was that the only reason?

9 A. Well, it was very -- it was a very
10 abrasive fiber to work with. I understand that
11 it was prone to pitting even stainless steel,
12 but I believe that having a substitute is the
13 reason that the product was discontinued.

14 Q. Nothing to do with health as far as
15 you know?

16 A. Not to my knowledge, sir, no.

17 Q. Have you asked anyone that at the
18 company?

19 A. I don't believe there would be anyone
20 to ask.

21 Q. Somebody made the decision in 1983 to
22 eliminate this product, correct?

23 A. I don't know who made the decision in
24 1983.

25 Q. Okay. And, and you know a decision

1 was made to eliminate it because it was
2 eliminated?

3 A. I know it was eliminated, yes, sir.

4 Q. And somebody made that decision.

5 A. I don't know that.

6 Q. All right. You've made no attempt to
7 find out who made it or why they made it?

8 A. I don't recall ever asking anyone. I
9 don't know who I would ask, quite frankly.

10 ✓ Q. The 7705 which was discontinued in
11 1983 and 7021 which was still being
12 manufactured when this document was prepared,
13 what would be the difference in terms of what
14 those products would be used for? Could they
15 be used for the same thing?

16 A. Well, 7021 couldn't be used and
17 wouldn't be shown as recommended for hot and
18 cold mineral acid. The resistance of white
19 asbestos fiber to hot and cold mineral acid
20 would probably be recommended -- probably at
21 that point in time the designation would have
22 been satisfactory or unsatisfactory, and I
23 believe the designation would be
24 unsatisfactory.

25 So -- but it could be used in many

1 other applications; oil, water, gasoline
2 service, probably aliphatic and aromatic
3 service, perhaps against certain refrigerants,
4 although I don't know if the binder is correct
5 for that; steam, a variety of general service
6 applications.

7 Q. Do you know what the term anti-stick
8 releasing agent is?

9 A. Yes, I do.

10 Q. What is it?

11 A. It refers to a treatment that is added
12 to the gasketing itself. When we discussed the
13 manufacturing process, after the sheet has been
14 removed from the sheeter, it's then printed
15 with a Garlock style number and other
16 information.

17 And then immediately thereafter an
18 anti-stick treatment is added to both sides.
19 It's a spray that's added whose purpose is to
20 enhance the gasket's ability to release from a
21 flange after it's been in service.

22 Q. So it's, it's -- it has nothing to do
23 with installation but rather removal at some
24 point in time after it's been installed?

25 A. I can't think of any purpose that --

1 for installation, but for removal, yes, it's
2 designed to help make the gasket easier to
3 remove from the flange once it's been in
4 service.

5 Q. Okay. On this first page of, of
6 Exhibit Number 4, I think basically everything
7 there is, is compressed sheet. Am I correct?

8 MR. CONNOR: For the record, that's
9 Exhibit 5.

10 BY MR. ZUYDHOEK:

11 Q. I'm sorry. Exhibit 5.

12 A. Everything is either a compressed
13 sheet or gasket from that sheet, yes, sir.

14 ✓ Q. Okay. And would every one listed here
15 have an anti-stick releasing agent?

16 A. Yes.

17 Q. So is it fair to say that all
18 compressed sheets were manufactured with an
19 anti-stick releasing agent?

20 A. Yes.

21 Q. And would 7021 and 7705 have gone
22 through the same sheeter?

23 A. Well, normally any blue product was
24 run -- there was a -- it was not a very popular
25 or -- popular is perhaps not the right word.

1 It wasn't a product that was made on a daily
2 basis. It was made probably every four to six
3 weeks, and my understanding is because of the
4 abrasive nature of the fiber, generally it was
5 relegated to a particular mixer and perhaps
6 even to certain sheeters.

7 I don't believe blue asbestos or 7705
8 would have ever been run on the more modern
9 equipment, but it would have been run on the
10 older equipment. So there was some I think
11 tendency to utilize certain pieces of
12 equipment, but it could run on the same piece
13 of equipment that any other compressed asbestos
14 style was produced on.

15 ✓ Q. Would 7705 have been manufactured
16 between 1955 and 1960?

17 A. I don't honestly know. I'm not sure
18 what -- when blue asbestos first came into use.
19 My belief is -- and we could certainly look at
20 a catalog from that era, but I would expect
21 that 7705 was manufactured in the 1950s and
22 '60s.

23 Q. If as a customer I was running cold
24 water through pipes and had to use gaskets,
25 which one would be recommended?

1 A. Well, usually the customer did make
2 the decision, so cold water, there would be a
3 whole host of products that could have been
4 acceptable; anything from a vegetable fiber --
5 you know, cold is a relative term as well, but
6 against water, the customer might have elected
7 to use rubber or they might have elected to use
8 vegetable fiber.

9 They might have elected to use
10 asbestos-containing gasketing but -- so there
11 isn't any particular product that would be
12 exclusive to water service, but there's a
13 variety of products that could be used.

14 ✓ Q. Okay. And would the blue asbestos
15 gasket -- containing gasket be recommended for
16 that type of application?

17 A. Well, it wouldn't be recommended for
18 it. The specific recommendation would be for
19 the hot and cold mineral acids because the
20 product was more expensive and, and typically
21 only used in those areas where it was really
22 necessary.

23 Q. Okay. So only, only -- the only
24 reason to use blue asbestos, whether it's 7705
25 or some other number, would be these acids that

1 you're talking about?

2 A. Certainly from a product
3 recommendation standpoint that would be my
4 belief, yes, sir.

5 Q. Okay. And I take it from a prior
6 answer that you would have no way of
7 ascertaining based on any documentation right
8 now as to what type of compressed sheet gasket
9 was sold to du Pont between 1955 and 1960?

10 A. There are no sales records that I
11 could look at, no, sir. I have no way of
12 knowing.

13 Q. Now, as I go through this, I see on
14 page five, for example, top of the page,
15 two-thirty and two thirty-one, square braided
16 packing, square braided ring crocidolite,
17 discontinued in 1980. Are you aware of why in
18 1980 those two items would have been
19 discontinued?

20 A. Well, again, the discontinued -- the
21 discontinuance of -- particularly in the
22 braided packing area, we had a program to
23 develop non-asbestos substitutes for
24 essentially all of the braided asbestos styles
25 that we produced that was active during my time

1 in compression packing in the late '70s and
2 early '80s, and those particular products, for
3 instance, again being recommended for the
4 specific acid service, there were other
5 materials available by then; perhaps carbon and
6 graphite, but certainly PTFE or Teflon would be
7 suitable for use where the blue was used
8 previously.

9 Q. And would they be less expensive or
10 more expensive than, than what was used to --
11 when they were replaced?

12 A. I really don't know. One of the --
13 the price per pound is one way of looking at
14 the relative cost of a product, but the
15 customer uses it by the inch or the foot. So
16 the number of feet per pound for any particular
17 product varies.

18 Carbon is very light, for instance, so
19 there would be a lot of feet per pound. Blue
20 seems to be as though it was a heavier product.
21 I can't accurately answer your question. I
22 believe -- I really don't know.

23 Q. Do you recall whether the
24 discontinuation of these two types of
25 crocidolite in 1980 had anything to do whatever

1 with health concerns?

2 A. Not to my knowledge, sir, no.

3 Q. Have you ever asked anyone involved in
4 the decision-making process as to whether it
5 did or not?

6 A. I'm not sure who specifically made the
7 decision. We made the decision, I know, to
8 eliminate all braided asbestos packings in
9 1980, so no, but I'm -- I've not -- there's no
10 one -- I don't know who I would ask, and I have
11 not asked specifically.

12 Q. When you were designated as the
13 company representative to testify on asbestos
14 litigation what did you do in order to learn
15 about asbestos and the way the company handled
16 it up until then?

17 A. Well, the areas that I'm qualified to
18 testify in encompass areas that I have personal
19 experience and that preceded my designation as
20 a witness. So for instance, the sale of the
21 product, the use of the product, the
22 recommended applications for the product, the
23 pricing of the product, the literature
24 associated with the product, the catalogs
25 dealing with the product, the manufacturing of

1 the product, all of those things I would have
2 either a pretty in-depth or at least a nominal
3 understanding of.

4 The areas that I also testify in
5 about, for instance, documents that exist that
6 I was not -- either I wasn't even born at the
7 time or was never involved in a meeting, the
8 other things like prior depositions from
9 Garlock employees or prior testimony by Garlock
10 witnesses, corporate witnesses, or other
11 individuals, I would have never had any of that
12 information -- access to that information
13 previously, so that would be an example of
14 something that I would have only accessed after
15 having been informed of the responsibility.

16 And then other information as I --
17 that I referred to earlier, things like old
18 catalogs and so forth that I may have used or
19 been familiar with early in my career with the
20 company, of course I would go back and, and
21 review those; review being a relative term. I
22 would look at them to refamiliarize myself with
23 them.

24 Q. Did you ever have any discussions with
25 Mr. Jewett, for example, about the process of

1 testifying?

2 A. I don't recall having any discussions
3 with him about the process. I'm not sure
4 exactly what you mean there, but certainly Clay
5 Jewett I think took -- called me one day and,
6 and expressed to me the fact that he was aware
7 that I was going to be acting as a corporate
8 witness, and I have talked to him many times
9 over the years since then.

10 Q. On specific subjects about which you
11 were going to testify?

12 A. I guess I would say yes to -- for
13 instance, to clarify something that, based on
14 my research, for instance, I might believe to
15 be true to see if he could add to that
16 knowledge.

17 Q. So for example, if you were to ask
18 Mr. Jewett why was it that they discontinued
19 crocidolite in 1980 and 1983, I take it that's
20 a question you haven't asked him yet.

21 A. I don't recall ever having such a
22 conversation with him, no.

23 Q. How about Mr. Whittaker? Have you
24 discussed with him any, any of the testimony
25 that he's given or any of the testimony that

1 you were about to give?

2 A. When you say testimony I was about to
3 give, I didn't -- with neither individual would
4 I call and say this is what I'm going to
5 testify to. What I would more likely say is a
6 question -- this is the question that's been
7 posed to me, this is what I believe to be true
8 based on my review of documents or whatever,
9 looking through the catalog, and is their
10 understanding any different than what I have
11 concluded.

12 Q. Okay. And would you ever ask them,
13 this is the question that I have been asked, I
14 really don't know what the answer is?

15 A. I don't recall ever expressing it that
16 way, but I'm sure that I've asked them
17 something like based on what I've reviewed,
18 this is what I believe to be true; do you know
19 anything that would be contrary to that --

20 Q. Okay.

21 A. -- or words to that effect.

22 Q. And have you ever discussed with
23 Mr. Whittaker the discontinuation of
24 crocidolite in 1980 and 1983?

25 A. No.

1 Q. Ever asked him why it was done?

2 A. No.

3 Q. And both Mr. Whittaker and Mr. Jewett
4 have testified extensively, have they not?

5 A. I believe that's true, yes.

6 MR. CONNOR: Object to the term
7 extensive, but --

8 BY MR. ZUYDHOEK:

9 Q. If you'd look at the last page of
10 Exhibit 5. There are four products specified
11 there, all manufactured with crocidolite, all
12 of which were discontinued in 1980. Correct?

13 A. That's correct.

14 Q. Do you have any knowledge of why they
15 were discontinued?

16 A. Well, again, as I said much earlier,
17 for those particular types of products that
18 were recommended for very specific use, there
19 were other substitutes that we believed were
20 acceptable at that point in time.

21 Q. And would that be a reason to
22 discontinue crocidolite, merely because you had
23 an acceptable substitute?

24 A. I would think so.

25 Q. And you have -- can you say it had

1 nothing to do with health?

2 A. To my knowledge, yes, sir.

3 Q. The anti-stick releasing agent, was
4 that always in the process when you first
5 became familiar with it?

6 A. When I first became familiar with it
7 in 1972, yes, sir.

8 Q. Do you know how long it had been part
9 of the process?

10 A. I've looked at advertisements and so
11 forth, catalogs that go back to -- certainly as
12 early as 1927, and I believe I have read
13 references at that point. I'm working from my
14 memory now, but I believe that I've seen
15 references to anti-stick that goes back that
16 far.

17 Q. And, and was part of the process of
18 using an anti-stick releasing agent to
19 facilitate the removal of old gaskets without
20 generating dust?

21 A. Well, since the -- since adding an
22 anti-stick treatment to the sheet goes back
23 into the -- possibly, if I'm correct, to 1927
24 or before, I don't believe that -- that was
25 certainly never why it was discussed with me.

1 There's a need, once a gasket has come
2 out of service or failed, to remove it from the
3 flange. It takes time to do that, and the
4 easier it removes from the flange, the better
5 the customer likes it.

6 So I believe that the reason that it
7 was added was to respond to customer need to
8 not only install gaskets, but to remove them as
9 easily as possible once they've been in
10 service.

11 Q. Does it, in fact, the anti-stick
12 agent, facilitate the removal of old gaskets
13 without generating dust?

14 A. If you're asking me if a gasket that
15 has anti-stick generates no dust upon removal,
16 I'm not able to answer that. I can simply tell
17 you that it allows the gasket to be removed
18 more easily.

19 Q. And does it facilitate the removal of
20 old gaskets without generating dust?

21 MR. CONNOR: Objection. Asked and
22 answered.

23 THE WITNESS: No visible dust. I
24 know that there are tests that industrial
25 hygienists have done about that very subject.

1 I can't answer it.

2 BY MR. ZUYDHOEK:

3 Q. Okay. Look at page ten of Exhibit 4.

4 A. Which exhibit?

5 Q. And I'll quote, Garlock's compressed
6 asbestos sheets and gaskets are treated with an
7 anti-stick releasing agent which reduces any
8 tendency of the gaskets to adhere to pipe
9 flanges during removal and replacement. This
10 anti-stick agent facilitates the removal of old
11 gaskets without generating dust, unquote. Do
12 you agree with that statement?

13 A. Yes.

14 Q. There are also right in the -- on the
15 same page, same paragraph, Garlock states that
16 from ninety-five to ninety-eight percent of s
17 asbestos-containing products have been made
18 only with chrysotile asbestos fibers. And that
19 the remaining two to five percent of such
20 products were made with crocidolite asbestos
21 fibers. Do you see that statement?

22 A. Yes.

23 Q. And is that -- that percentage, is it
24 percentage by weight? Is it percentage by
25 number? What is it? What's it referring to?

1 A. Well, the information that I've
2 reviewed that leads me to believe that that is
3 true is a listing of all asbestos fibers
4 purchased by Garlock by year from the late
5 1960s, I believe, through some time in the
6 1980s. So it is a, it is an estimation based
7 on the amount of fiber purchased, crocidolite
8 versus chrysotile.

9 Q. Has Garlock retained industrial
10 hygienists?

11 A. Retained them in our plant or retained
12 them -- yes, Garlock has retained industrial
13 hygienists to do fiber release studies, yes,
14 sir.

15 Q. What is a fiber release study?

16 A. Again, you know that I'm not an
17 industrial hygienist or anything like that. It
18 is a study where -- that attempts to utilize
19 agreed-upon practices that studies the amount
20 of fiber in the air, in the removal of whatever
21 product is identified in the test.

22 Q. And at various times those tests have
23 been done in the plant at Garlock?

24 A. I believe there is some testing that
25 has been done in the plant, yes.

1 Q. And when were they done?

2 A. I believe either in the late '70s or
3 the early '80s.

4 Q. And what were the results?

5 A. The fiber release was within
6 permissible levels.

7 Q. And what were the permissible levels
8 at that time?

9 A. Couldn't tell you.

10 Q. Are those studies itemized on page
11 thirteen of Exhibit 4?

12 A. I don't know whether the studies that
13 are itemized on page thirteen includes testing
14 done in the plant.

15 Q. Where else would they have been done
16 if not in the plant?

17 A. By -- at the location, I believe, of
18 the industrial hygienist or some other -- I
19 would assume that that's specified -- it's
20 specified in the study itself.

21 Q. Okay. Are asbestos fibers given off
22 when asbestos gaskets are removed?

23 MR. CONNOR: Again, let me object.
24 He's not an expert. This is not his field of
25 expertise. His testimony, whatever it will be,

1 are relying upon these reports that were just
2 referenced.

3 MR. ZUYDHOEK: By the way, I call for
4 the production of those reports. I haven't
5 seen them and I'd like them to be produced.

6 MS. CATALANA: This is the first
7 request that we've gotten.

8 MR. CONNOR: Yes.

9 MR. ZUYDHOEK: Don't be so sure of
10 that, but you've certainly gotten it now, so I
11 make that request now.

12 MR. CONNOR: That's okay.

13 THE WITNESS: And your question?

14 (Whereupon, the above-requested
15 question was then read by the reporter.)

16 THE WITNESS: I'm not really
17 qualified to answer that. I've reviewed some
18 of the details in some of the studies, and I
19 believe that there certainly is fiber count
20 that are part of the study, so I believe it
21 would be accurate to say that there are fibers
22 released during the removal of -- in the
23 studies that were conducted.

24 BY MR. ZUYDHOEK:

25 Q. When Garlock sold gaskets in 1955 and

1 1960, Garlock knew that they would have to be
2 removed at some point.

3 A. The -- certainly we know that products
4 are eventually replaced and removed, yes, sir.

5 Q. There wouldn't be any reason to have
6 an anti-stick releasing agent unless you knew
7 that, right?

8 A. You'd think not.

9 Q. And I also assume that Garlock knew
10 what the process was by which gaskets were
11 removed.

12 A. Well, certainly we were familiar with
13 what our recommended practices were. I
14 wouldn't go so far as to say that Garlock is
15 aware of every practice used by every customer,
16 but certainly we have recommended practices for
17 removing gaskets, and I believe we know how
18 customers typically remove gaskets, yes.

19 Q. Did you assume that only the
20 recommended practices were used?

21 A. I have no way of knowing that.

22 ✓ Q. Can you tell me what the recommended
23 practices were?

24 A. Generally the first thing that's
25 recommended is taking something like a putty

1 knife or scraper and using it to scrape or
2 remove the gasket from the flange.

3 The actual process is -- has always
4 been covered by -- in a portion -- the best of
5 my knowledge, in a portion of our catalog as it
6 is today. So it describes the use of a putty
7 knife. I believe it may also mention a wire
8 brush.

9 And it -- primarily what it talks
10 about is the need to ensure that the gasket is
11 completely removed from the flange, cleaned
12 from the flange and to do so without damaging
13 the serrations on the flange itself. It's
14 probably a paragraph of recommendations.

15 Q. Now, the flange is not a product that
16 Garlock makes, correct?

17 A. No, sir.

18 Q. And when a Garlock gasket is removed,
19 it's going to be replaced with another gasket.
20 Isn't that the process?

21 A. I assume so, yes.

22 ✓Q. So the flange has to be clean in order
23 that the gasket fits into a clean flange?

24 A. It's supposed to be, yes, sir.

25 Q. Have you ever heard of Garlock gaskets

1 being removed by the use of a chisel?

2 A. Not specifically, no.

3 Q. You've never heard of that being done?

4 A. Not that I recall, unless it's been in
5 some deposition, but I don't recall it, no.

6 Q. And you never remember seeing it in
7 any deposition?

8 A. Not that I recall, no, sir.

9 Q. Did you review Mr. Krieger's
10 deposition?

11 A. No, sir.

12 Q. As the designated corporate
13 representative did you make any inquiry within
14 the company as to how gaskets are removed other
15 than the recommended method of removal?

16 A. Within the company?

17 Q. Within the company.

18 A. Probably.

19 Q. Who would you have talked to?

20 A. I can't really think of anybody
21 specifically, but I have talked to sales
22 representatives for Garlock previously. I've
23 certainly talked to Roy Whittaker and Clay
24 Jewett.

25 Q. On that specific subject?

1 A. I would think so, yes.

2 Q. Do you recall the conversations? Do
3 you recall what you said and what they said?

4 A. No.

5 Q. Who is it that, that actually writes
6 the recommendations that Garlock makes for
7 removal of gaskets?

8 A. I would think that -- well, it's
9 probably a shared responsibility. For
10 instance, any literature that we currently
11 publish there's a group of people who reviews
12 it. Marketing reviews it. That would be my
13 area. Application engineering reviews it.
14 Generally the review of those kinds of
15 changes are pretty much left to those two
16 areas. Most of the practices associated with
17 removing a gasket have remained pretty much
18 unchanged to my knowledge through time. So I
19 wouldn't know who specifically developed the
20 language that we used, but I would expect that
21 the process would be very similar to what we
22 use now.

23 Q. Have you talked to anybody in
24 marketing about the manner in which gaskets are
25 removed?

1 A. Well, I'm in marketing.

2 Q. Have you talked to yourself?

3 A. I don't want to admit to that.

4 Q. Have you talked to anybody in
5 engineering about the manner in which gaskets
6 are removed?

7 A. Sure.

8 Q. Who?

9 A. Dave Burgess, Matt Tones, two
10 individuals that I work with on a regular
11 basis.

12 Q. Spell that.

13 A. B-U-R-G-E-S-S, first name Dave; Tones,
14 T-O-N-E-S, first name Matt.

15 Q. Are they still employed?

16 A. Yes, they are.

17 Q. And what are their titles?

18 A. Applications engineering, applications
19 engineer I would say.

20 Q. And what does an applications engineer
21 do?

22 A. They talk to whoever calls them, but
23 they talk to salesmen, Garlock employees,
24 distributor representatives, end users who have
25 questions about the use of our product. Most

1 of the conversations usually revolve around the
2 discussion of the particular -- it's often due
3 to a problem.

4 The customer is having problems
5 getting the kind of seal that they want in
6 their particular gasket application, so they
7 may be calling about chemical capability. They
8 may be asking if we could look at the gasket
9 that's failed and do an autopsy on it.

10 A lot of the questions revolve around
11 the load and loading of the gasket, because the
12 amount of force that can be applied to load and
13 seal the gasket varies.

14 Q. Is that the torquing?

15 A. Torquing is a specific way of loading
16 the gasket. Many customers do not use torque
17 wrenches, but we're talking about the kind of
18 bolts that they're using and how much force can
19 be exerted and how much load is required to
20 seal the gasket.

21 So sometimes people who are designing
22 gaskets -- not gaskets but vessels which use
23 gaskets and so forth, those are typical of some
24 of the conversations they have.

25 Q. And do you know that they get into

1 discussions with customers on removal?

2 A. I wouldn't think -- I wouldn't think
3 it's very many of the calls that they get, but
4 I believe that they get calls on removal. I
5 think that's probably a very small portion of
6 their calls, but I would believe that they get
7 calls on removal.

8 ✓ Q. And have you discussed that with them;
9 the two of them?

10 A. I think so.

11 Q. Have you discussed it with them in
12 connection with your role as the corporate
13 representative in asbestos litigation?

14 A. Yes, I believe so.

15 Q. And what was the discussion? What did
16 you say? What did they say?

17 A. My question to them was -- often it's
18 not just removal. It also may include
19 disposal. And my question to them was when
20 people call in about asbestos-containing
21 products and they ask about disposal, what do
22 you tell them. And our practice is to refer
23 them to the Federal Register.

24 Q. Okay. And how long has that practice
25 been going on?

1 A. I don't know specifically, but since I
2 first asked the question, it certainly didn't
3 appear to me to be a new practice, but I
4 can't tell you when it began.

5 Q. When did you first become aware that
6 asbestos was a health problem?

7 MR. CONNOR: When you say --
8 personally? You mean not as a representative
9 of the company?

10 MR. ZUYDHOEK: Right. I'll get
11 there.

12 MR. CONNOR: You are drawing a
13 distinction.

14 BY MR. ZUYDHOEK:

15 Q. Right. I'm asking you now personally
16 when did you first become aware that asbestos
17 was a health problem?

18 A. Well, I know I'm not going to be able
19 to answer that question very definitively, but
20 I do know that Garlock had in place practices
21 that dealt with the control of dust, for
22 instance, for many years before my employment,
23 and that occasionally I did go out into the
24 plant, including the area -- the textile area
25 early in my employment.

1 And I knew that there were areas that
2 I couldn't go unless I had -- well, probably I
3 couldn't go. And I knew that there were
4 precautions taken in the plant, but I don't --
5 I can't really tell you specifically -- I knew
6 there was -- there were issues associated with
7 it, but the depth of my knowledge, I can't
8 really tell you.

9 Q. Would this have been when you started
10 with the company that there were areas that you
11 couldn't go into?

12 A. I believe -- well, I believe the
13 textile area was an area where you needed
14 things like hearing protection perhaps, safety
15 glasses, so I don't remember it specifically.

16 Q. Breathing protection?

17 A. Not that I recall, no.

18 Q. Do you ever remember breathing
19 protection being recommended in the Garlock
20 plant?

21 A. As a salaried employee, no.

22 Q. As an employee.

23 A. There were no --

24 Q. I don't understand the distinction
25 you're making as a salaried employee.

1 A. For instance, I never worked in any
2 areas of the plant in a manufacturing position.
3 I believe that there are areas in manufacturing
4 like the textile department where the use of
5 a -- some sort of protection was required.

6 Q. A respirator?

7 A. Perhaps. Mr. Houghton testified that
8 respirators were used in certain areas.

9 Q. And Mr. Houghton again is who?

10 A. Mr. Houghton was an employee who
11 worked primarily in textiles for Garlock who
12 has been previously deposed.

13 Q. And do you remember -- and you
14 reviewed his testimony or talked to him or
15 both?

16 A. I reviewed his testimony.

17 Q. And did he put a date on when
18 respirators were required in the textile
19 department?

20 A. Not that I could find.

21 Q. Did he discuss the specific processes
22 where respirators were required?

23 A. Not that I recall, no, sir.

24 Q. Okay. Now, let's focus on the same
25 question as the, as the corporate

1 representative. You've done some -- you've
2 looked at some documents and you've talked to
3 certain people with respect to the recognition
4 that asbestos was a health problem, I take it,
5 as the corporate representative.

6 A. Yes.

7 Q. Okay. What documents have you looked
8 at in that connection?

9 A. Well, when you say -- I forgot what
10 terminology you used exactly, but a health
11 problem I think you said. I have reviewed
12 documents that talk about the control of dust,
13 for instance.

14 The control of dust -- all dust is
15 something that I recall having seen in
16 Mr. Houghton's deposition. There are various
17 associations that Garlock belonged to at one
18 time, the Asbestos Textile Institute. The
19 Hemeon report from 1947 talks about -- it's a
20 study of asbestos textile plants by the
21 Industrial Hygiene Foundation. They talk
22 about -- I hesitate to, to try to classify
23 their, their definition or words but the
24 hazards, I'm going to say, associated with
25 asbestos.

1 Q. The Asbestos Textile Institute. Is
2 that the name of it?

3 A. ATI, yes, sir.

4 Q. ATI. And was, was Garlock a member of
5 ATI --

6 A. Yes.

7 Q. -- when the Hemeon report was written?

8 A. Don't know. I believe the Asbestos
9 Textile Institute is one of those ones that
10 Garlock belonged to at two different times in
11 our history, and I believe the answers to
12 interrogatories probably say some time in the
13 '40s but they're unable to identify
14 specifically what years, and then there's other
15 years -- again, the specific answers are in the
16 answers to interrogatories. I never attended
17 those meetings.

18 Q. You weren't even born?

19 A. Well, in some cases I wasn't.

20 Q. The, the Hemeon report you said was
21 1947?

22 A. I believe so.

23 Q. Did Garlock have a copy of that?

24 A. When you say did we have, I don't know
25 when we received one. I assume we did. In the

1 context of, of acting as the company corporate
2 representative I have read that document, and
3 it's been part of the litigation for some
4 period of time.

5 Q. Where did you find it?

6 A. It was provided to me by Garrison
7 Litigation.

8 Q. Okay. Without any labels on it as to
9 where it came from other than Garrison
10 Litigation?

11 A. I believe it's probably stamped with
12 something, but I couldn't tell you what it
13 says.

14 Q. Well, let's see if we can make it out.

15 (Whereupon, Heffron Exhibit 6, the
16 Hemeon report by the Industrial Hygiene
17 Foundation, was then received and marked for
18 identification.)

19 MR. ZUYDHOEK: Mr. Heffron, I show
20 you Exhibit Number 6. Can you identify it?

21 MR. CONNOR: You just want him to
22 read the title?

23 BY MR. ZUYDHOEK:

24 Q. Can you identify the document? Can
25 you tell me what it is?

1 A. Yeah. I believe it to be the report
2 that I referred to as the Hemeon document by
3 the Industrial Hygiene Foundation.

4 Q. Okay. And this -- can you tell me --
5 you mentioned that you might be able to tell
6 when it was received. At least from the
7 exhibit I've shown you can you tell that?

8 A. No, sir.

9 Q. Okay. Now, I think you said that
10 sometime in the '40s Garlock was a member of
11 the Asbestos Textile Institute.

12 A. Yes, sir.

13 Q. And then they were not and then they
14 were again; is that correct?

15 A. That's correct.

16 Q. Okay. And have you ascertained as to
17 why they discontinued their membership and then
18 why they reobtained it?

19 A. No.

20 Q. Are they still a member?

21 A. No.

22 Q. Okay. So they discontinued their
23 membership twice?

24 A. I believe that's true, yes.

25 Q. Do you know why they discontinued

1 their membership the second time?

2 A. No, sir.

3 Q. Have you attempted to find out?

4 A. I don't know who I would ask, sir.

5 Q. Okay. You haven't asked anybody, I
6 guess.

7 A. No, I haven't asked anyone.

8 Q. Do you know what the Asbestos Textile
9 Institute was in 19 -- in the 1940s?

10 A. From a very general sense I believe
11 so, yes.

12 Q. What would your answer be for that?

13 A. It was an association for
14 manufacturers of asbestos textile and perhaps
15 the suppliers as well of the raw material.

16 Q. And this would include your
17 competitors, I take it.

18 A. I believe so, yes, sir.

19 ✓ Q. And the Industrial Hygiene Foundation
20 of America, do you know what that was?

21 A. Specifically no. The name would imply
22 that it's responsible for industrial hygiene,
23 but I have no -- had no involvement with them
24 and have no knowledge of them.

25 Q. I take it you've read the Hemeon

1 report.

2 A. I've reviewed it, yes, sir.

3 Q. And you know that it contains
4 information with respect to various plants that
5 were visited by the authors?

6 A. Yes, sir.

7 Q. And one of those plants was Garlock?

8 A. Yes, sir.

9 Q. And in fact, are you able to tell me
10 which plant, in terms of the designations that
11 are used in the Hemeon report, was Garlock?

12 A. I believe plant G was Garlock.

13 MR. CONNOR: That's logical.

14 MR. ZUYDHOEK: And if you look at the
15 last couple of pages of the exhibit, there's a
16 reference there to --

17 MR. CONNOR: What page are you
18 starting on?

19 MR. ZUYDHOEK: It's the next to the
20 last page of the exhibit. Letter or -- on the
21 Industrial Hygiene --

22 MR. CONNOR: Foundation letterhead.

23 BY MR. ZUYDHOEK:

24 Q. Right. July 11, 1947. Do you have
25 that, Mr. Heffron?

1 A. Yes, I do.

2 Q. And do you see that that refers to the
3 Garlock Packing Company as being plant G?

4 A. Yes, sir.

5 Q. As designated on the general report?

6 A. Yes, sir.

7 Q. Now, have you discussed the Hemeon
8 report with anyone at Garlock?

9 A. Not that I recall, no, sir.

10 Q. I take it you did not know about the
11 existence of the Hemeon report until you became
12 the corporate representative for asbestos
13 litigation.

14 A. That's correct.

15 Q. And I take it you became aware of it
16 as soon as you became the corporate
17 representative for asbestos litigation.

18 MR. CONNOR: Objection to the form.

19 THE WITNESS: I don't know if that's
20 accurate. It's sometime between the summer of
21 '97 and the September of '99 when I first acted
22 as a, as a corporate witness. At some point in
23 time between those two years I certainly would
24 have been made aware of it during that time
25 frame.

1 BY MR. ZUYDHOEK:

2 Q. You were aware of it on the first
3 occasion when you testified as a corporate
4 representative?

5 A. No. I believe I reviewed it prior to
6 my first testimony.

7 Q. Okay.

8 A. But when specifically, I can't tell
9 you.

10 Q. Now, you mentioned '97. Were you kind
11 of designated the corporate representative for
12 two years prior to when you actually testified?

13 A. Well, in 1997 I was told that I needed
14 to begin to familiarize myself with the
15 hundreds of documents probably and the issues
16 that typically I'm responsible for answering as
17 the corporate representative. And that's when
18 I first began to review documents and so forth.

19 Q. What percentage of your time do you
20 spend as the corporate representative for
21 asbestos litigation as opposed to in relation
22 to all your other time for the company?

23 A. It varies significantly. If there's a
24 deposition that I need to provide or prepare
25 for or if there's a trial that I need to

1 provide testimony for, I get phone calls on a
2 regular basis asking me questions.

3 So I've never really attempted to keep
4 track of the actual numbers, but I would say it
5 varies between none of my time and today
6 apparently it will be all of my time.

7 Q. I think so. Okay. And when you first
8 got into it in the first full year and you had
9 to do some -- I take it some research to find
10 out what was going on; is that correct?

11 A. Yes, sir.

12 Q. What percentage of your time that year
13 would you have spent coming up to speed?

14 A. Probably not very much. That was part
15 of the problem at that time. I was a general
16 manager responsible for plant operations, and
17 the winter of that year I decided to go back
18 and complete my degree from Roberts Wesleyan,
19 and that didn't conclude until the spring of
20 1999. So I don't really recall specifically,
21 but I was unable to put too much time into it.

22 Q. Okay. Once you started testifying,
23 and I think -- how many did you identify? Six
24 or eight?

25 A. Six or eight of each.

1 Q. Okay. Once you started testifying,
2 what percentage of your time would you say you
3 devoted to being a corporate representative?

4 A. Well, again, it varies very much from
5 one day or week to the next. I would generally
6 say that it's perhaps twenty percent of my
7 time.

8 Q. Other than actually testifying, how
9 much time do you spend being the corporate
10 representative and doing things to further
11 being a corporate representative?

12 A. When you say actually testifying,
13 you're including or excluding any review of
14 documents that I might do for a trial or a
15 deposition?

16 Q. Well, I guess I am excluding that.

17 A. Okay. Again, it varies significantly.
18 Five to ten percent of my time. I don't
19 generally think of it in those terms. I don't
20 keep track of it, but it depends on the
21 complexity of the question that's been asked to
22 me and how much research I need to do to
23 attempt to either answer the question or to
24 understand the issue.

25 Q. And who was it that designated you as

1 the corporate representative?

2 A. I wish I knew.

3 MR. CONNOR: It's called a short
4 straw.

5 BY MR. ZUYDHOEK:

6 Q. Looking at Heffron Exhibit 1, granted
7 it's not that easy to read, but I guess I don't
8 see any designation here for that function. Is
9 that in addition to everything that's already
10 on here?

11 A. Yes, sir.

12 Q. Are you a six Sigma black belt?

13 A. Let's say I took the class.

14 Q. October of '97 to August '99,
15 responsible for meeting and exceeding
16 stakeholder needs domestically and
17 internationally, internally and externally.
18 What does that mean?

19 A. Where was it again?

20 Q. Middle the first page, October of '97
21 to August of '99. Responsible for meeting and
22 exceeding stakeholder needs domestically and
23 internationally, internally and externally.
24 What does that mean?

25 A. Well, stakeholders are anyone who

1 works for your company, buys from your company,
2 supplies to your company, uses your product.
3 Our products are sold both in the United States
4 and elsewhere. It's fashionable to talk about
5 stakeholders as employees of the company as
6 well, so basically you report to the world.

7 Q. Sounds like six Sigma to me.

8 A. Doesn't it?

9 Q. Referring again to the Hemeon report,
10 Exhibit 6, did you ascertain what was done
11 specifically with respect to this report after
12 it was prepared?

13 A. By?

14 MR. CONNOR: Object to the form.
15 Vague and ambiguous.

16 BY MR. ZUYDHOEK:

17 Q. By Garlock.

18 A. Did I ascertain what was done
19 specifically with this report after it was --

20 Q. Prepared.

21 A. -- prepared?

22 Q. By Garlock. What was done by Garlock
23 with respect to this report?

24 A. Garlock didn't prepare the report.
25 The Industrial Hygiene --

1 Q. That's correct.

2 A. No. I don't know specifically what
3 Garlock did.

4 Q. And you have not, I take it, attempted
5 to find out as part of your responsibility as a
6 corporate representative.

7 A. Well, I've reviewed the documents such
8 as Mr. Houghton's testimony. Mr. Houghton was
9 a supervisor in the textile department at the
10 time that the Hemeon report was published. And
11 thereafter, I believe he was asked questions
12 relative to that. They would be in his
13 testimony.

14 Q. Okay.

15 MR. ZUYDHOEK: I call for the
16 production of the Hemeon -- or the Hemeon --

17 MR. CONNOR: Houghton.

18 MR. ZUYDHOEK: Houghton deposition
19 transcript. Is there only one deposition
20 transcript of Mr. Houghton or were there
21 several?

22 THE WITNESS: I believe he was
23 deposed twice.

24 MR. ZUYDHOEK: I'll ask for the
25 production of both of them.

1 MR. CONNOR: Okay.

2 BY MR. ZUYDHOEK:

3 Q. If you'd look at page fourteen,
4 there's a table there and with respect to plant
5 G, there's an issue -- a column entitled recent
6 x-rays survey made, and for plant G the answer
7 is no; a column for periodic x-ray examinations
8 made, and for plant G the answer is no; and
9 for -- a column have own x-ray machine, and for
10 plant G the answer is no. When you started in,
11 in 1972 would the answers to those issues have
12 been different?

13 A. Well, if you mean in 1972 in areas
14 like the textile department were there medical
15 monitoring -- was there a medical monitoring
16 program in place, then I would say the answer
17 would be different, and yes, there was a
18 program.

19 Q. Okay. Tell me about that program.

20 A. Well, I really can't tell you very
21 much about it. I know that it was
22 instituted -- again, Mr. Houghton was asked
23 some questions about when it was first begun.
24 I don't believe he was able to positively
25 identify the time frame, but I know that it

1 still exists, and that employees who worked in
2 areas where raw asbestos was processed in our
3 plant prior to its encapsulation, that those
4 employees were screened.

5 I'm certain an x-ray was taken.
6 Beyond that in terms of detail I can't tell
7 you. And that employees who remain with
8 Garlock to this day, if they worked in areas of
9 the plant where they worked with raw asbestos
10 fiber, still receive periodic x-rays, time
11 table on which I'm not knowledgeable.

12 Q. And you don't know when that started,
13 I take it.

14 A. Not specifically, no.

15 Q. Would you be able to say whether or
16 not those programs existed between 1955 and
17 1960?

18 A. I couldn't tell you, no, sir.

19 Q. Do you know whether Mr. Houghton did
20 in his deposition?

21 A. I believe he attempted to answer the
22 question. I believe his response was something
23 like in the '50s, but I would refer to his
24 deposition for that detail.

25 Q. The protection in the textile

1 department, would that have included
2 respirators? Did Mr. Houghton testify to that?

3 A. He did specifically mention the use of
4 respirators in the textile department, yes,
5 sir.

6 Q. What did he say -- what do you recall
7 he said about it?

8 A. I believe, I believe his response was
9 in areas that were dusty, but again, I would, I
10 would want to refer to his testimony, but that
11 seems like what it was.

12 Q. In the areas, for example, where the
13 asbestos was taken out of the, the shipment
14 containers that they came from Johns-Manville,
15 for example?

16 A. I don't recall -- I don't know whether
17 that question was asked, that specifically. I
18 don't recall him identifying any specific areas
19 where it was used. I believe he simply used
20 the term -- in the deposition I most recently
21 reviewed, he used the term dusty.

22 Q. When you saw the, the textile area
23 when you first became employed were there any
24 warning signs or any posters in the area about
25 asbestos?

1 A. Well, I wish my memory was that good
2 because it honestly isn't. I do recall as in
3 other areas of the plant that there was
4 restrictions that were placed on such as safety
5 glasses, perhaps hearing protection. I'm not
6 certain that that's true. I honestly cannot
7 give you an accurate answer to that.

8 Q. Do you remember the case that
9 Mr. Houghton was testifying in?

10 A. No, I don't, sir.

11 Q. If you'd look at Exhibit 4, page
12 forty-nine.

13 MR. CONNOR: I'm sorry. What page
14 are you on?

15 BY MR. ZUYDHOEK:

16 Q. Page forty-nine. It's
17 interrogatory -- answer to interrogatory
18 forty-two. I'll quote it. Quote, depending on
19 the job definitions used at particular plants
20 and facilities, Garlock believes that certain
21 occupations such as pipe fitters, millwrights,
22 machinists and boilermakers are potential users
23 of asbestos-containing gasket and packing
24 products, unquote.

25 And can you tell me when this answer

1 to the interrogatory was prepared what you were
2 relying on to make that statement?

3 A. Well, I have some personal experience
4 from calling on plants and working in the
5 industry, but I believe this would be an answer
6 that probably was our standard answer to
7 interrogatories prior to my being designated as
8 the corporate representative.

9 I may be incorrect on that, but I
10 believe that may be the case, and I -- so I
11 don't know what information was drawn upon at
12 that time.

13 Q. Okay. Which of the occupations that
14 are specified there do you remember based on
15 your own experience?

16 A. Well, I think the first part of the
17 answer is very accurate, depending on job
18 definitions because I don't pretend to, to know
19 how a definition of a job might vary from one
20 state or type of industry to the other.

21 But certainly the kinds of people that
22 I've talked to and the kinds of people I deal
23 with in our own plant who are involved in the
24 mechanical operations of the plant and the
25 repair and maintenance of the equipment

1 typically fall into categories like pipe
2 fitters and millwrights and machinists and so
3 forth.

4 Q. And for example, pipe fitters, would
5 you be aware of the fact that they are involved
6 in both the placing of the gaskets in and the
7 removal of the gaskets?

8 A. I would expect them to do that, yes.

9 Q. Let me refer you to page fifty-four
10 and fifty-five. And I'll quote to you from the
11 bottom of page fifty-four going over on to the
12 other page. Quote, Garlock has made numerous
13 changes in products over the years. Changes
14 were made for many reasons including cost
15 reduction, improved performance or because of
16 the development of new materials, unquote.

17 That's an accurate statement, I take
18 it.

19 A. I believe so, yes.

20 Q. Okay. Were changes ever made for
21 health reasons?

22 A. Not to my knowledge, sir.

23 Q. So no change with respect to asbestos
24 was done for health reasons as far as you know?

25 A. As far as I know, yes, sir.

1 Q. So the elimination of the crocidolite
2 was not done for health reasons?

3 MR. CONNOR: Objection. Asked and
4 answered.

5 THE WITNESS: Not to my knowledge,
6 sir.

7 MR. ZUYDHOEK: And the total
8 elimination of asbestos products now by the
9 company was not done for health reasons?

10 MR. CONNOR: Same objection.

11 THE WITNESS: I don't believe so,
12 sir.

13 BY MR. ZUYDHOEK:

14 Q. Have you also reviewed some minutes of
15 the Asbestos Textile Institute dated March 7,
16 1956?

17 A. That sounds familiar.

18 Q. Look at page twenty-two. And have you
19 actually looked at those minutes?

20 A. I believe so, yes.

21 Q. Can you tell me what they are or what
22 they say?

23 A. I probably haven't reviewed them in
24 the last perhaps year, but my, my belief is,
25 hopefully I'm accurate, that that was a meeting

1 that Mr. Houghton was supposed to have
2 attended.

3 My belief -- my understanding is that
4 he was there as a guest to discuss the
5 practices that Garlock had in -- on dust
6 control in its own plant, and that, as it
7 suggests, he was -- when he was deposed, he was
8 asked questions about that meeting. But I read
9 the meeting minutes themselves, yes.

10 Q. And do you remember the specifics of
11 what the minutes said other than the subjects
12 that you just mentioned?

13 A. No. As I recall it's a -- it's
14 several pages, perhaps. I'm not sure how many
15 pages, but there were a number of topics that
16 were discussed in the minutes themselves. So
17 no, I wouldn't, wouldn't say that I could
18 recall every topic that is in those meeting
19 minutes.

20 Q. All right.

21 MR. ZUYDHOEK: I will -- I request
22 right now that production of the March 7, 1956
23 minutes of the ATI meeting. I make the request
24 right now.

25 MS. CATALANA: I was going to say.

1 We're fast, but I don't know how fast we are.

2 THE WITNESS: Short break?

3 (Whereupon, a recess was then taken.)

4 (Whereupon, Heffron Exhibit 7, a
5 document that was distributed to Garlock
6 employees who worked in the manufacturing area,
7 was then received and marked for
8 identification.)

9 BY MR. ZUYDHOEK:

10 Q. Mr. Heffron, I show you Exhibit 7. Is
11 that a document that you have seen before?

12 A. Yes.

13 Q. What is it?

14 A. It's a document that, to the best of
15 my knowledge, was distributed to Garlock
16 employees who worked in the manufacturing area.

17 Q. And I am unable to find on the
18 document a date. Can you tell me when it was
19 issued?

20 A. No, sir, I cannot.

21 Q. Would it have been in existence when
22 you started in 1972?

23 A. I don't honestly know. That's my --
24 my perception is that we've -- I don't honestly
25 know.

1 Q. Is the first time that you've seen it,
2 was it in connection with your role as the
3 corporate representative in asbestos
4 litigation?

5 A. I don't know because I recall at one
6 time -- the document says every person employed
7 at Garlock, and I don't know the date of the
8 publication. My belief is that during my
9 career I have had a chest x-ray and that a
10 similar document -- I would have reviewed a
11 similar document, but I don't have any specific
12 recollection of that.

13 Q. You see the next to the last page it
14 looks like it's a tear-off form where you get
15 to sign and date it?

16 A. Yes.

17 Q. Do you recall ever signing one of
18 these for yourself?

19 A. I don't, I don't actually remember,
20 but -- I'm positive I've had a, a chest x-ray
21 or a pulmonary function test, so I may have and
22 simply don't recall it.

23 Q. When you tear the form off and sign it
24 and date it, where do you send it?

25 A. Human resources.

1 Q. So human resources would have, I
2 presume, in the personnel files of all of the
3 employees signed documents like this?

4 A. I don't know how they would file them,
5 but my belief would be that they would be
6 either in human resources in the health and
7 safety department files which are essentially
8 in the same department.

9 Q. And they'd be dated?

10 A. I believe so, yes, sir.

11 Q. Do you see the page again -- the pages
12 are unnumbered, but this is the one with the
13 cartoon of the guy in the mask and carrying a
14 briefcase full of dust. There's a statement
15 here, the government has set standards that
16 limit how much asbestos you can be exposed to,
17 unquote. Would that give you some indication
18 of when the date might be at least?

19 A. It wouldn't me. I don't -- I'm not an
20 expert in industrial hygiene, but I think
21 things like permissible exposure limits were
22 established many years ago.

23 Q. And it doesn't say OSHA either, does
24 it?

25 A. No, it does not.

1 Q. The ubiquitous government. Do you see
2 the page where the cartoon -- the lead cartoon
3 is an X over the cigarette.

4 A. Yes.

5 Q. Third bullet point there, persons
6 exposed to excessive amounts of asbestos have a
7 greater risk of developing mesothelioma which
8 is a rare cancer of the lining of the chest or
9 abdomen, unquote. Does that indicate to you
10 the approximate date of this document?

11 A. No, it does not.

12 Q. Have you ever discussed this document
13 with anybody at Garlock?

14 A. Well, generally I don't get asked to
15 testify very often about things like health and
16 safety, but -- I'm guessing here, but I know at
17 times since 1997 I have discussed things with
18 other employees -- employees in the health and
19 safety department about something like this.
20 But I can't -- I'm not as -- I'm -- sitting
21 here today I'm not saying that I recall this
22 specifically, but --

23 Q. Has that document ever been marked as
24 an exhibit at one of your depositions before?

25 A. I don't know, sir.

1 Q. Okay. Do you recall who you would
2 have discussed it with if you discussed it with
3 the health and safety area?

4 A. Curt Solomon.

5 Q. Who's Curt Solomon?

6 A. At one time he was responsible for
7 Garlock health and safety.

8 Q. Still employed?

9 A. Yes.

10 Q. What is his position now?

11 A. Well, he's a supervisor in
12 manufacturing.

13 Q. How long has he been out of the health
14 and safety area?

15 A. I'm not certain, but several years I
16 would say. I think he's been -- well, yes, I
17 guess that's the best answer I can give you.

18 Q. How old is he?

19 A. I would guess him to be in his late
20 forties, mid forties; perhaps late forties.

21 Q. Did he start with the company after
22 you did?

23 A. That's my perception, yes, sir.

24 MR. ZUYDHOEK: Why don't you mark
25 this.

1 (Whereupon, Heffron Exhibit 8, a
2 document entitled Berkeley Occupational
3 Medicine Associates, was then received and
4 marked for identification.)

5 BY MR. ZUYDHOEK:

6 Q. Show you Exhibit 8 and ask you if
7 you've seen that document before.

8 A. I don't know. Mr. Honore's name is
9 familiar to me. I'm quite certain that he is
10 one of the cases shown for Workers'
11 Compensation. As to whether or not I've
12 specifically seen this, I don't know.

13 Q. Okay. Just looking at Exhibit 2 --
14 and we've got Mr. Honore on there. Is that
15 right?

16 A. Yes.

17 Q. Is that how you pronounce it, Honore?

18 A. I'm not certain. He retired in 1960
19 or left the company in 1960. I believe he only
20 worked for Garlock for a year.

21 Q. Yeah. And in fact, what I want to
22 focus your attention on Exhibit 8 is to page
23 two. And that the paragraph on page two
24 dealing with Garlock is as follows: Quote, in
25 1959 he worked for Garlock Packing Company

1 making gaskets. One day a week, four to eight
2 hours per day he made asbestos gaskets. The
3 asbestos came in rolls, and Mr. Honore would
4 take it off and roll it over and form the
5 gasket. There was no cutting or grinding;
6 however, he did punch holes in the gasket after
7 it was formed. He had to stretch the asbestos
8 to make it reach the proper size. There was
9 asbestos dust whenever he would unroll the roll
10 of asbestos, unquote.

11 My question is is the process that
12 they're describing there would be in which
13 department?

14 A. I don't believe he worked in the
15 Palmyra operation. I believe he was an
16 employee who worked in a warehouse in San
17 Francisco. I'm not certain that that is the
18 case, but that is my, my belief.

19 Q. Okay. All right. Can you tell what
20 he was doing assuming that this is not Palmyra?

21 A. I talked earlier about the use of
22 asbestos cloth and its treatment with a rubber
23 impregnation which left it in a tacky state.
24 And by tacky, I mean if you folded it upon
25 itself, it would have a tendency to stick

1 together.

2 And one of the types of gaskets that
3 that material could be used to produce would be
4 a handhole or a manhole gasket. I've heard
5 both terms. The manway is another term. All
6 of which generally pertain to a boiler and a, a
7 way of inspecting the boiler or gaining access
8 to the boiler.

9 So that is the method of making
10 asbestos fabric into a gasket that I'm familiar
11 with. But in that case it would be
12 encapsulated product, and the method I'm
13 referring to would be an encapsulated product
14 where the fabric itself was coated with rubber.

15 Q. The sentence here, quote, there was
16 asbestos dust whenever he would unroll the roll
17 of asbestos, do you know what they're referring
18 to there?

19 A. I don't.

20 Q. Is that a reference to the product as
21 it came from the manufacturer?

22 MR. CONNOR: I'm going to object. He
23 already indicated that he doesn't know.

24 BY MR. ZUYDHOEK:

25 Q. Are you able to --

1 A. Well, the asbestos fabric would be put
2 through a coating process where it's run
3 between two calendars, and rubber cement really
4 is how we referred to it would be added to it.
5 So the material would be rolled in a roll. So
6 to gain access to it, you would need to unroll
7 it. That's the extent that I can answer that
8 question.

9 ✓ Q. What I don't understand based on the
10 context is whether he's referring to a process
11 that was engaged in at the unrolling process --
12 he engaged in once it was being handled at
13 Garlock as opposed to when it came in to
14 Garlock and he was unrolling it. Maybe you
15 can't tell based on the statement.

16 A. Well, he worked in the -- I believe he
17 worked in the warehouse in San Francisco. So
18 the product would have been manufactured in
19 Palmyra, treated with rubber, shipped to San
20 Francisco, and that's where he would have
21 consumed it.

22 Q. What he's telling this doctor is that
23 when he unrolled it as it came from Palmyra
24 there was asbestos dust.

25 MR. CONNOR: Well, I'm going to --

1 we're assuming. I'll object. The document
2 does speak for itself, just so the record is
3 clear, and the document is obviously going to
4 be attached, but this is a document dated April
5 10th, 1980 by -- you're correct, Dr. --
6 authored by Donald Whorton, M.D., Berkeley
7 Occupational Medicine Associates addressed to
8 M.P. Dailey, attorney at law in San Jose,
9 California referencing the gentleman in
10 question, Martin Honore, H-O-N-O-R-E.

11 MR. ZUYDHOEK: All of which is
12 correct. Does that appear to be -- what's the
13 reference there that he's getting asbestos dust
14 when he unrolls it coming from Palmyra?

15 MR. CONNOR: Objection to the form.

16 THE WITNESS: I mean, I can read what
17 the sentence says. The product that I
18 described with a rubber treatment wouldn't
19 appear to me to have any dust associated with
20 it, but I can't -- I don't have any facts to
21 support or deny the statement that's in there.

22 MR. ZUYDHOEK: Mark this.

23 (Whereupon, Heffron Exhibit 9, a
24 document consisting of a timeline that shows
25 the various gasketing forms that Garlock

1 manufactures, was then received and marked for
2 identification.)

3 BY MR. ZUYDHOEK:

4 Q. Mr. Heffron, let me show you Exhibit
5 9. Is that a document that you've seen before?

6 A. Yes, sir.

7 Q. What is it?

8 A. It's a timeline, as it says itself,
9 history of gasketing. It's a timeline that
10 shows the various gasketing forms that Garlock
11 manufactures and the time that each broad
12 classification or specific classification was
13 developed or introduced.

14 Q. Okay. So we start in the 1900s, I
15 take it, early 1900s, and which -- would that
16 would be the first use of asbestos or --

17 A. I think in previous testimony that
18 I've given and what I've read says that as
19 early as 1905 Garlock made style 900 which was
20 a compressed asbestos sheet. So I believe
21 that's probably where that date or that
22 reference comes from.

23 Q. And is the suggestion here that there
24 were no changes in the, the basic process
25 between -- from then until 1965?

1 A. I don't believe that the document is
2 intended to speak to any changes that were
3 made. We did talk about that earlier, and I
4 don't believe that the basic process did
5 change. The document is I think only meant to
6 reflect the various types of gasketing that
7 were available or developed and when that
8 occurred.

9 Q. Okay. The reference to Blue-Gard,
10 what is that?

11 A. Blue-Gard is a Garlock trade name. It
12 is a Kevlar fiber reinforced sheet. It's the
13 first really successful non-asbestos substitute
14 that was developed by Garlock. It became a
15 family of products.

16 The gasket was actually -- the sheet
17 was actually blue. All the products are not
18 blue, but it was a family of products, and
19 other Kevlar reinforced products with different
20 binders were reduced -- were introduced
21 subsequent to that.

22 Q. So the first non-asbestos product
23 produced by Garlock was in 1980?

24 MR. CONNOR: Objection.

25 THE WITNESS: No.

1 BY MR. ZUYDHOEK:

2 Q. It was the first one developed by
3 Garlock? Is that what you meant?

4 A. No. It was the, it was the first --
5 it was the first compressed -- made in the high
6 pressure sheet process. It was the first sheet
7 utilizing the high pressure sheet process whose
8 fiber reinforcement was non-asbestos. There
9 were other non-asbestos sheets offered from the
10 very beginning, but they would not have been
11 manufactured using the high pressure sheet
12 process.

13 Q. When you say from the very beginning,
14 you mean way back?

15 A. The earliest beginnings of the
16 company, as far as I know.

17 Q. Okay.

18 MR. ZUYDHOEK: Mark that.

19 (Whereupon, Heffron Exhibit 10, one of
20 a series of ads developed by Garlock in the
21 late 1980s, was then received and marked for
22 identification.)

23 BY MR. ZUYDHOEK:

24 Q. Showing you Exhibit 10. Is that a
25 document that you've seen before?

1 A. Yes.

2 Q. And what is it?

3 A. It's one of a series of ads developed
4 by Garlock in the late 1980s, approximately
5 1988. There were a series of ads such as this
6 that were developed to promote and encourage
7 customer evaluation and conversion to
8 non-asbestos products.

9 Q. And that -- is it fair to say that the
10 title of this is Time Is Running Out?

11 A. Yes, that's the title.

12 Q. Okay. And the bold headline on the
13 first page is It's Time to Stop Using Asbestos
14 and Nobody Has Been More Aware of It Than
15 Garlock?

16 A. That's correct.

17 Q. What does that refer to?

18 A. Well, I was actually part of a group
19 of people who participated in the development
20 of this literature, and there were two very key
21 issues as I recall in that time frame.

22 One of them was the promulgation of
23 the new Clean Air Act which ultimately was
24 promulgated in 1990. And the one was a ruling
25 by the EPA which announced the, the -- asbestos

1 would no longer be able to be produced, sold or
2 used even in an encapsulated form after
3 approximately August of 1994.

4 So those two key issues, the need to
5 improve sealing performance, reduce emissions,
6 I'm -- they're one and the same issue, and the
7 fact that asbestos, at that point in time based
8 on the EPA, was no longer going to be
9 available, we felt that it was important for us
10 to let customers know about that because
11 typically it takes them a very long period of
12 time to evaluate substitutes and they needed to
13 begin then.

14 Q. There's a reference in here to the
15 Garlock functional test lab which tests by
16 domestic and international standards as being
17 unequalled by any competitor. What's that?

18 A. What page are you referring to? The
19 second page?

20 Q. I think it's the second page, middle
21 column, bottom.

22 A. Yes. Garlock has a functional test
23 lab. It's always maintained a test lab. I've
24 seen catalogs that, before my employment with
25 the company, showed the lab.

1 It's changed significantly over the
2 years, particularly since probably 1980, but it
3 is a lab that does functional testing of our
4 products to determine things like compression,
5 the percentage of compression, the percentage
6 of recovery -- those are all ASTM standard
7 tests -- its resistance to fluids, and things
8 like sealability, the ability of the product to
9 create a seal, and the amount of leakage versus
10 certain things like nitrogen or fuel A.

11 There are international standards such
12 as DIN, and the standards basically identify
13 the size of the test specimen, the size of the
14 equipment or fixturing, the method used to seat
15 the gasket or load it, the equipment required
16 to measure it, and those are some of the types
17 of tests that are performed in that area.

18 Q. And I take it that's -- when you say
19 functional testing, that's basically to test
20 the actual role of the gasket as a sealer?

21 A. Yes, sir.

22 Q. It's not done -- that particular test
23 lab isn't designed to test for health, is it?

24 A. No.

25 Q. And then we have the top of the next

1 column, and Garlock has its own textile plant
2 where state-of-the-art equipment is used in
3 manufacturing operations. It is this kind of
4 advanced technology, whether in testing,
5 manufacturing or R&D, that gives Garlock a
6 strong advantage over competitors in the
7 asbestos-free market. What is the
8 state-of-the-art equipment that is being
9 referenced there?

10 A. That's the textile facility in
11 Sherbrooke, Quebec, Canada that was opened in
12 approximately 1976.

13 Q. And in fact, the Palmyra plant did not
14 have a -- any longer a textile facility at that
15 time, did it, or was that phased out?

16 A. No, there wasn't. The textile
17 operation in Palmyra no longer exists, that's
18 correct.

19 Q. Why was it that you shifted it from --
20 I assume you shifted to Sherbrooke from
21 Palmyra.

22 A. Well, I think there were a couple of
23 reasons. Even in 1976 a lot of the textile
24 products that we manufactured were
25 asbestos-containing products.

1 All the mines for asbestos, the ones
2 that I mentioned, JM, Bell, I forgot the third
3 one, Lake, were all in Canada. And in addition
4 to that, there was a study done on our textile
5 facility in terms of I guess I would say air
6 sampling. And the -- it was decided to build a
7 new facility that would be able to meet current
8 and future standards in terms of air quality.

9 And the location of the plant in
10 Canada, the fact that we had an employee who
11 was a Canadian, who had expertise in that area,
12 I assume were all factors in opening that
13 operation there. It was never -- no one has
14 ever explained to me the specific details
15 behind opening or closing either facility.

16 Q. The air quality testing that was done
17 in Palmyra, was that external to the plant or
18 was it internal to the plant?

19 A. Internal to the plant.

20 Q. What was it they were testing for?
21 Air quality?

22 A. Well, I believe in 1972 OSHA -- if not
23 before, OSHA had standards for monitoring air
24 quality. So any testing that was being done in
25 the middle '70s I assume would be following

1 procedures and regulations as mandated by OSHA.

2 Q. Was part of that asbestos air quality?

3 A. Yes.

4 Q. And when was it -- the Palmyra plant
5 closed down, that operation again?

6 A. Approximately 1975. I don't know the
7 exact date, and it was approximately 1976 when
8 the facility in Canada opened.

9 Q. Was there a gap between closing one
10 and opening the other?

11 A. I don't honestly know.

12 Q. The, the textile plant in Canada, does
13 that actually prepare materials that are then
14 used in Palmyra?

15 A. Yes.

16 Q. So they have to be what, trucked in
17 from Canada to Palmyra?

18 A. Yes.

19 Q. And it was, it was decided that it
20 would be more efficient than improving the
21 facility in Palmyra?

22 A. I assume so.

23 Q. Was the Sherbrooke plant brand new
24 when it was built?

25 A. Yes, it was.

1 Q. And that was '75, '76?

2 A. Yes, '76.

3 Q. Next to the last page, time to clear
4 the air. What does that refer to?

5 A. Well, my belief is that there was a
6 lot of misunderstanding perhaps about asbestos
7 or non-asbestos products and their ability to
8 do the job. There has never been a single
9 non-asbestos product that we've been -- that
10 we've been able to develop that allows us to
11 replace asbestos in all the applications that
12 it's operated under in terms of temperature and
13 fire resistance and oxidation resistance, et
14 cetera.

15 But in the development of the
16 non-asbestos materials, we did develop the
17 ability to make products that sealed better.
18 And one of the things that I mentioned was the
19 Clean Air Act. Of course, there was already a
20 Clean Air Act in existence, but there was a new
21 one being promulgated which eventually was
22 passed in 1990, and as the column on the right
23 shows, there's a reference to EPA regulations
24 and what was expected there. And again, the
25 belief that our product allowed, in the

1 applications in which it would work, would
2 provide a tighter seal, a seal that didn't leak
3 as much.

4 Q. Are you saying that it was time to
5 clear the air of asbestos in the air or trying
6 to clear the air of the confusion over
7 asbestos?

8 A. And the pollution associated with VOC
9 leaking into the atmosphere.

10 Q. All of those things?

11 A. I don't know that it had any reference
12 to asbestos, no.

13 Q. Well, I mean this document has
14 reference to asbestos, doesn't it?

15 A. The document is designed to draw the
16 customer's attention to the differences in
17 performance between asbestos and a non-asbestos
18 product and reasons why the non-asbestos
19 product should be evaluated, one of which is
20 its sealing performance.

21 Q. When you say nobody has been more
22 aware of it than Garlock, are you referring to
23 Garlock's familiarity with asbestos; the
24 asbestos that is being used as a product?

25 MR. CONNOR: Objection.

1 THE WITNESS: Well, again, I was part
2 of the group that helped develop this, and
3 there was no discussion in those groups about
4 asbestos other than in its performance
5 characteristics as a seal, and the very real
6 fact that I believe we could show that against
7 chlorine, for instance, that the leak rate of
8 compressed non-asbestos sheet was approximately
9 ten times better than that of compressed
10 asbestos sheets. So it was in that context
11 that this information was presented.

12 BY MR. ZUYDHOEK:

13 Q. Are you saying that health issues with
14 respect to asbestos had nothing to do with the
15 generation of this document?

16 A. Yes. All of our products were
17 encapsulated. They were -- we were able to
18 sell them. We probably could still be selling
19 them.

20 ✓ Q. Were there any tests done at Garlock
21 concerning the release of asbestos fibers in
22 the plant?

23 A. Oh, I mentioned air quality monitoring
24 that was done. There was air sampling done in
25 the areas of the plant that worked with raw

1 asbestos fiber. The products that we shipped
2 were encapsulated, but in the production of the
3 textiles and the production of the compressed
4 sheet we were working with raw fibers, and
5 there was air monitoring that was done.

6 Q. How about tests done in connection
7 with the removal of asbestos from, from gaskets
8 or from the flanges of gaskets and the removal
9 of asbestos gaskets? Were any air tests done
10 on those?

11 A. Yes, there were air tests done.
12 They're referenced in our answers to
13 interrogatories. There was numerous tests that
14 have been done by industrial hygienists on
15 behalf of Garlock.

16 Q. Okay. And were there tests done when
17 asbestos sheets were cut?

18 A. The -- I'm not certain what you mean
19 by that. In the industrial hygiene tests that
20 I referred to -- and I don't -- there's, I
21 think, a hundred or close to that, so I don't
22 pretend to know the details behind each one,
23 but the fabrication of gaskets is part of some
24 of the tests.

25 Q. Okay. So actually taking a sheet of

1 compressed asbestos gasket and cutting it,
2 you've tested the air in that process?

3 A. Yes, sir.

4 Q. And those --

5 A. I believe that's true.

6 Q. Okay. And what were the results of
7 those tests?

8 A. Well, again, there's many tests.
9 Generally when I review them, I'm looking at
10 the very beginning and at the very end to see
11 frankly what the conclusions are. To my
12 knowledge, the conclusions of all of those
13 tests were that the fiber release, if any, was
14 within existing permissible levels.

15 ✓ Q. And those tests were done by Garlock
16 or by an independent lab?

17 A. By an independent lab.

18 Q. And those tests -- the results of
19 those tests are published and available?

20 A. They have been produced previously,
21 yes, sir.

22 MR. ZUYDHOEK: I call for the
23 production in this litigation of those.

24 MS. CATALANA: I believe those are
25 what you've already asked for.

1 MR. CONNOR: It's what you've
2 referenced.

3 MR. ZUYDHOEK: Okay.

4 BY MR. ZUYDHOEK:

5 Q. Have you ever witnessed any of that
6 testing?

7 A. No, sir.

8 Q. The, the warnings that were identified
9 in the, in the document of the product
10 liability committee -- and I think you said
11 although that one was dated in '77, there were
12 some that went on in '72.

13 A. Yes, sir.

14 Q. Were there any prior to 1972?

15 A. I don't believe so, no, sir.

16 Q. So you can say that there were no
17 warnings on the products themselves prior to
18 1972?

19 A. That's correct.

20 Q. And that would be on any of the
21 asbestos-containing products?

22 A. I believe so, yes, sir.

23 Q. And you specifically looked to
24 ascertain that as part of your responsibilities
25 as the corporate representative?

1 A. Yes, sir.

2 Q. How about the use of respirators or
3 dust masks, that sort of thing? Has Garlock
4 ever made any recommendations to its customers
5 with respect to the use of those devices?

6 A. I don't believe Garlock believes that
7 it's necessary because its products are
8 encapsulated, but to my knowledge, no, Garlock
9 has never made any recommendations to its
10 customers.

11 Q. And if, in fact, they had made that
12 recommendation, you would know it, wouldn't
13 you?

14 A. I believe so, yes.

15 Q. Are you able to tell me what -- would
16 all of the instructions pertaining to the
17 installation of Garlock gaskets be in the, the
18 brochures and the catalogues that you referred
19 to?

20 A. I think so. I think in our current
21 catalog, page thirty-eight.

22 Q. To be precise.

23 A. Well, we change our catalog
24 periodically. If we've altered it and added
25 any pages, that may not be correct. I believe

1 all the catalogs have some information, and
2 the, the information that's contained there
3 would be the extent of the information I
4 believe we published.

5 Q. Okay. But the current catalog
6 wouldn't be referring to any
7 asbestos-containing material -- products,
8 right?

9 A. No, but I don't believe we've changed
10 the language since the discontinuance of
11 asbestos products.

12 Q. Okay. And so the same language would
13 have existed back in those years when there
14 were asbestos-containing products in terms of
15 the language in the brochures and catalogs?

16 A. Without reviewing each catalog, I
17 couldn't tell you that absolutely. I don't
18 believe that there's been a material change in
19 the instructions.

20 Q. I take it Garlock knew when it sold
21 asbestos-containing products in '55 to '60 that
22 the sheet would be cut by the customer
23 representatives and the gaskets themselves,
24 when it was necessary, would be removed by the
25 customers.

1 A. I'm not sure I can say exactly what we
2 knew. It was typical for us to sell sheet and
3 to sell gaskets. It was also typical for the
4 distributors who distributed our products to
5 also fabricate gaskets, but it was certainly
6 known to me that customers also bought sheets
7 of material and cut their own gaskets.

8 Q. And in fact, I think we've already
9 established, haven't we, that in between '55
10 and '60 there weren't any distributors? It was
11 direct sales?

12 A. That's correct.

13 Q. Okay. Can you tell me that a Garlock
14 gasket can always be removed from the flange
15 using a putty knife?

16 A. I can tell you that a putty knife can
17 always be used to remove a gasket. Whether or
18 not the gasket is removed to the satisfaction
19 of the customer using a putty knife, I can't
20 say.

21 Q. And what is it about the -- in the
22 process of gasket use that causes the gasket
23 material to become stuck to the flange?

24 A. Well, I don't think I can answer that
25 a hundred percent accurately, but flanges get

1 rusty. Depending on the duration that the
2 product has been in service -- the customer
3 determines what sealing performance is, what
4 adequate performance is and generally when to
5 replace the product.

6 So depending on the temperature
7 probably -- most probably the temperature,
8 perhaps the pressure, the design of the flange,
9 how long the product has been in service, but
10 one, one aspect that would be likely to harden
11 the gasket would be exposure above three
12 hundred degrees, let's say, where the
13 elastomer -- the rubber that's used to bind the
14 gasket together begins to harden.

15 Q. And under those circumstances is a
16 putty knife the instrument that would remove
17 the gasket completely from the flange?

18 A. Perhaps.

19 Q. And I presume that you knew some
20 customers were -- would have piping that would
21 be carrying liquids in excess of those
22 temperatures?

23 A. Yes.

24 Q. How about use of a rotary wheel to
25 remove gaskets? Have you ever heard of that?

1 A. I've heard of it. We don't
2 specifically recommend it, but I've certainly
3 heard of it, yes, sir.

4 Q. You know it's done?

5 A. Yes, I do.

6 Q. And is there a reason why you do not
7 recommend it?

8 A. Well, again, most of our language
9 regarding the removal of gasketing is centered
10 around the need to properly remove the
11 gasket -- any remnants of the gasket so that
12 there's a clean sealing surface.

13 The way the gasket works is the
14 serrations on the surface of the flange grip or
15 bite into the surface of the gasket, and that's
16 what creates the seal and keeps the gasket from
17 being blown out. You don't want to do anything
18 to damage those serrations because if you do,
19 your sealing performance will suffer.

20 So a lot of our language had to do
21 with the fact that you do need to clean it and
22 you need to make sure you don't damage the
23 sealing surface.

24 Q. And by virtue of the operation of
25 piping and the, and the gaskets, the gasket

1 material itself becomes stuck to the
2 serrations?

3 A. It can be, yes.

4 Q. Were you ever aware -- made aware of,
5 of customers misusing Garlock gaskets in terms
6 of either installation or removal?

7 A. Misuse is kind of a broad category.
8 Am I aware of -- have I ever been aware of
9 customers putting a material in a service
10 that -- for which it was not designed either
11 from a temperature standpoint or chemical
12 capability standpoint or whatever? Yes.

13 Have I ever known a customer to not
14 properly load the gasket by properly tightening
15 the bolts and so forth? Those would be typical
16 of the kind of conversations we would have with
17 a customer. Beyond that, I'm not sure what
18 misuse would, would, would pertain to.

19 Q. Does your catalog make torquing
20 recommendations?

21 A. Yes.

22 Q. And in terms of, of removal, have you
23 ever heard of what you would consider misuse in
24 terms of the way the gasket is removed?

25 A. Well, the misuse that I would, I

1 would -- the way I would use that term would be
2 if the customer did something that damaged the
3 sealing surface of the flange and rendered the
4 surface unable to create a proper seal.

5 Q. Of course the sealing surface of the
6 flange is, is not a Garlock product.

7 A. That's correct.

8 Q. There's a flange manufacturer, I take
9 it.

10 A. Yes, sir, or equipment manufacturer.

11 Q. Have you ever heard any, heard any
12 complaints about du Pont misusing Garlock
13 gaskets?

14 A. No, I haven't. Again, I'm not sure
15 what misusing means, but probably du Pont has
16 improperly installed a gasket sometime in their
17 life, but I'm not aware of it specifically, no.

18 Q. The respirators that you mentioned,
19 they were available at the Garlock plant for,
20 for the people that worked in the textile area?

21 A. Yeah. I really can't speak to that
22 with any great detail, but I specifically do
23 recall in Mr. Houghton's deposition he
24 referenced the use of respirators, so I use it,
25 as well.

1 Q. Your knowledge in that regard would
2 depend completely on Mr. Houghton's description
3 in his deposition transcript?

4 A. I don't know if exclusively is the
5 right word. I'm certain that I've talked to
6 people over the years about it and I've
7 observed it as I walk through the plant, and I
8 have had conversations with our health and
9 safety people, but I certainly do rely,
10 particularly for years prior to my service
11 beginning, on Mr. Houghton's description.

12 Q. Do you distinguish between a
13 respirator and a dust mask?

14 A. I hope he would. I assume a dust mask
15 is one thing and a respirator is another, but I
16 don't -- I don't have any training in that
17 area.

18 Q. I mean, would you be able to see one
19 and say that's a dust mask and see another and
20 say that's a respirator?

21 A. I think so.

22 Q. Well, describe both for me.

23 A. Well, a dust mask I've used in my own
24 shop.

25 Q. In your basement?

1 A. No, in the woodshop. And it's a -- it
2 fits over the nose and mouth, and it's held by
3 an elastic band, and it simply provides the
4 exclusion of dust. And I'm certain, however,
5 that even those masks can be had in various
6 levels of filtration.

7 A respirator -- I've seen a respirator
8 used. For instance, it's a standard procedure
9 in the cleaning out of a mixer. The mixer, as
10 I mentioned before, is the device where the
11 dough is created, and that's true for both
12 compressed asbestos and compressed
13 non-asbestos.

14 And in order to solvate the rubber, we
15 add toluene. If someone is going to work in
16 the mixer to clean it out, they have to wear a
17 respirator. So a respirator is a device which
18 allows someone to breathe air without breathing
19 the air in the area that they're in, or
20 perhaps -- again, I'm not an expert in that
21 area, perhaps through filtration of the air.

22 Q. The mixer is big enough that you would
23 actually be inside of it when you're cleaning
24 it out?

25 A. Well, you'd be leaning into it. The

1 earlier mixers -- the name -- I recall the name
2 now. It's Mogul. The old Mogul mixers mixed a
3 batch of eight hundred pounds of dough, so they
4 were very large. And I'm talking more about
5 leaning inside even the smaller mixers, which
6 do approximately I think four hundred pounds or
7 somewhere between -- I think it can vary
8 between two hundred fifty and four hundred
9 pounds. They're in an area where, for
10 protection purposes, we just want to make sure
11 that the operator is safe.

12 Q. And a Mogul mixer, that would be big
13 enough for a man to actually get inside of it?

14 A. It's big enough. I don't know that
15 anyone ever did. I mentioned the clam shell
16 type construction. As it rotated forward, the
17 top came up. So I have no knowledge of any
18 practice of an employee to climb inside, but
19 it's big enough to.

20 Q. Okay. You said the respirators --
21 Houghton testified about the respirators. Did
22 he talk at all about dust masks?

23 A. I simply don't recall.

24 Q. Okay. Did you ever wear any
25 protective -- breathing protective device in

1 the vicinity of any place in the Palmyra plant?

2 A. Not to my recollection, no.

3 Q. Were either respirators or dust masks
4 mandatory as far as the employees in the, in
5 the mixing area or the -- where the raw
6 asbestos was being mixed?

7 A. I'm not certain.

8 Q. How about clothing? Did the people
9 that worked on the raw asbestos area have any
10 special clothing?

11 A. Well, again, the -- I can't really
12 speak to years and years ago. The employees
13 who -- and the textile department hasn't
14 existed in Palmyra since 1975, but compressed
15 asbestos sheet was made as recently as December
16 31st of 2000.

17 The employees who work in that area
18 wear a No-Max fire retardant garment which is
19 designed to protect them in case of a fire and
20 so forth; provide some protection. And that,
21 that suit or outfit is put on when you come to
22 work and, and disposed of -- not permanently
23 disposed of but taken off before you leave.
24 And they're, pretty certain, laundered by an
25 outside company.

1 Q. Are they laundered on a daily basis or
2 weekly basis? Do you know?

3 A. I don't know.

4 Q. I take it by that there's a fire
5 hazard in the plant or you wouldn't be wearing
6 the No-Max.

7 A. Well, you're working with toluene and
8 that's flammable, and that was part of the
9 issue in the development of the non-asbestos
10 products.

11 Asbestos is not electrically
12 conductive. Carbon is. Graphite is. Kevlar
13 is. So part of the -- beyond the -- getting a
14 product with the right fiber length, size,
15 modulus of elasticity, chemical resistance
16 there was also the problem of making sure that
17 when we worked with the material, that it
18 didn't generate static electricity, and, as a
19 result, a fire, and we did have fires that
20 occurred in our plant as a result of working
21 with non-asbestos fibers.

22 Q. Were the employees that worked with
23 the raw asbestos, did they have locker rooms
24 and showers and things of that nature?

25 A. Yes.

1 Q. Were they required to take a shower
2 when they went home at night?

3 A. I don't know.

4 Q. Is there a fiber preparation machine
5 operator? Is that a position that --

6 A. Well, I think we saw in Mr. Thurley's
7 case he was a fiber prep operator or something
8 like that. So I take that to be a textile
9 position, but I'm not certain.

10 Q. And are you aware of the detail of
11 that operation; what he does?

12 A. No, sir. I don't believe that job
13 exists any longer. Certainly not in Palmyra
14 since 1975.

15 Q. Mr. Thurley worked from '68 to '96, so
16 he could have been doing it from '68 to '75?

17 A. It's possible.

18 Q. Do you know how the shipments of the
19 raw asbestos arrived at Palmyra?

20 A. Well, primarily they arrived by truck.
21 At one time we did have a rail line that had
22 access to the plant, so I guess it's
23 conceivable -- no one has ever told me about
24 receiving asbestos fibers via rail. The only
25 thing I'm familiar with is receiving it via

1 truck, and it would then be in a bale form.

2 Q. And how are you familiar with it? Do
3 you remember it?

4 A. Yeah, sure, I remember it. And I've
5 discussed it, for instance, with Mr. Whittaker.

6 ✓ Q. And a bale, describe a bale to me.
7 What are the sizes?

8 A. Well, the bale, as I recall -- I'm not
9 certain, but the bale as I recall it would
10 probably be something less than four feet by
11 four feet and weighing several hundred pounds.
12 So they're relatively large bales.

13 Q. Wrapped in?

14 A. Well, at one time burlap. Later after
15 the installation -- or certainly when we
16 received -- after the installation of the
17 vacuum de-bagging unit they were wrapped in
18 plastic, but certainly there was a period of
19 time, years I'm sure, where they were received
20 with burlap.

21 Q. And I take it that burlap wouldn't be
22 as confining as the plastic would be.

23 A. I don't know.

24 Q. Do you know why they switched from
25 burlap -- the, the manufacturer switched from

1 burlap to plastic?

2 A. I don't know why they did, but I know
3 that it worked -- that was the, that was the
4 preferred way of receiving the material so that
5 it would work properly with the vacuum
6 de-bagging unit.

7 Q. So was, as far as you understood, the
8 vacuum de-bagging unit designed for use with
9 plastic bales of raw asbestos?

10 A. I don't know, sir.

11 Q. Do you ever remember seeing raw
12 asbestos on the floor that had to be swept up?

13 A. Yes, I believe so.

14 Q. And what, what area was that?

15 A. The textile department.

16 Q. And was that done on a daily basis?

17 A. I have no idea.

18 Q. And how did you know it was asbestos?

19 A. That was what was being produced in
20 that department.

21 Q. And, and which, which building would
22 that have been in?

23 A. I believe it would be building seven.

24 Q. And, and in that area where you
25 remember seeing asbestos, raw asbestos on the

1 floor, what was the ventilation like?

2 A. Well, I know that they had
3 ventilation. Even Mr. Houghton talks about the
4 fact that there were such things as vacuum
5 boxes and various suction devices that were
6 used to control dust being generated at any
7 particular piece of equipment and that it went
8 into a ventilation system, but that's the
9 extent of my knowledge basically.

10 Q. But if it had to be swept up off the
11 floor, it wasn't being picked up by the vacuum
12 ventilation devices, I take it.

13 A. That would seem to be true.

14 Q. Did you ever see somebody sweeping it
15 up?

16 A. Yeah, I believe so.

17 Q. What did they use?

18 A. It looked like they were using a broom
19 to me; a wide broom. There wasn't very much of
20 it, but they were sweeping something up.

21 Q. And they did it on a daily basis?

22 A. Again, I don't know how often it had
23 to be done.

24 Q. Was there -- did they have any process
25 of wetting it down before they swept it up or

1 did they just sweep it up dry?

2 A. Well, the textile department had an
3 atomization -- a water atomization unit, so
4 there was water being sprayed into the air as I
5 recall, and I don't recall it being very dusty.
6 But your question was simply did I see them
7 sweeping up asbestos, and I believe that's
8 true.

9 Q. And the reason to spray water into the
10 air was to reduce the airborne asbestos fibers?

11 A. I believe it's been a practice in the
12 manufacturing of textile for many years to
13 either work in a humid climate or to atomize
14 the water into the air because it -- it's a
15 benefit to the operation. All the benefits I
16 don't pretend to be aware of.

17 Q. Is that asbestos textiles or all
18 textiles?

19 A. I don't know, sir.

20 Q. Do you remember seeing that; somebody
21 actually doing that sweeping operation?

22 A. Yes, I believe so.

23 Q. Were they wearing a dusk mask?

24 A. I don't know.

25 Q. Were they wearing a respirator?

1 A. I don't know.

2 Q. Do you think you would remember if
3 they were?

4 MR. CONNOR: Objection.

5 THE WITNESS: I don't know.

6 BY MR. ZUYDHOEK:

7 Q. When you remember seeing somebody
8 actually doing that sweeping up of asbestos
9 fibers, were there any signs in the area about
10 asbestos?

11 A. I don't recall.

12 Q. When you started in '72, were the
13 chest x-rays -- were there mandatory physicals
14 in the plant?

15 A. I can't say with any certainty. I
16 know that we have had a medical monitoring
17 program. I know that Mr. Houghton talked about
18 it in his deposition. I know that there's no
19 documents that date back past OSHA that I've
20 been able to find.

21 Q. Have you looked for them?

22 A. Yes, sir. So what specifically was
23 done, I don't know.

24 Q. Have there been any OSHA violations
25 cited at the Palmyra plant?

1 A. Of any type whatsoever?

2 Q. Asbestos.

3 A. I have never personally seen any
4 citations. I do believe that there may have
5 been. I don't know whether a citation was
6 issued, but I do believe that that was part of
7 the evaluation of the upgrades that would be
8 required in the textile operation in 1975 which
9 eventually led the company to build a new
10 facility.

11 Q. Okay. So part of the reason to do it
12 was either the OSHA regulations or the presence
13 of an OSHA inspector or the possibility of a
14 violation?

15 A. I don't know.

16 MR. CONNOR: Objection.

17 BY MR. ZUYDHOEK:

18 Q. If you were to look for a violation
19 that went that far back, where would you go to
20 look for it?

21 A. Probably in the health and safety
22 files.

23 Q. It would be documented, wouldn't it?

24 A. I would think so.

25 MR. ZUYDHOEK: I make a request that

1 any -- that the health and safety files be
2 searched for any OSHA violations pertaining to
3 asbestos.

4 MS. CATALANA: For any particular time
5 period?

6 MR. ZUYDHOEK: Yes. From OSHA's
7 beginning until the current time, but obviously
8 we're going to be focusing on the '70s.

9 MR. CONNOR: The December OSHA -- I
10 think OSHA came in in December of '70, I
11 believe. I will note for the record we
12 certainly object to the relevance of such a
13 request.

14 BY MR. ZUYDHOEK:

15 Q. Did Garlock hold regular safety
16 meetings for the employees?

17 A. Yes.

18 Q. How often?

19 A. I have no way of knowing historically
20 how often they're held, but I believe that
21 they're currently held as often as once a week,
22 but I don't know if that frequency has changed.

23 I would say that certainly in, in my
24 years in manufacturing if there was any lost
25 time, an accident, for instance, or there was a

1 condition that existed, we would hold a safety
2 meeting immediately, that there was a normal
3 routine that was followed in terms of the
4 frequency.

5 So that if there were no unusual
6 occurrences or problems or injuries, we would
7 meet on a regular basis, whatever was
8 predetermined. But if something unusual
9 required a, a meeting, we would have a meeting
10 immediately.

11 Q. Is it required -- for example, when
12 you started in 1972 was it required that you
13 attend safety meetings?

14 A. I don't think so because I was a, was
15 a salaried employee, so primarily, but not
16 exclusively, safety meetings were held on a
17 regular basis for the hourly employees.

18 Q. And it was held by the safety
19 department?

20 A. Well, meetings certainly have been
21 held by the safety department, but it's the
22 responsibility of the supervisor in each area
23 to hold safety meetings on a regular basis.

24 Q. And how big was the safety department
25 in Palmyra in 1972? How many employees?

1 A. I would think as far as the safety
2 department itself, probably a single
3 individual.

4 Q. Okay. And do you remember who that
5 was; who would have been in charge of safety
6 then?

7 A. I'm certain it's in our answers to
8 interrogatories. In '72, I'm not sure.

9 Q. Do you ever recall asbestos being part
10 of a safety meeting?

11 A. Well, as to whether or not asbestos
12 was part of a safety meeting on a regular basis
13 with our hourly employees I don't have any way
14 of knowing because I would not have attended
15 those. I don't recall any of the safety
16 meetings that I was ever at anything like that
17 being discussed.

18 Q. Did Garlock ever use any barricades
19 to, to keep employees away from dusty areas?

20 A. Well, barricade to me, I think of a
21 wooden saw horse that's set up or something
22 like that. In some areas, for instance, the
23 textile area where a vacuum was drawn in order
24 to handle the air, there were -- I'm sure
25 you've seen the plastic sheeting that hangs

1 down that's approximately four inches wide, and
2 if you want to gain access, you just simply
3 push through that. I seem to recall something
4 like that. Beyond that, I don't recall
5 anything that I would refer to as a barrier of
6 any sort.

7 Q. Would that type of barricade preclude
8 dust from filtering through?

9 A. It's a barrier -- I don't know if it's
10 barricade, but its purpose, from my
11 understanding, was -- because I've seen it in
12 many other areas that are simply trying to
13 create a positive air flow. It's used to block
14 off an area so that adequate suction can be
15 obtained to create the draw necessary.

16 Q. Does Garlock keep track of
17 asbestos-related diseases of its employees?

18 A. Well, it has a medical monitoring
19 program, and it certainly would be aware
20 through Workers' Compensation cases. Any other
21 method of tracking, that I'm unaware of.

22 Q. Does the exhibit that we've marked
23 contain all of the Workers' Compensation cases
24 for asbestos diseases up until 1999?

25 A. I believe it contains all of them up

1 through 1999, yes, sir.

2 Q. Would there be more after 1999?

3 A. The document -- the most recent
4 document I think is about a page and a third,
5 so there might be a few.

6 Q. Four or five more cases?

7 A. One or two. Two or three. I'm not
8 certain that that's the case.

9 MR. ZUYDHOEK: We will ask for the
10 production of the current document of Workers'
11 Compensation claims.

12 BY MR. ZUYDHOEK:

13 Q. Is there any other document that's
14 maintained with respect to the medical
15 monitoring, for example?

16 A. Not that I'm aware of.

17 Q. For example a, an employee who's still
18 working that might have some pleural changes
19 that have been diagnosed but he's not filed a
20 Workers' Compensation claim because he's not
21 lost any income or time on the job. Is there
22 any document like that?

23 A. Well, there are files that are kept on
24 all existing employees with relevant
25 information, and any employee who ever worked

1 in an area working with raw asbestos fiber is
2 eligible for the monitoring program or
3 participates in the monitoring program.

4 So what information might exist as to
5 the current state of their chest x-ray, for
6 instance, I don't know; probably notations, but
7 I would expect that that type of information
8 would appear in an employee's file.

9 MR. CONNOR: Again, if it were to
10 exist?

11 THE WITNESS: If it exists.

12 BY MR. ZUYDHOEK:

13 Q. Did Garlock use pipe fitters in its
14 plant?

15 A. I'm not sure if we still have the
16 designation pipe fitter or not, but I would say
17 yes.

18 Q. So there was a time when you actually
19 had employees who were pipe fitters?

20 A. Yes, I believe so.

21 Q. And they would be involved in pipe
22 fitting including the installation and removal
23 of gaskets?

24 A. To the extent that that was done, if,
25 if, if a gasket needed to be installed or

1 removed, I would expect that the pipe fitters
2 would be the ones who would do that.

3 Q. And how about insulators? Did Garlock
4 use insulators?

5 A. Never seen any.

6 Q. David Smith, Garlock employee named
7 David Smith?

8 A. Yes.

9 Q. What's his job?

10 A. David is a -- he works in the high
11 pressure sheet area, and the last I knew he was
12 a mixer operator. In other words, he mixes
13 dough prior to the material being sheeted.

14 Q. Gene Simmons, G-E-N-E. Not the
15 actress. Name ring a bell?

16 A. Does not ring a bell, no, sir.

17 Q. John Hardy?

18 A. No.

19 Q. Bob Wiley?

20 A. Yes.

21 Q. What's his job?

22 A. Bob works in customer service, and I
23 think pretty much for his entire career he's
24 worked in government sales; probably not
25 exclusively government sales anymore.

1 Q. Gordon Baker?

2 A. Yes.

3 Q. What's his job?

4 A. He is a -- he works with engineering
5 and construction firms on specifications. I'm
6 unsure of his exact title, but we'll say
7 something like manager of specifications.

8 Q. Alice Roberts?

9 A. That's L.S. Roberts.

10 Q. Sorry.

11 A. But it's actually Lagoo or something
12 like that. He's Cajun, and he is a Garlock
13 area manager which is a term we use for sales
14 representative.

15 Q. Would there be organizational charts
16 for Garlock available from 1955 to 1960?

17 A. No.

18 Q. Are there any records of Garlock other
19 than the Hemeon report and the minutes that
20 we've talked about that you know of?

21 A. Well, there's certainly catalogs and
22 brochures and things such as that that exist
23 from that time. Not much else that I've seen.

24 Q. Has there been any attempt by Garlock
25 to identify what products Robert Krieger might

1 have been using at du Pont between 1955 and
2 1960?

3 MR. CONNOR: Do you mean other than
4 his description in his deposition? Are you
5 talking about style numbers?

6 MR. ZUYDHOEK: I'm trying to find out
7 if there's anything more specific than what he
8 has in his deposition.

9 THE WITNESS: The process that we use
10 doesn't always involve me. For instance, if a
11 request comes through on a regular basis to
12 review our records to see whether or not any
13 records -- we can find any sales records for a
14 plant, a business location, since our records
15 only go back to 1974, and we went to industrial
16 distribution in the late '60s to certainly
17 complete by 1972, it's very rare for us to find
18 a record of any customer that's referenced
19 other than a Garlock distributor. So if a
20 request were to come through asking to look for
21 sales to du Pont in 1955 to 1960, we would --
22 our answer would be there are no records.

23 MR. ZUYDHOEK: Mr. Krieger was a
24 self-employed plumber up until the time he
25 retired. After he left du Pont if he had any

1 occasion to use Garlock products would he have
2 purchased them from a distributor?

3 MR. COMERFORD: Objection.

4 MR. CONNOR: Same objection.

5 THE WITNESS: I don't have any way of
6 knowing that.

7 BY MR. ZUYDHOEK:

8 Q. It wouldn't -- a plumber wouldn't buy
9 directly from the company, would he?

10 A. No, sir.

11 Q. Okay. Is there any -- has Garlock
12 made an attempt to quantify the amount of
13 asbestos fibers that Mr. Krieger might have
14 been exposed to?

15 A. I have no knowledge of that.

16 MR. CONNOR: Just a late objection,
17 but it's -- that might be the subject of
18 potential expert testimony.

19 MS. CATALANA: Do you have a time
20 frame just because we have a flight? I'm
21 trying to feel you out as to --

22 MR. ZUYDHOEK: Five minutes.

23 MS. CATALANA: Oh, really.

24 MR. ZUYDHOEK: Maybe not even that.

25 BY MR. ZUYDHOEK:

1 Q. Do you know whether the amount of raw
2 asbestos used by, by Garlock changed over the
3 years up until the time that it was phased out
4 completely?

5 A. Well, there's a document that I
6 reviewed that goes from about 1968 to about
7 1983 that lists all asbestos fibers purchased
8 by Garlock and indicates their fiber type and,
9 and source of supply.

10 Those years certainly show a variance
11 in the amount of fiber that we purchased. By
12 the time we discontinued compressed asbestos
13 sheet in December 31st of 2000, the volume of
14 asbestos was very, very small.

15 Q. Is that a document that you've
16 previously testified with respect to?

17 A. No, but again, I was the, I was the
18 marketing manager at that time and I know I've
19 reviewed the sales during that time frame, so I
20 know that the -- what the sales were at that
21 time frame and I know what sales were in
22 previous years, so.

23 Q. Is that document a single-page
24 document? Multi pages?

25 A. I'm thinking it might be a two-page

1 document, but it's no more than that; perhaps a
2 single page.

3 MR. ZUYDHOEK: I request that it be
4 produced.

5 MS. CATALANA: I think we're going to
6 certainly object to the relevance being that
7 it -- didn't you say the time frame was '68
8 to -- and beyond?

9 THE WITNESS: Yes.

10 MR. ZUYDHOEK: Well, okay.

11 MR. CONNOR: Well, you've made a
12 request.

13 MS. CATALANA: We're just noting our
14 objection.

15 BY MR. ZUYDHOEK:

16 Q. There's just -- in the answers to
17 interrogatories I saw the names of some
18 different facilities, and just so I understand,
19 mixing room, was there a mixing room at the
20 Garlock plant?

21 A. When you say a room, this is a room.
22 It has doors and windows. The area where the
23 mixing was done in prior to it moving to its
24 present location was in the basement of
25 building three.

1 So it wasn't a room -- to the best of
2 my knowledge it was not a room solely dedicated
3 to that, but the majority of the space in that
4 area was made up of the equipment that did the
5 mixing. So the mixing currently is done in the
6 same area or basic area where the sheeting of
7 the product is done.

8 Q. And carding. Was there a carding room
9 or a carding area?

10 A. I don't know, sir.

11 Q. Okay. Twisting machines. For the
12 twisting machines, is that part of the --

13 A. Textile operation.

14 Q. Okay. Weaving. That would be part of
15 the textile?

16 A. Yes.

17 Q. Winding?

18 A. Winding would be part of the textile.

19 Q. Spooling?

20 A. Spooling would be part of the textile.

21 Q. Ring spinning?

22 A. I'm not really familiar with ring
23 spinning, but the way it's described certainly
24 makes it sound like it's part of textile.

25 Q. Well, I am finished today. I reserve

1 my rights to ask again for further testimony
2 based on the production of documents that have
3 been called for and haven't yet been produced,
4 but we'll advice on that if and when they are
5 produced.

6 MR. COMERFORD: I'll probably be five
7 minutes. Can I jump in?

8 MS. CATALANA: Sure.

9
10 EXAMINATION BY MR. COMERFORD:

11
12 Q. Mr. Heffron, my name is John
13 Comerford. We met briefly outside. I know
14 it's been a long day and you've answered a lot
15 of questions. I'll try to go quickly.

16 Sir, is it true that once you were
17 designated the corporate representative you did
18 what you -- you attempted to do everything
19 reasonable to obtain what you believe is sort
20 of a good history of Garlock so you could
21 testify at depositions like this?

22 A. Everything that I believe is
23 reasonable, yes.

24 Q. Okay. And sir, we've heard about some
25 of these Workers' Compensation claims. I just

1 want to go over some names with you and see if
2 any of them sort of ring a bell with you. Are
3 you familiar with a case -- a gentleman coming
4 down with malignant mesothelioma named
5 Frederick Douglas that took place sometime in
6 the late 1980s?

7 A. The name is not familiar to me, sir.
8 I don't generally get involved in any way in
9 compensation cases other than in the context of
10 today, but -- so the name is not familiar to
11 me.

12 Q. Are you familiar with a third-party
13 case someone coming down with an
14 asbestos-induced signature cancer known as
15 mesothelioma out of the Garlock plant sometime
16 in the late 1980s or early '90s?

17 A. I'm not sure if I understand the
18 question.

19 Q. As you sit here today do you remember
20 any Garlock employee out of the Palmyra plant
21 who -- which you later learned to believe to be
22 a malignant mesothelioma?

23 A. If it was, I believe it would be
24 identified on the Workers' Compensation cases
25 and I'm -- so I don't know. I'm not aware of

1 any.

2 Q. Are you aware of any mesothelioma
3 cases where, for whatever reason, the estate or
4 the person with mesothelioma didn't file a
5 compensation claim but did, in fact, have an
6 asbestos-related disease such as mesothelioma?

7 A. I'm not aware of any, no.

8 Q. Okay. Are you familiar with a
9 gentleman named Mr. Durfy who developed
10 asbestosis who worked out of the Garlock plant?

11 A. Well, did you ever -- he is a name
12 that's familiar to me, but I don't know if it's
13 familiar to me because of that context or not.

14 Q. Are you generally familiar with a
15 Workers' Compensation claim of a gentleman
16 named Mr. Durfy who actually had two employers,
17 Kodak and Garlock? I'm only saying that to see
18 if it refreshes your recollection.

19 A. No, sir. Is he on this list?

20 Q. Well, I don't have the updated list.

21 A. Okay.

22 Q. And are you familiar with a gentleman
23 named Mr. Diefenderfer who passed away from
24 malignant mesothelioma and there's a pending
25 Workers' Compensation claim for?

1 A. Yes, I am.

2 Q. And did you actually know
3 Mr. Diefenderfer?

4 A. Yes.

5 Q. When did it come to your -- when did
6 you become aware of his mesothelioma; before or
7 after his passing?

8 A. I don't know. I do know that it was
9 sometime in the last eighteen months or
10 possibly less than that. I don't know whether
11 he was deceased when I learned of it or not.

12 Q. Okay. And then I think there's a note
13 here of a Catherine Garnsey.

14 A. Yes.

15 Q. Did you actually know Ms. Garnsey or
16 know of her?

17 A. I think I know relatives of hers, but
18 I don't know her, no.

19 Q. And I think you know some relatives
20 because she had relatives that actually worked
21 at Garlock?

22 A. I believe so. The name is familiar.

23 Q. And you already mentioned Mr. Thurley
24 and that you have some kind of recollection of
25 him working at the plant.

1 A. Yes, sir.

2 Q. Did you learn of his mesothelioma
3 while he was still living? In other words,
4 while he was still suffering with this disease,
5 did you become aware that he had filed a
6 Workers' Compensation claim?

7 A. I don't recall. I don't know.

8 Q. What is the process when a Workers'
9 Compensation claim is filed? When, if at all,
10 do you become aware of it? Is it within a few
11 months after it's established, before it's
12 established? What's the sort of policy?

13 A. I don't know that there's a policy.
14 The extent of my involvement is typically for
15 testimony such as this where there's a list of
16 employees who have filed Workers' Compensation
17 cases alleging illness due to exposure to
18 asbestos. I'm not consulted when a Workers'
19 Compensation case is filed. There is no
20 process to inform me that I'm familiar with.

21 Q. Are you ever contacted to seek your
22 advice on whether the case should be
23 controverted or accepted or rejected?

24 A. No, no, sir.

25 Q. And you've described some of the sort

1 of investigation you took to prepare yourself
2 to be this corporate designee. Did you ever
3 take it upon yourself to go see any of the
4 families of these Workers' Compensation victims
5 or even the claimants themselves such as
6 Ms. Garnsey, Mr. Diefenderfer, Mr. West,
7 Mr. Thurley, Mr. Durfy and discuss how and
8 where they were supposedly exposed to asbestos?

9 MR. CONNOR: Objection.

10 THE WITNESS: No, sir.

11 MR. COMERFORD: Would you agree with
12 me that if you're presenting testimony, to give
13 an honest and fair picture of what Garlock knew
14 when, that it would be appropriate to actually
15 speak to some of these Workers' Compensation
16 claimants?

17 MR. CONNOR: Objection.

18 THE WITNESS: No, not necessarily.
19 The knowledge that Garlock has is in the use of
20 raw asbestos fiber, and that would be if our
21 employees were exposed, that's how they would
22 be exposed. The extent of my involvement is
23 always with people who, who did not work in the
24 Garlock facility and worked with encapsulated
25 products, so there is no transfer of knowledge

1 from raw asbestos to encapsulated products to
2 my knowledge.

3 MR. COMERFORD: Well, you would agree
4 with me that for the last five or six hours you
5 were asked a substantial number of questions
6 concerning sort of plant worker and industrial
7 hygiene issues at Garlock?

8 THE WITNESS: Yes.

9 MR. CONNOR: Objection. We'll
10 stipulate to that.

11 MR. COMERFORD: You'll stipulate.

12 MR. CONNOR: As to the relevance of
13 it, we're not agreeing.

14 BY MR. COMERFORD:

15 Q. You would agree with me that there's
16 been prior depositions where you were asked
17 questions such as the ones Mr. Zuydhoek was
18 giving you? In other words, this isn't the
19 first lawyer presenting you with these
20 questions, is it?

21 A. With questions about Workers'
22 Compensation cases?

23 Q. Plant worker evidence, use of
24 respirators, industrial hygiene at the plant.
25 My point is this isn't the first gentleman to

1 present you with those questions, is it?

2 A. Oh, no.

3 MR. ZUYDHOEK: Damn.

4 BY MR. COMERFORD:

5 Q. Lab Chrysotile, is that a company that
6 supplied raw fiber to the Garlock facility?

7 A. I don't know. I'd want to look at the
8 records.

9 Q. As you sit here today from we'll say
10 1995 to 2000 when some raw asbestos was still
11 coming to the plant, do you know who that raw
12 supplier was; the company?

13 A. I believe it would be one of the three
14 that I mentioned; not JM, but Lake or Bell, but
15 no, I don't.

16 Q. And I'm just trying to clear it up.
17 This two-page document that lists -- one or
18 two-page document. I want to be fair to how
19 you testified -- where it lists some of the raw
20 fibers, was that the chart Mr. Whittaker
21 produced at a deposition concerning what raw
22 suppliers supplied asbestos and when and how
23 much?

24 A. I don't know.

25 Q. Okay. When was the first time you

1 heard of the term mesothelioma?

2 A. I can't tell you.

3 Q. Can you give me a decade?

4 A. Probably not.

5 Q. Do you know if you heard the term
6 mesothelioma before or after 1972?

7 A. Oh, I would say it would be after
8 1972.

9 Q. Can you tell me whether it was before
10 or after 1980?

11 A. No, I can't.

12 Q. The term asbestosis, not asbestos, but
13 the disease asbestosis, can you give me a
14 ballpark or time period when you first heard
15 that term?

16 MR. CONNOR: Are you talking about
17 him personally?

18 MR. COMERFORD: Him personally
19 just --

20 THE WITNESS: I would guess in the
21 '70s.

22 BY MR. COMERFORD:

23 Q. Would it be before or after you
24 started with the plant?

25 A. It would be after I would think.

1 Q. Okay. And just the term asbestos, had
2 you ever worked -- have you ever worked with
3 asbestos in any capacity before 1972 when you
4 started with the plant?

5 A. Perhaps.

6 Q. Do you have any specific recollection?
7 Like you didn't work as an asbestos pipe
8 coverer or plasterer or anything like that?

9 A. No. I helped, I helped with engine
10 repair and so forth as a fairly young person,
11 and it's my understanding that some of the
12 gaskets used in automobiles were
13 asbestos-containing in that time frame perhaps.
14 I may have.

15 Q. Sir, I'm only asking this question and
16 I'm trying not to pry. I represent a plaintiff
17 who's claiming exposure from 1955 to about
18 1960. What's your date of birth?

19 A. 1950.

20 Q. Okay. And so you were quite young
21 during the exposure in this case?

22 A. I'd say so.

23 MR. CONNOR: We'll stipulate to that.

24 MR. GELMAN: Object to quite young.

25 MR. ZUYDHOEK: I should have been so

1 young.

2 BY MR. COMERFORD:

3 Q. You used the word PEL earlier in your
4 testimony. Can you tell me what that stands
5 for?

6 A. Permissible exposure limit.

7 Q. And I think you were referencing
8 somewhat to governmental regulations, whether
9 they be state or federal, but some type of
10 governmental regulations to that, the PEL?

11 A. That's correct.

12 Q. Would you agree with me, sir, that
13 that PEL regulation never applied to cancer but
14 only to asbestosis?

15 A. I have no way of knowing that, sir.

16 Q. Okay.

17 MR. COMERFORD: I don't think I have
18 any further questions.

19 MR. GELMAN: No questions.

20 MR. WHITCOMB: No questions.

21 MR. CONNOR: Okay. We're finished.
22
23
24
25

1 I hereby CERTIFY that I have read the
2 foregoing pages, and with the exception of the
3 changes on the errata sheet, that they are a
4 true and accurate transcript of the testimony
5 given by me in the above-entitled action on
6 April 17, 2003.

7
8
9
10 JAMES E. HEFFRON

11
12 Sworn to before me this

13
14 day of , 2003.

15
16 Notary Public
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25

1 STATE OF NEW YORK)

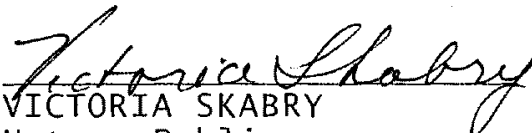
2 SS:

3 COUNTY OF ERIE)

4
5 I, VICTORIA SKABRY, a Notary
6 Public in and for the State of New York, County
7 of Erie, DO HEREBY CERTIFY, that the proceedings
8 were taken down by me in a verbatim manner
9 by means of Machine Shorthand on

10 , 2003, that the proceedings were
11 taken to be used in the above-entitled action.

12 I further CERTIFY that the
13 above-described transcript constitutes a true,
14 accurate and complete transcript of the
15 testimony.

16
17
18
19 
20 VICTORIA SKABRY
21 Notary Public.
22
23

James E. Heffron

EXHIBIT

Heffron 1
4-17-03 JDS

**Educational
Experience:**

1999

Roberts Wesleyan College, Rochester, N.Y.
Bachelor of Science Degree in Organizational Management

1971

Finger Lakes Community College, Canandaigua, N.Y.
Applied Science Degree in Business Administration

1969 - 1970

SUNY, Geneseo, N.Y.
Course work towards a Bachelor of Science Degree in Liberal Arts

**Professional
Experience:**

8/99 - present

Director of Training
Responsible for providing coordination and facilitation for the implementation of programs designed to improve plant-wide efficiencies and effectiveness. Examples are Six Sigma and Lean Manufacturing concepts.

10/97 - 8/99

Vice President & General Manager, Hydraulic Components
Responsible for meeting and exceeding stakeholder needs, domestically and internationally, internally and externally. Responsible for product management, development, engineering, and manufacturing.

2/96 - 10/97

Vice President, Quality
Responsibility for Quality, Training, and Employee Involvement departments

8/90 - 2/96

Vice President & General Manager, Compression Packing
Responsible for product sales and marketing, process and product engineering, production and inventory control.

1/89 - 8/90

General Manager, Industrial Products
Responsible for product sales and marketing, process and product engineering, production and inventory control.

10/87 - 1/89

Operations Manager, Hydraulic Components
Responsibility for engineering, manufacturing, and production control.

1/86 - 10/87

Director, OEM Sales
Responsible for management of all product-line for sales to the Original Equipment Market (OEM). Duties included setting sales goals, expense budgets, contracts, assigning sales territories, calling on customers and hiring and firing employees and manufacturers representatives.

8/82 - 10/87

Sales & Marketing Manager, Hydraulic Components
Responsible for coordinating the development and introduction of new products, literature, pricing policies and sales strategies.

EXHIBIT

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EXHIBIT

Heffron 9
mw 9/10/99

4/81 - 8/82

Southwest Regional Manager

Responsible for the management of a company sales force and a network of distributors. Established sales goals, target accounts, managed distributor network, provided input as to market conditions and needs.

9/79 - 4/81

Marketing Manager, Compression Packing

Responsible for the coordination and introduction of new products, developed literature, established pricing policies and sales strategies.

10/76 - 9/79

MRO Salesman, Eastern Region

Provided account coverage on maintenance products in support of distributors. Introduced new products, made sales calls and trained distributor personnel. Provided feedback to factory on product performance, competitive situations, market conditions and sales and product projections.

8/75 - 10/76

OEM Sales Correspondent, Compression Packing

Duties included handling inquiries, entering and expediting orders and providing technical support to equipment manufacturers.

Metropolitan Life Insurance

10/74 - 8/75

Insurance Salesman

Responsible for providing sales coverage and customer support for life and health insurance in self-developed sales territory.

Garlock Packing

1/72 - 10/74

MRO Sales Correspondent

Provided customer service on maintenance and repair products sold to distributors. Duties included handling inquiries, entering and expediting orders and providing technical support. Responsible for all product-lines.

EXHIBIT

Heffron 2
4-19-03 JLS

Worker's Compensation Claims

Updated 09/22/99

NAME	DATE OF CLAIM	DIAGNOSIS	PAYMENT/ BENEFIT TOTAL	JOB OR WORK PLACE	DATES
Clemons, Vera	11/26/48	Pulmonary Fibrosis; Asbestosis	\$ 6,086.15	Textile Dept.	1918-1943 (Intermittent Total 13-14 Yrs)
Baylord, Grace	11/14/57	Pulmonary Fibrosis; Pulmonary Asbestosis	\$ 2,400.00	Textile Dept.	1923-1957 (Employment Intermittent - Total 22 years)
Bacon, Clara	1/20/71	Asbestosis	\$ 18,000.00	Textile Dept.	1943-1970
Bohner, Elsie	6/7/73	Secondary Asbestosis	No Payment	Braiding Dept.	1951-1973
Honore, Martin D.	3/13/80	Thickened Pleura	\$ 6,753.00	No Records - Probably misc. duties in San Francisco Warehouse & Gasket Shop	1959-1960
Bills, Arthur	6/4/82	Asbestosis; Pulmonary Fibrosis	\$ 105.00 per week since 6/7/82	Textile Dept. Cut Gasket Dept	1950-1970 1970-1982
Nichols, Charles	7/24/85	Asbestosis; Emphysema; Pulmonary Fibrosis; Heart Disease	\$ 9,754.85 & \$271.38/wk to widow	Textile Dept. Braiding Yard	1947-1972 1972-1973 1973-1983
Zabliski, Raymond A.	2/22/89	Silicosis (disputed)	In Litigation	Shipping Dept.	1959-1984
Bailey, Omar H. Sr.	11/26/92	Lung Cancer	\$ 10,000.00	Compression Packing Supervisor	1956-1984
West, Sam	9/18/96	Mesothelioma	Currently denied In Litigation	Metal Parts Finisher Graphiter, Hyd/Mech Press Operator Exp. Jt. Builder Sheeter Oper.	1973-1993
Thurley, David	2/18/97	Mesothelioma	Currently denied In Litigation	Maint. Yard Scrap Fibre Prep Mach Oper Sander-washer Oper Metal Parts Finisher	1968-1996
Garnsey, Catherine	7/1/99	Lung Cancer	In Litigation	Spinning Frame Op. Insp. Packer Shipper Parts Coordinator Rubber Belt Finisher	1974-1984

EXHIBIT

EXHIBIT 1

RECEIVED

AUG 5 '77

LAW DEPARTMENT
GARLOCK INC.



RE: PRODUCT LIABILITY COMMITTEE MINUTES

DATE: July 26, 1977 - 9:00 am

In Attendance:

G Barlis	E Kuhnien
M Burdulis	G LeRoy
J Guffey	J Lynn
R Guild	M Panarites
D Holmes	H Schaefer
B Keep	R Stay

1. Mini-committees. Some of the product centers have set up their mini-committees; others have not. There was some question as to just what these committees should be doing.
2. Discussion on the rating of our products as far as the importance in becoming involved in a product liability claim. Should the products be categorized as to (1) potential physical injury to a person and (2) damage to equipment. Can we categorize our products without the knowledge of what the end use is for our product?
3. Biggest area of exposure for us now is 'asbestos'. It was agreed that we would work on this particular product first and through our experiences, apply them to our other products.
 - a. Bill Price and John Guffey were assigned the responsibility by Mr. Townsend to chair a labelling program in asbestos. They are to see that our labelling program satisfies all our objectives and it is to be implemented by January 1, 1978.
 - b. Mr. Guffey brought up the point that most companies have lost product liability suits because of their 'failure to warn'.

After some discussion, it was the unanimous opinion of the committee that we immediately begin to label all advertising of our products that contain asbestos with the following phrase:

CAUTION

Contains asbestos fibers. Avoid creating dust.
Breathing asbestos dust may cause serious bodily harm.

Mr. Stay was assigned the responsibility of seeing this label is on all advertising of asbestos products. It was also decided that all catalogs that have already been printed should be labelled with the warning before being sent out. (This warning to be only on products that contain asbestos.)

Handwritten notes:
10/10
8/10
4/14/77

c. Other areas in which labelling should be done are:

- (1) CA Sheet
- (2) Spool heads of braided asbestos material.
- (3) Labels inside boxes of our products that are sent to our distributors.

d. It was suggest that letters be sent to all of our distributors stating the following:

"Enclosed please find 'Caution' labels which we strongly recommend that you, as our distributor, pass on to all end users of our products containing asbestos."

There was a discussion as to which phrase should be used on these labels:

(1) CAUTION

Contains asbestos fibers. Avoid creating dust.
Breathing asbestos dust may cause serious bodily harm.

(2) DANGER

Cancer hazard. Contains asbestos fibers. Avoid creating dust.

From a marketing point of view, it was suggested that the number (1) phrase be used for all labelling. However, Mr. Lynn is to contact our legal department at corporate headquarters to find out which one they feel we should use.

After an answer is received from Mr. Lynn, Mr. Stay will proceed in having these letters/labels sent out.

e. Mr. Schaefer was concerned as to how the asbestos sheets should be labeled. Also, whether those sheets which did not show a Garlock trademark, did they need to show a warning label.

It was decided that all sheets will be imprinted with the warning label as soon as Mr. Lynn finds out which one to use. Also, all sheets presently in inventory should be labeled in some way with the warning.

4. Items to be discussed at next meeting:
 - a. Each Product Center manager to list all products and find out what their end use is. Not necessarily in order of liability.
 - b. Review of our labelling program for asbestos.
 - c. Warranty
 - d. Sales training.
 - e. Requests from customers (Material Information Sheets) as to what materials our products contain.
 - f. Proposed regulations on acrylonitrile.
5. Next meeting to be held on Tuesday, August 30, 9:00 a.m., Personnel Conference Room, bldg. 6-1.
6. Any additions or changes in these minutes should be brought to the attention of Mr. Panarites.

/bld



No. 94-CI-10078

IN RE: ALL ASBESTOS-RELATED §
PERSONAL INJURY OR DEATH §
CASES FILED OR TO BE FILED §
IN BEXAR COUNTY, TEXAS §

IN THE DISTRICT COURTS OF

BEXAR COUNTY, TEXAS

**DEFENDANT, GARLOCK INC'S OBJECTIONS,
ANSWERS AND RESPONSES TO PLAINTIFFS' MASTER SET
OF INTERROGATORIES AND REQUEST FOR PRODUCTION**

TO: ALL COUNSEL OF RECORD

NOW COMES, GARLOCK INC ("GARLOCK"), one of the Defendants in the
above-entitled cause, and files the attached Objections, Supplemental Answers and
Responses to Interrogatories submitted by Plaintiffs, pursuant to the Texas Rules of
Civil Procedure.

Respectfully submitted,

SEGAL MCCAMBRIDGE SINGER & MAHONEY, LTD.

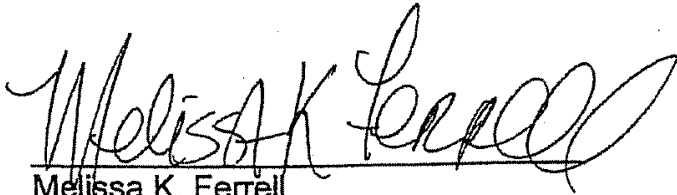
By: Melissa K Ferrell
Attorneys for Defendant, GARLOCK INC

William F. Mahoney
State Bar Number 24001507
Melissa K. Ferrell
State Bar Number 06937020
Segal McCambridge Singer & Mahoney, Ltd.
400 West 15th Street, Suite 700
Austin, Texas 78701
Phone: (512) 476-7834
Fax: (512) 476-7832



CERTIFICATION OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing instrument of **GARLOCK INC** was sent by certified mail, return receipt requested, to counsel for Plaintiffs and by regular mail to all other counsel of record on the 31 day of MARCH, 2000.



Melissa K. Ferrell

State Bar Number 06937020

Segal McCambridge Singer & Mahoney

400 West 15th Street, Suite 700

Austin, Texas 78701

Ph: (512) 476-7834

Fax: (512) 476-7832

GENERAL OBJECTIONS

GARLOCK poses the following general objections to plaintiffs' interrogatories and incorporates each of these objections by reference to every answer provided hereafter.

1. The interrogatories seek information going back many years and GARLOCK has found it difficult, if not impossible, to reconstruct or retrieve much of the information requested. The answers given are thus based on the present facts known or believed by GARLOCK at the time of its answer.

2. The interrogatories are overly broad, burdensome, vague and ambiguous. In addition, the interrogatories and requests are not sufficiently limited in time and use terms which do not refer to products manufactured by GARLOCK.

3. GARLOCK does not now manufacture or sell, and has never manufactured or sold, asbestos-containing insulation products as that term is commonly used and understood in this litigation. Therefore, GARLOCK objects to any interrogatory referring to or assuming that such products are or have been manufactured by GARLOCK. GARLOCK presumes that questions referring to insulation products are thus not applicable to GARLOCK.

4. GARLOCK does not now manufacture or sell, and has never manufactured or sold, asbestos-containing building products as that term is commonly used and understood in this litigation. Therefore, GARLOCK objects to any interrogatory referring to or assuming that such products are or have been manufactured by GARLOCK. GARLOCK presumes that questions referring to building products are thus not applicable to GARLOCK.

5. The interrogatories are overly broad in that they tend to group together all of the defendants. There has never been any competent scientific or medical evidence or reason to believe that GARLOCK products, upon reasonable use, release asbestos fibers in sufficient quantities, if any, to pose a health hazard, potential or otherwise, to persons using said products. GARLOCK denies that the use of, or exposure to, its asbestos-containing products poses any health hazard.

6. The interrogatories are duplicative of earlier requests made by Plaintiff's counsel to GARLOCK in the asbestos litigation. GARLOCK affirmatively asserts that it has answered multiple sets of interrogatories and responded to numerous requests for production propounded by Plaintiff's counsel in thousands of asbestos cases over the past 15 years. Many documents potentially responsive to these interrogatories have already been produced to Plaintiff's counsel and GARLOCK has no obligation to produce them again. Plaintiff's Exhibit List contains numerous GARLOCK documents

and GARLOCK will not produce additional copies of these documents, although it may refer to them in these answers to interrogatories. GARLOCK objects to these interrogatories to the extent they are duplicative and cumulative in nature.

7. GARLOCK objects to these interrogatories to the extent they relate to foreign companies that are not wholly-owned subsidiaries of GARLOCK INC and do not sell products in the United States. The activities of any such entities are not relevant to any issue in this litigation.

ANSWERS TO INTERROGATORIES

INTERROGATORY NO. 1:

State the name, address, job title, length of time employed by Defendant, and a year-by-year list of all other positions, titles or jobs held when working for Defendant of each person who has supplied any information used in answering these interrogatories.

ANSWER: These interrogatory answers have been reviewed and signed by James Heffron, the current Director of Training for GARLOCK INC. Mr. Heffron has been employed by GARLOCK since 1972 and a summary of his positions and duties with GARLOCK from 1972 to the present is attached as Exhibit A. These interrogatories request detailed information regarding GARLOCK's asbestos related product line and business activities over an extended period of time. Mr. Heffron is not qualified, based on his personal knowledge and experience, to provide complete answers to these interrogatories. No present GARLOCK employee is qualified, based on his personal knowledge and experience, to provide complete answers to these interrogatories. Mr. Heffron has reviewed documentation potentially responsive to these interrogatories and he verifies these answers as true and complete based on his personal knowledge, experience and his review of said documents. The documents reviewed by Mr. Heffron in conjunction with the preparation of these interrogatory answers include: (1) previously filed discovery responses filed by GARLOCK, including answers to interrogatories and responses to requests for production of documents; (2) deposition and trial testimony previously provided by GARLOCK employees in asbestos related litigation; (3) information summarizing GARLOCK's asbestos-containing product line prepared by ex-GARLOCK employees; (4) Documents identified by GARLOCK as exhibits in the nationwide asbestos litigation; and (5) all documents produced by GARLOCK in Response to the Subpoena Duces Tecum issued by Baron & Budd in the Fulton County, Georgia asbestos litigation, Civil Action No. 1998 CV 02684. Mr. Heffron has also spoken with ex-employees of GARLOCK who provided information relied upon by GARLOCK in previously filed answers to interrogatories. Those individuals are Clay Jewett, formerly employed as GARLOCK's Manager of Marketing and Roy Whittaker, formerly employed by GARLOCK in numerous

capacities, including Director of Engineering. Mr. Heffron also obtained information regarding GARLOCK's international operations from Gilles Vallée, Vice President of Garlock of Canada, Ltd. and Felipe Mues of Garlock de Mexico.

INTERROGATORY NO. 2:

State whether or not you are a corporation. If so, state your correct corporate name, the state of your incorporation, the address of your principal place of business, the name and address of the person or entity authorized to accept service of process on your behalf, and whether or not you have ever held a Certificate of Authority to do business in the State of Texas.

ANSWER: Defendant's legal name is GARLOCK INC (no punctuation). GARLOCK INC is an Ohio corporation with offices located at 3 Coliseum Centre, 2550 West Tyvola Rd., Charlotte, NC 28217, and a principal manufacturing facility and sales office at 1666 Division Street, Palmyra, New York 14522.

The GARLOCK Packing Company was originally incorporated in New York on March 27, 1905. On April 25, 1960, the name was changed to GARLOCK INC. On March 3, 1975, a Delaware corporation of the same name was incorporated and on May 12, 1975, the New York corporation was merged into the Delaware corporation. On November 25, 1975, Colt Industries Inc of Ohio was incorporated in the state of Ohio and on January 28, 1976, GARLOCK INC was merged into Colt Industries Inc of Ohio which immediately changed its name to GARLOCK INC.

CT Corporation System is the entity authorized to accept service of process on behalf of GARLOCK. GARLOCK does hold a Certificate of Authority to do business in the State of Texas.

INTERROGATORY NO. 3:

Has defendant or any of its predecessors or subsidiary companies at any time

engaged in the mining and subsequent sale of material containing asbestos fibers? If so, identify the location of the mine(s), the years of its operation, the type of asbestos mined and whether you sold any asbestos to any Defendants in the Cameron County asbestos litigation.

ANSWER: No.

INTERROGATORY NO. 4:

Identify by name each product containing asbestos fibers that Defendant or any of its predecessor or subsidiary companies at any time manufactured or sold.

ANSWER: A summary list of GARLOCK's asbestos-containing product line is attached to these answers to interrogatories as Exhibit B. The list identifies each product by style number, product category, the type of asbestos fiber used in the product, the percentage of asbestos in the product, the non-asbestos binder in the product and the year GARLOCK stopped manufacturing the product. If GARLOCK continues to manufacture the product, that fact is noted on the list as well.

In addition to the products identified in Exhibit B, GARLOCK INC. manufactured and sold a limited line of asbestos textile products (cloth and yarn) in limited quantities to manufacturers of braided asbestos packing products.

In addition to the products identified in Exhibit B, GARLOCK also acquired four subsidiary companies which made or sold some asbestos-containing products. GARLOCK does not have a comprehensive list of the products or manufactured or sold by these companies. These companies are the Belmont Packing and Rubber Company of Philadelphia, Pennsylvania, the Crandall Packing Company and Dealer's Steam Packing Company located in Palmyra, New York and the U.S. Gasket Company located in Camden, New Jersey. Each of these companies, prior to the purchase by GARLOCK, sold asbestos-containing gaskets and packing products substantially similar to the GARLOCK asbestos-containing products identified in Exhibit B. Each of the above-

named entities was merged with GARLOCK and GARLOCK assumed all assets and liabilities. GARLOCK preserved the Belmont trademark and continued to sell products under that label.

GARLOCK also purchased the assets of the Anchor Packing Company in June, 1987. An Anchor Packing catalog for that time period which identifies the asbestos products sold by Anchor at that time is attached as Exhibit C. GARLOCK did not assume the liabilities of The Anchor Packing Company. The GARLOCK/Anchor acquisition agreement has already been produced to Plaintiff's counsel.

INTERROGATORY NO. 5:

Identify by name each product containing asbestos fibers that Defendant or any of its predecessor or subsidiary companies at any time marketed or sold.

ANSWER: See Answer to Interrogatory No. 4.

INTERROGATORY NO. 6:

If the answer to one or more of the last three interrogatories is in the affirmative or lists any products, state as to each named product the following:

- (a) As to each product, state whether such product was mined, manufactured, marketed and/or sold.
- (b) The names of the companies mining, manufacturing, marketing and/or selling each product mined, manufactured, marketed and/or sold.
- (c) The trade or brand name of each of those products mined, manufactured, marketed and/or sold.
- (d) The date each of the named products was placed on the market.
- (e) A description of the physical (chemical) compositions of each of the

named products, including the type of asbestos contained in the product and the percentage of asbestos put in each product.

- (f) The date each of the products was removed from the market and no longer sold or distributed and the reason or reasons therefor.
- (g) The date asbestos was removed from such products, if ever, and the reasons therefor.
- (h) A description of the physical appearance of each of the named products.
- (i) A detailed description of the intended uses of the named products.
- (j) Identify the last year that you sold each asbestos-containing product.

ANSWER:

GARLOCK states that it has and does make a wide variety of products, many of which have contained asbestos and many of which have contained no asbestos. Among the specific products which GARLOCK has and does manufacture are asbestos gasket and asbestos sheet (from which the purchaser cuts gaskets). GARLOCK asbestos sheet is a mixture of asbestos fibers, curing agents, reinforcing fillers and elastomers (natural rubber or synthetic polymers having the elastic qualities of rubber). Asbestos fibers are machine blended with the rest of the mixture until they are thoroughly coated. The entire compound is then heated and rolled into sheets and is continually compressed to form a tough, impermeable, homogeneous material that resembles linoleum. Other gasket materials were made from woven, long fiber, asbestos yarn impregnated and encased in a rubberized coating. Other gaskets have had asbestos encased by layers of metal or encapsulated with a P.T.F.E. (polytetrafluoroethylene) resin envelope. GARLOCK asbestos packing materials consisted of woven asbestos encapsulated in either elastomeric compounds or metal foils and/or impregnated with lubricants.

GARLOCK gasket materials are primarily used for static sealing of steam line flanges, cylinder heads of engines, compressors and refrigeration equipment, fluid conduits, etc. GARLOCK packing materials are primarily used for dynamic sealing of machinery.

Finished compressed asbestos sheet is either cut into gaskets by GARLOCK or sold for use by others in cutting gaskets. GARLOCK's flexible and durable gasketing material is handled,

installed and removed in all intended applications without releasing meaningful quantities, if any, of asbestos fibers into the air. GARLOCK's compressed asbestos sheets and gaskets are treated with an anti-stick releasing agent which reduces any tendency of the gaskets to adhere to pipe flanges during removal and replacement. This anti-stick agent facilitates the removal of old gaskets without generating dust. Other GARLOCK products come in specific sizes for application and do not generally require modification before or during application or use. GARLOCK states that from 95% to 98% of its asbestos-containing products have been made only with chrysotile asbestos fibers and that the remaining 2% to 5% of such products were made with crocidolite asbestos fibers. Depending upon the type of product involved, the percentage of asbestos contained in these products has ranged from about 10% to about 85%. This Defendant has never mined, supplied, distributed, marketed and/or sold raw asbestos fibers to others.

- (a) GARLOCK manufactured, marketed and sold the asbestos-containing products identified in Exhibit B.
- (b) GARLOCK INC; see Answer to Interrogatory No. 4.
- (c) See Exhibit B attached to these Answers to Interrogatories.
- (d) The exact date each product identified in Exhibit B was placed in the stream of commerce is unknown. Asbestos compression sheet material became generally available in the early 1900's. Asbestos-containing packing products became available in 1907. GARLOCK has previously produced product catalogs to Baron & Budd and those catalogs accurately describe the asbestos products available for sale in particular time periods. GARLOCK attaches as Exhibit D its Response to Plaintiff's Subpoena Duces Tecum in the Fulton County Asbestos Litigation, Civil Action No. 1998 CV 02684; paragraphs 2 and 3 of said response identify the relevant GARLOCK catalogs produced to Baron & Budd. GARLOCK incorporates that response in relation to Interrogatory No. 6(d) here. Actual copies of all catalogs and advertising materials identified in GARLOCK's response to said Subpoena Duces Tecum were produced to Baron & Budd in the Georgia asbestos litigation in 1999.
- (e) See Exhibit B and all product related documents and catalogs previously produced to Baron & Budd in the Fulton

County, Georgia asbestos litigation.

- (f) The date each asbestos product was removed from the market is identified in Exhibit B. Asbestos products were removed from GARLOCK's product line when suitable new products with superior performance capabilities became available. The development of non-asbestos substitutes for certain fluid sealing devices was dependent on the engineering of new materials, extensive functional and performance testing and ultimately the customers willingness to use these materials for applications that historically had required asbestos products.
- (g) See Answer to 6(f).
- (h) See all product information, catalogs, advertising materials and photographs previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation.
- (i) See all product information, catalogs and advertising materials previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation.
- (j) See Exhibit B.

INTERROGATORY NO. 7:

Do any documents, including but not limited to written memoranda, specifications, recommendations, blueprints, or other written materials of any kind or character, relating to the design, preparation, or introduction into the market of the products listed in Interrogatory No. 6 still exist? If so, state:

- (a) A description of each such document.
- (b) The name, address and job title of each person who currently has possession of each document, and where the documents are currently located.

ANSWER: Yes.

- (a) The product information, catalogs and advertising materials previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation relate to the asbestos products listed in Exhibit B and their introduction into the market. Any other documents potentially responsive to this interrogatory are located at the GARLOCK record retention facility in Palmyra, New York and a warehouse in Rochester, New York. The Rochester warehouse holds documents retained by GARLOCK per its Record Retention policies and copies of said policies were previously provided to Baron & Budd in the Fulton County, Georgia asbestos litigation. GARLOCK will provide access to the records located in the Rochester warehouse and the Palmyra facility at a mutually convenient date, time and place.
- (b) Paul Grant; Garrison Litigation Management Group, Ltd., One HSBC Plaza, Suite 1830, Rochester, New York 14604-2415. See Answer to Interrogatory No. 7(a).

INTERROGATORY NO. 8:

Before distributing, selling or placing the products listed in your responses to Interrogatory Nos. 3-6 into the streams of commerce, were any tests conducted to determine potential health hazards involved in the use of, or exposure to, the materials such as asbestos contained in those products? If the answer is affirmative, state:

- (a) The names of the products tested and the date of each test.
- (b) The name, address, and job title of each person conducting the tests or involved with conducting the tests.
- (c) The results of the tests.

ANSWER: Yes. (a) - (c) At various times. GARLOCK has retained independent industrial hygienists to test its products for potential fiber release in a wide variety of occupational settings and situations. The industrial hygienists generated reports from those tests and those reports are included in GARLOCK's Exhibit Binders which have been previously produced to Baron & Budd. A copy of GARLOCK's Exhibit List is attached as Exhibit E and GARLOCK refers to the following exhibits as being responsive to this interrogatory.

<u>Name/Hygienist</u>	<u>Garlock Exhibit Numbers</u>
1. Nielsen	33 - 38
2. Mangold	18 - 31
3. McCrone	39 - 40
4. Boelter	99 - 108
5. Spencer	111 - 112

INTERROGATORY NO. 9:

Do any documents, including but not limited to written memoranda, specifications, recommendations, blueprints or other written materials of any kind or character, relating to the testing of the products referred to in Interrogatory No. 6 now exist? If so, state:

- (a) A description of each such document.
- (b) The name, address and job title of each person who currently has possession of each document, and where it is presently located.

ANSWER: See Answer to Interrogatory No. 8.

INTERROGATORY NO. 10:

Did Defendant or any of its predecessor or subsidiary companies make any design changes or modifications as a result of those tests describe in response to

Interrogatory No. 8? If the answer is affirmative, state:

- (a) The trade names of the products changed.
- (b) The nature of the changes made and the date of such changes or modifications.
- (c) The name, address and job title of each person responsible for having caused a change to be made, or having made a change or modification.

ANSWER: No.

INTERROGATORY NO. 11:

After releasing the products listed in Interrogatory No. 6 to the public, were any tests conducted on them to determine potential health hazards resulting from the use or exposure to the materials, such as asbestos, contained in those products? If the answer is affirmative, state:

- (a) The names of the products tested and the dates of such tests.
- (b) The name, address and job title of each person who conducted those tests.
- (c) The results of those tests.
- (d) Whether, as a result of the tests, any products were removed from the market.
- (e) The names of all products removed from the market as a result of these tests.

ANSWER: See Answer to Interrogatory No. 8

INTERROGATORY NO. 12:

Do any documents, including written memoranda, specifications, recommendations, blueprints or other written materials of any kind or character, relating to the potential health hazards of the products listed in Interrogatory No. 6 now exist? If so, state:

- (a) The name of each product.
- (b) A description of each document and how it relates to each product.
- (c) The name, address and job title of each person who currently has possession of each document, and where it is presently located.

ANSWER: (a) - (c) GARLOCK does not possess any medical or scientific documents which relate or associate any potential health hazard to the use of the asbestos-containing gasket and packing products identified in Exhibit B. GARLOCK did prepare Material Safety Data Sheets for certain of its asbestos-containing products and copies of those documents are attached to these Answers to Interrogatories as Exhibit F. GARLOCK possesses copies of the various OSHA and EPA regulations regarding the potential hazards associated with asbestos exposure. Actual copies of those regulations are contained in GARLOCK's Exhibit Binders as Nos. 1-9.

INTERROGATORY NO. 13:

Did Defendant or any of its subsidiary companies make any design changes as a result of the tests discussed in your response to Interrogatories No. 10 or 13? If the answer is affirmative, state:

- (a) The names of the products changed or modified.
- (b) The name, address and job title of each person responsible for

having made a change or modification.

- (c) The nature of the hazard or defect which resulted in such change or modification.

ANSWER: No.

INTERROGATORY NO. 14:

Has Defendant or any of its predecessor or subsidiary companies at any time published or distributed any printed material, including brochures, pamphlets, catalogs, packaging or other written material of any kind or character containing any warnings concerning the possibility of injury resulting from the use of the asbestos-containing products listed in Interrogatory No. 6? If so, state:

- (a) The names of each relevant product.
- (b) The exact wording of each warning statement on each printed material.
- (c) A description of the printed material other than the warning statement.
- (d) The method used to distribute the warning to persons likely to use the product.
- (e) The date each warning was first issued, distributed or placed on packaging.
- (f) The name, address and job title of each person responsible for having drafted or issued the warning.
- (g) The current location of any such printed material and the custodian thereof.
- (h) The form in which such literature or printed material can be accessed, i.e., the manner in which such literature is indexed or stored.

ANSWER: Yes.

- (a) Caution labels were placed on all of the asbestos products identified in Exhibit B in 1977 (assuming the individual product was still being manufactured by GARLOCK at that time). GARLOCK placed a caution label on its limited line of asbestos textile products (cloth and yarn) in 1972.
- (b) The caution label stated, "CAUTION: Contains asbestos fibers. Avoid creating dust. Breathing asbestos dust may cause serious bodily harm." This is the caution label language established by OSHA, Section 1910.1001, par. .2(ii), GARLOCK placed this label on its products in 1977, although gaskets and packings are exempt from the OSHA caution label requirement.
- (c) A similar caution and warning notice has been contained in GARLOCK's product literature and catalogs since 1977.
- (d) The caution label was placed on the product packaging and the product itself.
- (e) August, 1977; For textile products, (cloth and yarn) 1972.
- (f) The decision to place a caution label on GARLOCK's asbestos-containing products was a consensus decision made by GARLOCK management in 1977. Management personnel involved included John Guffey (Compressor Packing Division), Alexander Kuzmuk (Construction Products), Gordon LeRoy (Engineering), Mike Panarites (Personnel), Herb Schaefer (MRD Operations) and Ron Stay (Marketing). The decision to place a caution label on textile products in 1972 was made by Alexander Kuzmuk.

None of these individuals are currently employed by GARLOCK.
- (g) Caution labels samples have been previously produced to Baron & Budd.
- (h) Not applicable.

INTERROGATORY NO. 15:

Before 1970, had you received notice that any individual or individuals, other than those Plaintiffs who have filed personal injury actions in Texas State Courts is or are claiming or has or have claimed an injury as a result of using asbestos products manufactured and/or sold by your company or any of its predecessors or subsidiaries before 1970? If so, state:

- (a) The name and address of each claimant.
- (b) The date of notice of each claim.
- (c) A description of the claim.
- (d) The type of injuries allegedly sustained.
- (e) The name and address of each attorney who represents each individual making a claim.
- (f) The style and court number of each claim.
- (g) The disposition of each claim that has been settled or taken to judgment.

ANSWER: GARLOCK had no personal injury claims alleging asbestos related disease or injury based on product handling or usage prior to 1970.

INTERROGATORY NO. 16:

Were your asbestos products distributed, marketed, packaged, labeled and/or sold by companies other than your own? If the answer is affirmative, list the names and addresses of each of those companies, and the products in question.

ANSWER: Yes. Most of GARLOCK's product sales were made on a direct basis until the mid-1960's. At that time, GARLOCK management made the decision to utilize distributors for sales to maintenance and repair customers and after a conversion period of several years, the majority of GARLOCK product sales have been made through distributors. A recent listing of GARLOCK distributors is attached as Exhibit G. A list of GARLOCK distributors for Texas, the territory relevant to this litigation, is attached as Exhibit H. Any sales records relating to GARLOCK's product sales prior to 1978, no longer exist. Post 1978 sales records are available for inspection and copying at a mutually convenient date and time. These records are currently located in the Rochester warehouse described above. GARLOCK can also perform microfiche searches of product sales to particular customers or distributors.

INTERROGATORY NO. 17:

Did you or any of your predecessors, successors or subsidiaries have any distributors or sales representatives of asbestos products in the States of Alabama, Florida, Mississippi, Oregon, Washington, Georgia, Tennessee, Arkansas, Texas and Virginia? If so, state:

- (a) The name and address of each such distributor or sales representatives.
- (b) The years in which such company or person distributed, marketed or sold your products.
- (c) What products were distributed, marketed or sold and in what years.

ANSWER: Objection. GARLOCK's sales activities in these states are irrelevant to any asbestos litigation pending in Texas. Without waiving said objection, GARLOCK answers yes and refers to Answer to Interrogatory No. 16.

INTERROGATORY NO. 18:

List each employee (including only physicians and/or hygienists) who has acted in a medical advisory capacity to your company at any time during the past 40 years, including, but not limited to, physicians and industrial hygienists, and the current address, telephone number and job title of each of those individuals and who has, had or may have had any knowledge regarding the hazards of asbestos.

ANSWER: GARLOCK has not employed, retained or otherwise engaged physicians, industrial hygienists or others to conduct medical research. GARLOCK has had part-time plant physicians since 1920. They are as follows:

<u>Name</u>	<u>Dates of Service</u>
Dr. C. C. Nesbitt (deceased)	8/30/20 - 8/1/56
Dr. J. D. Bramer (deceased)	8/1/56 - 7/24/72
Dr. K. K. Kapur 1269 Pittsford Palmyra Road Macedon, New York 14502	10/23/72 - 8/14/79
Dr. William G. Fallon 602 7th Street Liverpool, New York 13088	10/31/79 - 3/1/88
Dr. B. Maureen Merritt P. O. Box 477 Celoron, New York 14720	9/15/88 - 8/28/90
Dr. Tillman F. Farley 3345 22nd Court Brighton, Colorado 80601	10/9/90 - 8/3/93
Dr. Alan Lorenz 2 Forest Knoll Pittsford, New York 14534	8/3/93 - 3/1/98

Dr. Carl M. Devore
Garlock Inc
1666 Division Street
Palmyra, New York 14522

3/3/98 - Present

All of these physicians served on a part-time basis and were at GARLOCK primarily for incoming employee physicals, treatment of minor injuries, etc. Any existing records, reports or memoranda written by any of these physicians and pertaining to GARLOCK are in the hospital records which are all maintained by patient name at GARLOCK.

INTERROGATORY NO. 19:

Does Defendant have in its possession any books, pamphlets, memoranda, or written material of any kind or character that would indicate that asbestos fibers, when inhaled, can be hazardous to the health of human beings? If so, state:

- (a) The name of each such publication.
- (b) The date of publication and the names of the author and publisher (if any).
- (c) The date received by Defendant, if known.
- (d) The name, job title, and address of each person who currently has possession of each publication and its present location.

ANSWER: Yes (a) - (d) GARLOCK is not aware of any competent scientific, medical, industrial hygiene or epidemiological studies which establish a causal relationship between the use of or exposure to asbestos-containing gaskets and packing products and any asbestos related diseases. GARLOCK has become aware of the potential hazards of excessive asbestos exposure from the following sources:

1. GARLOCK received copies of the Hemeon Report prepared by the Industrial Hygiene Foundation for the members of the Asbestos Textile Institute in June 1947. A copy of this report has already been produced to Baron & Budd.

2. GARLOCK has received copies of the OSHA and EPA regulations at or near the time they were published by those agencies. These government regulations are listed in Exhibit G.
3. GARLOCK may have received minutes of the Asbestos Textile Institute Meeting of March 7, 1956. The minutes show that George Houghton a GARLOCK employee, attended the meeting as a guest. Baron & Budd possesses copies of Mr. Houghton's deposition testimony regarding his participation and attendance at that meeting.
4. GARLOCK may have received minutes from the Asbestos Information Association Meeting of December 6, 1973 and June 10, 1976. Said minutes have previously been provided to Baron & Budd.
5. GARLOCK has also received worker's compensation claims from textile plant employees alleging asbestos disease caused by exposure to raw asbestos fibers used at that facility. All documents regarding those worker's compensation claims has previously been provided to Baron & Budd.
6. GARLOCK, throughout the course of the asbestos litigation, has become aware of medical and scientific literature which relates certain diseases to excessive occupational exposure to asbestos fibers.

INTERROGATORY NO. 20:

Has Defendant or any of its subsidiaries or predecessor companies at any time been a member of any trade organization or association that published or disseminated any documents or information relating to the hazards of asbestos comprised of other manufacturers, miners, marketers, and/or sellers of asbestos products? If so, state:

- (a) The name and address of each such association or organization.
- (b) The dates during which Defendant or any of its subsidiaries or predecessors were members.

- (c) The names and dates of any publications, minutes, or reports published, written or disseminated by any of the named associations or organizations.
- (d) Whether any of those publications are still in your possession, and if so:
 - (i) A description of the publications, including the date.
 - (ii) The current location of such publications.
 - (iii) The custodian of such publications.
 - (iv) The method or manner in which such publications are maintained.

ANSWER: Yes. GARLOCK was a member of the following trade associations that may have addressed asbestos related issues in one form or another. GARLOCK will answer all subparts for each association separately

1. (a) Fluid Sealing Association
2017 Walnut Street
Philadelphia, Pennsylvania 19103

(b) 1935 to present.

(c) GARLOCK does not possess any minutes, publications or reports related to asbestos hazards published or disseminated by this association.

(d) Not applicable.

2. (a) Asbestos Textile Institute
P.O. Box 471
131 North York Road
Willow Grove, Pennsylvania 19090

(b) GARLOCK was a member of the ATI for a short period of time in the mid 1940's and from 1966 to 1979.

(c) The Hemeon Report, June 1947 (previously produced to Baron & Budd); ATI Minutes, March 7, 1956 (previously

produced to Baron & Budd); ATI Minutes (1966 to 1979); attached as Exhibit I.

(d) Not applicable.

3. (a) Asbestos Information Association of North America
1975 K. Street
Washington, D.C.

(b) GARLOCK has been a member of the AIA from 1974 to 1980.

(c) AIA Minutes dated December 6, 1973 and June 10, 1976, (previously produced to Baron & Budd).

(d) Not applicable.

4. (a) American Society for Testing and Materials
1916 Race Street
Philadelphia, Pennsylvania 19103

(b) GARLOCK has been a member of ASTM from 1945 to the present.

(c) GARLOCK does not possess any minutes, publications or reports relating to asbestos hazards published or disseminated by this association.

(d) Not applicable.

5. (a) National Safety Council
444 North Michigan Avenue
Chicago, Illinois 60611

(b) GARLOCK has been a member of the National Safety Council from 1922 to the present.

(c) GARLOCK does not possess any minutes, publications or

reports relating to asbestos hazards published or disseminated by the National Safety Council.

(d) Not applicable.

INTERROGATORY NO. 21:

Identify by name and location each plant or manufacturing facility in which the products listed in your answers to Interrogatory Nos. 3-6 were manufactured, assembled or prepared for sale or marketing, specifying which plants produced each item, the dates each plant is or was in operation, and the time span during which each named item was produced or manufactured.

ANSWER: GARLOCK has operated the following plants which manufactured the asbestos-containing products identified in Exhibit B during certain time periods.

1. GARLOCK INC plant in Palmyra, New York. This was GARLOCK's principal manufacturing facility and has manufactured compressed asbestos sheet material from the early 1900's to the present. Asbestos packing products were also manufactured in Palmyra from the early 1900's to 1976. All style numbers listed on Exhibit B could be manufactured at the Palmyra plant during those years.
2. GARLOCK INC plant in Sodus, New York. GARLOCK manufactured braided asbestos packing products at this plant from 1976 to 1981. All packing products listed in Exhibit B could be manufactured at the Sodus facility.
3. Garlock of Canada owned and operated a manufacturing facility at 66 Jutland in Toronto, Canada from 1962 to 1991. This plant manufactured the compressed asbestos sheet and braided packing products listed in Exhibit B. From 1991 to the present, Garlock of Canada has operated a facility at 2860 Plymouth Drive in Oakville, Ontario. Asbestos-containing braided packing products were manufactured at that facility from 1991 to March 1999. Garlock of Canada has operated a plant at 4100 Rue Sherbrooke, Quebec,

Canada from 1976 to the present. This plant manufactures and sells asbestos cloth and yarn. The compressed sheet and asbestos packing materials manufactured in Canada are not sold to customers in the United States.

4. Garlock de Mexico, SA de CV operates a plant in Mexico City, Mexico. The address is Apartado Postal 15-103; Poniente 116, No. 571; Colonia Industrial Vallejo; Delegacion Azcapotzalco; 02300, Mexico, DF. Garlock de Mexico has manufactured compressed asbestos sheet materials and braided compression packing from 1964 to the present. The compressed asbestos sheet materials manufactured in Mexico are primarily Style Numbers 900, 7021, 7405, 8748, 7006 and 7228. The braiding packing style numbers manufactured in Mexico are 117, 127, 150, 234, 731, 1019, 1020, 1021, 2601, 2602, 2603, 2611 and 5862. The asbestos-containing compression sheet and braided packing materials manufactured in Mexico are not sold to customers in the United States.
5. GARLOCK PTY, Ltd. (Sealing Technology Division) has owned and operated a plant at 10 Willis Street in Arncliffe, Australia since 1970. They began selling asbestos-containing braided packing products in 1970. This entity never sold asbestos-containing products to customers in the United States.
6. GARLOCK INC owned an interest in a textile plant (E.R.I.C.A.) in Barcelona, Spain. This plant manufactured asbestos cloth and yarn and compression packing until March, 1979.
7. GARLOCK manufactured spiral wound gaskets at the former United States Gasket plant in Camden, New Jersey from 1955 to 1964 and at a plant in Gastonia, North Carolina from 1965 to 1987.

INTERROGATORY NO. 22:

Have printed sales materials been prepared by Defendant or any of its subsidiary or predecessor companies or their agents for purposes of marketing or advertising

products containing asbestos? If so, state:

- (a) The name, address and job title of each person or entity who prepared such materials.
- (b) The name, address and job title of each person who currently has possession of such materials and their present location.
- (c) The date the materials were prepared.
- (d) The media used to disseminate the sales materials.

ANSWER: GARLOCK has published numerous catalogs over the years for the purpose of marketing and advertising the product line.

- (a) No particular individual has been responsible for the preparation of sales, marketing and advertising materials over the years. GARLOCK has a marketing/advertising department and the following individuals have managed this department over the years:

Larry Rienzo	Late 1960's to early 1970's
Joan Clement	Early 1970's to late 1970's
Gay Pllock	1979 to 1982
Tina Masters	1982 to 1989
Janine Murganberger	1989 to 1990
Laur Fawcet	1990 to 1998

- (b) The current marketing/advertising manager is Mary Cappellino. Current advertising and marketing materials are in the possession of the advertising department.
- (c) Advertising materials have been prepared and disseminated on a continuous basis by GARLOCK since the 1930's.
- (d) GARLOCK has used a variety of media to disseminate sales and advertising material, including trade publications, direct mailings to distributors, direct mailing to customers, sales calls to distributors and customers and seminars for customers and distributors.

INTERROGATORY NO. 23:

Have any written or printed materials or instructions of any kind or character been prepared by Defendant or any of its subsidiary or predecessor companies or their agents indicating how asbestos products should be used and maintained? If so, state:

- (a) The name, address and job title of each person who prepared such materials or instructions or assisted in their preparation.
- (b) The name, address and job title of each person who currently has possession of such materials or instructions and their present location.
- (c) The dates of distribution or use and the manner in which such materials or instructions were distributed to purchasers of Defendant's products or those of its subsidiaries or predecessors.
- (d) The year each such written material or instruction was prepared and disclosed to potential customers.

ANSWER: Yes. GARLOCK's product information, catalogs and advertising materials contained references on how asbestos and non-asbestos products should be used and maintained by the customers. Copies of those materials have been previously produced to Baron & Budd in GARLOCK's Response to the Subpoena Duces Tecum issued in Fulton County, Georgia Asbestos Litigation, Civil Action No. 1998 CV 02684. Additional materials may be located in the Rochester document warehouse and Baron & Budd will be provided access to those records for inspection and copying at a mutually convenient date, time and place. GARLOCK also prepared Material Safety Data Sheets regarding certain asbestos products and those documents are attached as Exhibit F.

- (a) No particular individual has been responsible for the preparation of sales and advertising materials. The marketing and advertising managers are listed in GARLOCK's Answers to Interrogatory No. 22. The MSDS Sheets were prepared by Harold Hughes.
- (b) Current materials are in the possession of the marketing and advertising departments. The MSDS Sheets are located at the GARLOCK plant in Palmyra, New York and have been

produced to Baron & Budd.

- (c) Specific dates of distribution are unknown. GARLOCK disseminated its product information, catalogs, sales and advertising materials through a variety of media, including advertisements in trade publications, direct mailings to distributors, direct mailings to customers, sales calls on distributors and customers and seminars for customers and distributors. The MSDS Sheets were available commencing in the late 1970's.
- (d) Sales and distribution materials for distribution to customers were prepared and disseminated on a continuous basis since the 1930's. The MSDS Sheets were prepared and available for distribution commencing in the late 1970's.

INTERROGATORY NO. 24:

Does Defendant have insurance policies that might cover the claims made by Plaintiffs in these cases? If so, list the name of each insurance carrier, the amount of initial coverage, amount of coverage remaining at the present time, and the effective dates of each policy. (If properly answered, this Interrogatory need not be supplemented as to the remaining amount of coverage).

ANSWER: Yes. Insurance for product liability claims filed against GARLOCK is available under various insurance policies, including the following primary policies.

<u>Carriers</u>	<u>Years of Coverage</u>
1. Travelers Insurance Co.	1951 - 1961
2. Employer's Mutual of Wausau	1961 - 1976
3. Aetna Life and Casualty	1975 - 1986
4. National Union	1986 - present

The total amount of insurance coverage available to GARLOCK for product liability claims is subject to differing views between the insured and the insurers. Available coverage is sufficient to cover asbestos related claims currently pending on a nationwide basis

against GARLOCK. Cover sheets on relevant policies will be provided under separate cover.

INTERROGATORY NO. 25:

As to the disease asbestosis, state:

- (a) The date on which Defendant or its subsidiary or predecessor first learned that such disease was caused by inhalation of asbestos fibers by humans.
- (b) How Defendant became aware of the existence of the disease.
- (c) Who within the company first discovered, recognized or understood the adverse consequences or effects of the disease and/or of asbestos exposure.
- (d) What information was disseminated within Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (e) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in any written form.
- (f) Who is the custodian of such information.
- (g) The date on which you first received knowledge or information that asbestosis was caused by inhalation of asbestos fibers.

ANSWER: (a) George Houghton, ex-employee of GARLOCK may have learned that the disease asbestosis was related to excessive exposure to asbestos fibers through his participation in ATI meetings in the late 1940's. Mr. Houghton has previously been deposed regarding those activities and Baron & Budd is in possession of those transcripts. Vera Clemons, an employee in the GARLOCK textile plant in Palmyra, New York filed a worker's compensation claim in 1947 alleging that she had contracted asbestosis from occupational exposure to raw asbestos fibers used at the textile plant. GARLOCK has never received any information relating asbestosis to exposure to asbestos-containing gaskets and packings. The Industrial Hygiene Foundation generated the Hemeon Report in June, 1947 and that report relates to a

survey of dust levels in various textile plants, including GARLOCK. The report refers to asbestosis and Baron & Budd is already in possession of this report.

- (d) See Houghton's transcripts already in the possession of Baron & Budd. GARLOCK established a dust control and ventilation program in its textile plant. GARLOCK also made changes in its textile plant manufacturing methods to control the level of dust in the plant. These measures included; installing hoods over carding machines, installing exhaust fans, refining to the vacuum system, installing spinning frames, designing and installing dust hoods for looms and collecting cyclones with outdoor exhausts. Oral warnings regarding the avoidance of dust and instructions regarding housekeeping have been given to GARLOCK employees at the GARLOCK manufacturing plants for over 50 years. Respirators have been available and their use encouraged in dusty areas for over 50 years.
- (e) See Answer to Interrogatory 25(a) through 25(d).
- (f) All such information is already in possession of Baron & Budd. The historical information regarding GARLOCK's membership in the ATI is in the possession of Garrison Litigation Management and has been produced to Baron & Budd.
- (g) See Answer to Interrogatory No. 25(a).

INTERROGATORY NO. 26:

As to the disease lung cancer, state:

- (a) The date on which Defendant or its subsidiary or predecessor first learned that such disease was caused by inhalation of asbestos fibers by humans.
- (b) How Defendant or its subsidiary or predecessor became aware of the disease and its relationship to asbestos exposure.
- (c) Who within the company or its subsidiary or predecessor first discovered or recognized the adverse consequences or effects of asbestos exposure.

- (d) What information was disseminated within Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (e) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in written form.
- (f) Who is the custodian of such information.
- (g) The date on which you first received knowledge or information that lung cancer was caused by inhalation of asbestos dust and fibers.

ANSWER:

- (a) GARLOCK first learned that excessive exposure to asbestos fibers was viewed by the medical and scientific community as a possible cause or contributor to lung cancer through the OSHA regulations and public media reports in the early 1970's. George Houghton, a former GARLOCK employee, is listed as a guest at a 1956 ATI meeting and minutes of said meeting refer to asbestos exposure and lung cancer. We refer to Mr. Houghton's deposition testimony already in the possession of Baron & Budd for details regarding that meeting.
- (b) Media reports and the OSHA regulations
- (c) Unknown.
- (d) Warning labels and signs advising workers of the hazards of inhaling asbestos fibers were placed at GARLOCK plant entrances in the early 1970's per the OSHA regulations. With regard to the compressed asbestos sheet manufacturing operation in Palmyra, New York in 1977, GARLOCK purchased the following equipment: An enclosed automatic bag opener and emptier, an enclosed fluffing device, an enclosed conveyor apparatus for transferring asbestos to appropriate mixers and blenders and associated dust collection equipment. Respirators became mandatory for all employees working in dusty areas in the early 1970's as did the wearing of disposable and cloth overalls.
- (e) GARLOCK INC.
- (f) Early 1970's.

- (g) See Answer to Interrogatory No. 26(a).

INTERROGATORY NO. 27:

As to the pleural disease, pleural thickening or pleural plaques, state:

- (a) The date on which Defendant or its subsidiary or predecessor learned that such disease was caused by inhalation of asbestos fibers by humans.
- (b) How Defendant or its subsidiary became aware of the disease and that it was caused by exposure to asbestos.
- (c) Who within the company or its subsidiary or predecessor first discovered or recognized the adverse consequences or effects of asbestos exposure.
- (d) What information was disseminated within Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (e) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in a written form.
- (f) Who is the custodian of such information.

- ANSWER:
- (a) GARLOCK received personal injury claims commencing in the late 1980's alleging that pleural thickening or pleural plaques were conditions potentially caused by occupational exposure to asbestos fibers. The 1986 OSHA regulations also discuss pleural changes and GARLOCK received those regulations.
 - (b) Lawsuits filed against GARLOCK and the 1986 OSHA regulations.
 - (c) Unknown.
 - (d) See Answer to Interrogatory No. 26(a).
 - (e) Yes.
 - (f) GARLOCK INC.

INTERROGATORY NO. 28:

As to the disease mesothelioma, state:

- (a) The date on which Defendant or its subsidiary or predecessor first learned that such disease was caused by inhalation of asbestos fibers by humans.
- (b) The date on which Defendant first suspected that mesothelioma was caused by inhalation of asbestos dust and fibers.
- (c) How Defendant or its subsidiary or predecessor became aware of the disease and that it was caused by exposure to asbestos.
- (d) Who within the company or its subsidiary or predecessor first discovered or recognized the adverse consequences or effects of asbestos exposure.
- (e) What information was disseminated within Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (f) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in a written form.
- (g) Who is the custodian of such information.
- (h) Whether Defendant agrees that there is no known medical cure for mesothelioma.

- ANSWER:**
- (a) GARLOCK believes it first became aware of the potential relationship between excessive exposure to asbestos fibers and mesothelioma in the 1970's. The source of such knowledge was the asbestos litigation which involved lawsuits alleging a causal relationship between asbestos exposure and mesothelioma.
 - (b) See Answer to Interrogatory No. 28(a).
 - (c) See Answer to Interrogatory No. 28(a).
 - (d) Unknown.

- (e) See Answer to Interrogatory No. 27(d).
- (f) Old complaints may be stored in the Rochester warehouse.
- (g) GARLOCK INC.
- (h) Objection. Calls for an expert medical opinion.

INTERROGATORY NO. 29:

As to gastrointestinal cancer, laryngeal cancer, pharyngeal cancer or lymphatic cancer, state:

- (a) The type of cancer and the date on which Defendant or its subsidiary or predecessor first learned that such diseases were caused by inhalation of asbestos fibers by humans.
- (b) What cancers has the Defendant or its subsidiary or predecessor become aware can be caused by exposure to asbestos fibers.
- (c) The date on which Defendant first suspected other cancers were caused by asbestos inhalation.
- (d) Who within the company or its subsidiary or predecessor first discovered the adverse consequences or effects of asbestos exposure.
- (e) What information was disseminated with Defendant's company or its subsidiary or predecessor regarding such adverse consequences or effects.
- (f) Whether any such information is still maintained by Defendant or its subsidiary or predecessor in a written form.
- (g) Who is the custodian of such information.

ANSWER: (a) GARLOCK became aware in the late 1980's that individuals were claiming excessive exposure to asbestos fibers could cause gastrointestinal cancer, laryngeal cancer, pharyngeal cancer or lymphatic cancer. GARLOCK does not admit such diseases are related to asbestos exposure. GARLOCK is aware there is controversy and disagreement in the medical

profession whether or not inhalation of asbestos fibers can cause or contribute to the diseases listed in this interrogatory.

- (b) Mesothelioma and lung cancer in individuals with underlying asbestosis.
- (c) Not applicable. See Answer to Interrogatory No. 29(a).
- (d) Not applicable. See Answer to Interrogatory No. 29(a).
- (e) Not applicable. See Answer to Interrogatory No. 29(a).
- (f) Not applicable. See Answer to Interrogatory No. 29(a).
- (g) Not applicable. See Answer to Interrogatory No. 29(a).

INTERROGATORY NO. 30:

Does Defendant contend that asbestos products can be manufactured or designed so as to eliminate all potential health hazards to persons working with or exposed to them? If the answer is affirmative, explain, in detail, and attach any studies or surveys on which this answer is based.

ANSWER: Yes. (As to asbestos-containing encapsulated gasket and packing products) GARLOCK has not been made aware of any competent scientific, medical, industrial hygiene or epidemiological studies which establish a causal relationship between the use of or exposure to asbestos-containing gaskets and packing products and any asbestos related disease. The manufacturing process encapsulates the asbestos fibers within the gasket and packing products and fiber release studies conducted by certified industrial hygienists, measuring exposure levels in a wide variety of occupational settings, show *de minimus* or trivial fiber release from the products. All of those studies are contained in GARLOCK's exhibit binders and we specifically identify Exhibits 15 - 126 as the relevant fiber release studies. All scientifically credible industrial hygiene fiber release studies show exposure levels well below the historical and current OSHA permissible exposure levels. OSHA does not require caution labels on gasket and packing products

and gasket and packing products are exempt from the Environmental Protection Agency's ban on asbestos products. See GARLOCK Exhibits 1 - 9.

INTERROGATORY NO. 31:

Describe in detail the types of packages or packaging which Defendant or any of its subsidiary or predecessor companies used for asbestos material or products, listing the dates each type of package was used, a physical description of each type of package, and providing a description of any printed material or trademarks that appeared thereon.

ANSWER: GARLOCK states that it does not have records which would show when it started and/or stopped using any particular type or style of packaging. For at least 50 years, the dominant colors of GARLOCK's packaging materials have been yellow, red and black. Sometimes black has predominated, and at other times yellow has been the dominant color. However, the three colors have usually been used together. GARLOCK cannot identify with any specificity the type of packaging used for particular products at particular times.

The form in which GARLOCK asbestos-containing products are shipped varies, depending upon the size and configuration of each item, the number of items called for by the customer's order, and the customer's own desires. Among the containers used are burlap bags, cardboard boxes and wooden crates. In addition, asbestos sheet is occasionally shipped flat on wooden pallets.

All of its products, both those containing asbestos and those containing no asbestos, have been sold under the GARLOCK name. In addition, the Calipers and Scale trademark was used with all of its products from about 1900 until approximately 1968. A number of secondary trademarks have also been used over the years. Principal marks which have been used in connection with asbestos-containing products, as well as non-asbestos-containing products, have been BELMONT, GUARDIAN, CHEVRON, LATTICE BRAID, PALMYRA and PAPER-PAK.

INTERROGATORY NO. 32:

Has Defendant or any of its subsidiary or predecessor companies at any time entered into a "rebranding" agreement with any other company, either as buyer or seller, concerning asbestos materials or asbestos products? If so, state as to each such agreement:

- (a) The name of the company manufacturing the asbestos products.
- (b) The trade name affixed to those products.
- (c) The periods of time covered by each such agreement.
- (d) The volume, in dollar amount, of each transaction.
- (e) The initial purchaser of the products.

ANSWER: Yes. GARLOCK has manufactured asbestos and non-asbestos products and then sold those products for resale under the labels of other companies. GARLOCK has applied customer brand names to compressed asbestos sheet material for the following companies.

Anchor Packing; Philadelphia, Pennsylvania	1979 - 1993
Sepco; Birmingham, Alabama	1973 - 1986
J.A. Sexauer; White Plains, New York	1965 - present
Vallumoid; Worcester, Massachusetts	1960 - 1980
Drew Chemical, Boonton, New Jersey	1980 - 1986
Industrial Packing, Bucksport, Maine	1988 - present
A. W. Chesterton, Woburn, Massachusetts	1960 - 1976

- (a) GARLOCK INC.
- (b) Unknown.
- (c) GARLOCK is not aware of the existence of any written rebranding agreements although any such agreements may be stored at the Rochester warehouse which contain all documents kept by GARLOCK pursuant to its record

retention policies. Baron & Budd will be given access to those documents at a mutually convenient, date, place and time and can inspect and copy any rebranding agreements which are located in the warehouse.

- (d) Unknown.
- (e) See the companies listed in the introductory paragraph to this Answer to Interrogatory.

INTERROGATORY NO. 33:

List the name and address of each company from which Defendant or its subsidiary or predecessor purchased materials or asbestos products which Defendant sold or distributed in any form, stating the form of the materials, the dates of such purchases, and the ultimate disposal of such materials.

ANSWER: GARLOCK has from time to time, purchased finished products from other manufacturers, branded those products with the GARLOCK label and sold those products to third-parties. The names of the companies who manufactured the products, the form of the product, the dates of the purchases and the ultimate purchases of these products is presently unknown to GARLOCK. Documentation regarding this issue may be located at the Rochester warehouse where documents kept by GARLOCK pursuant to its record retention policies are stored.

Baron & Budd will be provided access to those documents at a mutually convenient date, place and time and may inspect and copy any documents responsive to this interrogatory at that time.

INTERROGATORY NO. 34:

Does Defendant or any of its subsidiaries or predecessors currently have possession of any writings or contracts on those rebranding agreements set forth in the answer to Interrogatory No. 32? If the answer is affirmative, state:

- (a) The name, address and job title of each person having custody of each of those documents and their current location.
- (b) A brief description of each such document, including the dates and the parties signatory.

ANSWER: No. See Responses to Interrogatory Nos. 32 and 33 regarding documents stored at the Rochester warehouse per the GARLOCK record retention policy.

- (a) Unknown.
- (b) Unknown.

INTERROGATORY NO. 35:

Prior to 1968, did any person file a claim against a Worker's Compensation carrier covering Defendant or any of its subsidiaries or predecessors alleging that he/she contracted a disease from inhaling asbestos fibers? If so, provide:

- (a) A list of the claim, including each claimant's name, address and the date each claim was filed, and including the caption and jurisdiction of the claim.
- (b) The disease alleged in each such claim.
- (c) A brief summary of the disposition of each such claim.
- (d) The name, address and title of the person having custody of the records pertaining to each such claim.

ANSWER: (a) - (d) Yes. A listing of all asbestos related worker's compensation claims filed against GARLOCK is attached as Exhibit

J. GARLOCK believes that Baron & Budd is already in possession of the documents relating to these worker's compensation claims. GARLOCK refers to the Baron & Budd exhibit list filed in El Paso and other jurisdictions in Texas and throughout the country.

INTERROGATORY NO. 36:

Did Defendant or any of its subsidiaries or predecessors maintain written minutes of corporate meetings, either board of directors, departmental or otherwise, which reflect discussions pertaining to any subject matter related to asbestos, asbestos health hazards or asbestos products? If so, for each such set of minutes, state:

- (a) The dates of each such meeting.
- (b) The general subject matter discussed at each meeting.
- (c) Who was in attendance at each meeting.
- (d) Where and by whom the written minutes are presently maintained.
- (e) By whom the minutes were taken and put into final format.
- (f) Whether the minutes were abstracted and reports disseminated to other individuals, and if so, the names and job titles of those individuals.

ANSWER: Yes. GARLOCK created a Product Liability Committee in the late 1970's and minutes of meetings conducted by that committee are attached as Exhibit K. GARLOCK also has certain Board of Directors Meeting Minutes which refer to asbestos related issues and said minutes are attached as Exhibit L.

- (a) See Exhibit K and Exhibit L.
- (b) See Exhibit K and Exhibit L.
- (c) See Exhibit K and Exhibit L.
- (d) GARLOCK INC.

- (e) See Exhibit K and Exhibit L.
- (f) See Exhibit K and Exhibit L.

INTERROGATORY NO. 37:

Do you or any of your subsidiaries, including foreign business entities, currently manufacture any products containing asbestos? If so, state:

- (a) As to each product, whether such product is mined, manufactured and/or marketed or sold.
- (b) The names and addresses of the companies mining, manufacturing, marketing, and/or selling each of those products.
- (c) The trade or brand name of each of those products mined, manufactured, marketed and/or sold.
- (d) The date each of the named products was placed on the market.
- (e) A description of the physical (chemical) composition of each of the named products, including the type of asbestos contained in the product.
- (f) A description of the physical appearance of each product and its packaging.
- (g) A detailed description of the intended uses of the named products.
- (h) Whether there are any warning labels on said products or containers regarding potential asbestos-related health hazards.

ANSWER: Yes. Garlock of Canada and Garlock of de Mexico currently manufacture certain asbestos-containing products. GARLOCK will answer the interrogatory subparts separately for each entity.

Garlock of Canada, Ltd.

- (a) Manufactured, marketed and sold.
- (b) Garlock of Canada, Ltd., 4100 Rue Garlock, Sherbrooke, Quebec.

- (c) Garlock of Canada, Ltd. sells asbestos yarn and cloth—these products do not have trade or brand names. Garlock of Canada, Ltd. has also sold compressed asbestos sheet and braided packings. See Exhibit B for style numbers.
- (d) Garlock of Canada, Ltd. opened its textile facility in 1976 and has been manufacturing and selling asbestos yarn and cloth since that time. Garlock of Canada, Ltd. sold compressed asbestos sheet from 1962 to 1991 and braided packing from 1962 to 1999.
- (e) See Exhibit B and product information, catalogs, and advertising material products previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation. See Answer to Interrogatory No. 6.
- (f) See product information, catalogs and advertising materials previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation. See Exhibit B and Answer to Interrogatory No. 6.
- (g) See product information, catalogs and advertising materials previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation. See Exhibit B and Answer to Interrogatory No. 6.
- (h) Yes. Caution labels have been placed on asbestos textile products since 1976 and on compressed sheet and braided packing since 1977.

Garlock of de Mexico

- (a) Manufactured, marketed and sold.
- (b) Garlock de Mexico; Apartado Postal 15-103; Poniente 116, No. 571; Colonia Industrial Vallejo; Delegacion Azcapotzalco; 02300, Mexico, DF.
- (c) Asbestos products manufactured and sold by Garlock de Mexico include compressed asbestos sheet material and braided compression packing.

- (d) 1959 to the present.
- (e) See Exhibit B and product information catalogs and advertising materials previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation. Also, see Answer to Interrogatory No. 6.
- (f) See Exhibit B and product information catalogs and advertising materials previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation. Also, see Answer to Interrogatory No. 6.
- (g) See product information, catalogs and advertising materials previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation. See Answer to Interrogatory No. 6.
- (h) Yes. Caution labels have been placed on asbestos-containing products manufactured and sold by Garlock de Mexico since February, 1997.

INTERROGATORY NO. 38:

State whether you or any of your predecessors and/or subsidiaries maintain, from 1940 through the present or for any portion thereof, copies of invoices, shipping documents, bills of lading, purchase orders or other documents of a similar nature relating to the mining, manufacture, marketing, sale or distribution of asbestos products.

If so, state:

- (a) The location of such documents.
- (b) The name and address of the custodian of the documents.
- (c) The format in which the documents are kept, i.e., hard copy, microfilm, microfiche, etc.
- (d) In what form the documents can be accessed, i.e., by state, by product, etc., and if by product, whether kept according to asbestos

or non-asbestos.

ANSWER: GARLOCK states that it does not maintain separate compilations of sales records for its asbestos-containing products or for sales in specific states or sub-divisions thereof. Such older records that still exist are retained in the document warehouse in Rochester, New York. These records will be made available to plaintiff for inspection and copying at plaintiff's expense and at a mutually convenient date, time and place. It is believed that the oldest such paper records generally date from approximately 1978.

Upon receipt of specific information from the Plaintiffs as to the products to which they allege to have been exposed, the dates of the alleged exposure and the locations at issue, this Defendant will attempt to identify whether or not it sold such asbestos-containing products to the locations specified, at the time periods in question. GARLOCK maintains a microfiche database of sales documents maintained at the Rochester warehouse and GARLOCK will search specific sites or facilities relevant to Plaintiff with claims in this jurisdiction.

INTERROGATORY NO. 39:

Will you call company representatives as witnesses at the trial of any of these cases? If so, list:

- (a) The name, address and job title of each company representative who may be called.
- (b) A summary of the testimony expected to be given by each such witness.
- (c) List any and all previous times that the named witnesses have either given deposition or trial testimony in an asbestos-related case, including the jurisdiction, style of the case, case number, date of testimony, and the name of the attorney taking the deposition for the Plaintiffs in that case.

ANSWER: Defendant objects to this interrogatory to the extent that it seeks a description of a trial witness's testimony. Additionally, because it is an overly broad request, imposes an undue burden on Defendant, and seeks information protected from disclosure by the attorney/client privilege and attorney work product privilege. Subject to these objections and without waiving them, Defendant responds as follows:

This Defendant discloses the following fact witnesses who may be called to testify at trial:

1. Any present or former employee of GARLOCK. GARLOCK specifically identifies Mr. Clayton Jewett and Mr. Roy Whittaker as former employees, and Mr. James E. Heffron as a current employee, who may testify on behalf of GARLOCK. Messrs. Jewett, Whittaker and/or Heffron may provide testimony on the process involved in the manufacture of various asbestos containing and non-asbestos containing GARLOCK gaskets and packing material. Messrs. Jewett, Whittaker and/or Heffron may also describe the various products manufactured by GARLOCK and the proper application and use of said products. GARLOCK reserves the right to call any current or past GARLOCK employees in response to the evidence presented in plaintiffs' case-in-chief.
2. GARLOCK reserves the right to cross-examine any fact or expert witnesses disclosed by the plaintiffs as well as any and all treating physicians of the plaintiffs. In addition, defendants adopt, insofar as they deem it consistent with their own defenses, any fact witnesses disclosed by any co-defendants or any plaintiffs in this matter.
3. GARLOCK disclaims any duty to introduce any of the above-mentioned witnesses at trial by virtue of placing them on the list.
4. GARLOCK specifically reserves the right to call any witness listed by any party, either live or by deposition or by previous trial testimony, who may have been called to testify in this case for the purpose of impeachment, rebuttal, or any other purpose the law allows.
5. GARLOCK has not yet completed its determination of witnesses and reserves the right to supplement and amend

this list up to and including the time of trial.

6. Any and all treating physicians, attending physicians, screening physicians and pathologists of the plaintiffs' decedent and of the plaintiffs.
7. Any and all family members, friends, or other witnesses disclosed by the plaintiffs or otherwise revealed in discovery to be conducted.
8. Any and all co-workers or other employees of the employer(s) of the plaintiffs' decedent as disclosed by plaintiffs or other defendants or as otherwise may be disclosed in trial preparation and discovery.
9. See **Exhibit M** for testimony lists which includes the occasions where Messrs. Jewett, Whittaker and Heffron have given testimony in an asbestos-related case.

INTERROGATORY NO. 40:

Have Defendant or its subsidiaries or predecessors ever acquired through purchase, reorganization or merger another corporation, company, or business which manufactured, sold, process, distributed or contracted or supplied products containing asbestos? If so, for each such entity, state:

- (a) Full and correct name;
- (b) Principal place of business;
- (c) State of incorporation;
- (d) Date of acquisition by Defendant;
- (e) Whether or not the business entity was ever authorized to transact business in the State of Texas.

ANSWER: (a) - (e)

In past years, GARLOCK acquired four subsidiary companies which made and/or sold at least some asbestos-containing products. Those companies were the Belmont Packing & Rubber Company, Crandall Packing Company, Dealers' Steam Packing Company and U.S. Gasket Company. Belmont was purchased in 1930, Crandall in 1939, Dealer's Steam in 1929 and U.S. Gasket in 1955. The only asbestos-containing products of which GARLOCK is aware that were made and/or sold by these companies were sealing products substantially equivalent to similar such products made and sold by GARLOCK. The Belmont Packing & Rubber Company was located in Philadelphia, Pennsylvania; Crandall Packing Company and Dealers' Steam Packing Company were located in Palmyra, New York; and U.S. Gasket Company was located in Camden, New Jersey. Ultimately, each of the four subsidiaries was merged or otherwise absorbed into GARLOCK, including all assets and liabilities. As far as GARLOCK is aware, all business records of these former subsidiaries were destroyed many years ago in accordance with GARLOCK's long-standing record retention program. It is probable that old corporate minute books still exist, but GARLOCK would not expect them to contain any information pertinent to this litigation. In June, 1987, GARLOCK acquired The Anchor Packing Company of Philadelphia, Pennsylvania which has sold asbestos-containing gaskets, gasket materials and packing.

GARLOCK has no information regarding the state in which these entities were incorporated. GARLOCK has no information regarding whether these entities were ever authorized to do business in Texas.

INTERROGATORY NO. 41:

Was each of your asbestos products generally expected to reach, or packaged to reach, the consumer or user, without substantial change in the condition in which it was sold? If not, with respect to any such product, explain in what way the Defendant claims its products were altered or substantially changed after sale or distribution and before reaching the user.

ANSWER: Yes.

INTERROGATORY NO. 42:

For each asbestos-containing product identified in response to Interrogatory No. 6, identify all foreseeable users such as insulators, helpers, pipefitters, welders, machinists, plasterers, drywall finishers, carpenters, boiler makers, shipwrights and riggers, etc. of any of Defendant's asbestos-containing products.

ANSWER: Depending on the job definitions used at particular plants and facilities, GARLOCK believes that certain occupations such as pipefitters, millwrights, machinists and boiler makers are potential users of asbestos-containing gasket and packing products.

INTERROGATORY NO. 43:

Based upon the material contents of your asbestos-containing products, the method of manufacturing, and the method of application, can such products be generally applied without liberating asbestos fibers into the air?

- (a) If there is a different answer concerning different products manufactured, sold, distributed, or used by your company, then specify the different products by precise manufacturer's name and popular name.
- (b) If there is a difference in your answer depending on the year or years in which a particular product was used, then specify in detail what year or years you are referring to and the specific products you are referring to and year involved.

ANSWER: Yes.

INTERROGATORY NO. 44:

Was it a foreseeable use of your asbestos-containing products that they may have been removed, stripped or replaced at some time after installation?

ANSWER: Yes.

INTERROGATORY NO. 45:

Before 1970, did you or your subsidiaries or predecessor(s) ever arrange for any labor inspectors, insurance company inspectors or anyone from your company to go to job sites where your products were being used or installed to make or take dust level counts? If so, state when this procedure started, the purpose of such procedures, and all results of such procedures.

ANSWER: No.

INTERROGATORY NO. 46:

If Defendant performed or had performed any dust level counts, what action, based on the results, did your company take?

ANSWER: Not applicable.

INTERROGATORY NO. 47:

Has your company or its subsidiaries or predecessor(s) ever conducted or caused to be conducted any studies designed to assist in minimizing or eliminating the

inhalation of asbestos dust and fibers by those exposed to the use of your company's products? If so, give the following:

- (a) Name of the person or firm conducting such studies.
- (b) The date the studies began and the date they were completed.
- (c) Any publication or other written dissemination of the results of the studies.
- (d) The nature of any action to eliminate or minimize the inhalation of asbestos dust fibers.

ANSWER: No.

INTERROGATORY NO. 48:

Does your company have, has it ever had, or have your predecessor(s) or subsidiaries ever had, a Research Department? If so, give the year such Research Department was established, and whether or not such Research Department has operated continuously since being established. State also:

- (a) The amount of time and money expended each year on research concerning asbestos or asbestos-containing products?
- (b) What percentage of gross sales did your company or its predecessor(s) spend on research concerning the health effects of asbestos?
- (c) State in detail the purposes, duties and responsibilities of such Research Department.

ANSWER: A Research and Development Department existed during most of the 1960's. The exact dates of its formation and termination are not available. A new Research and Development Department was established early in 1984 and functioned for approximately two years. In both instances, the Department worked on the development of new and/or improved products and processes. The Department never conducted any medical research.

- (a) Unknown. GARLOCK has spend substantial funds researching and investigating possible substitutes for asbestos-containing products, but it is unable to quantify the dollar amount.
- (b) GARLOCK does not have a medical department and no medical research was conducted by GARLOCK on the health effects of asbestos. GARLOCK is an industrial products company primarily focused on the manufacturer and sale of fluid sealing devices.
- (c) The Research and Development Department was charged with a development and/or improvement of GARLOCK products and manufacturing processes. During the years GARLOCK did not have a formal Research and Development Department, GARLOCK continued to perform functional and performance related research.

INTERROGATORY NO. 49:

Does your company have, or has it ever had, or have your predecessor(s) or subsidiaries ever had, a Medical Department? If so, state:

- (a) The year such Medical Department was established.
- (b) Whether or not such Medical Department has operated continuously since being established.
- (c) The name of each director, chief, or head of your Medical Department year by year, beginning with the first year you had a Medical Director or Medical Department, and the last known address and phone number of each.
- (d) State the duties and responsibilities of such Medical Department.

ANSWER: No. By way of further answer, GARLOCK states that it has not employed, retained or otherwise engaged physicians, industrial hygienists or others to conduct medical research.

INTERROGATORY NO. 50:

Did your company or its predecessor(s) or subsidiaries ever place any warning directly on any of its asbestos-containing product or on their packaging? If so, identify the product(s) and year said warning was first applied.

ANSWER: See Answer to Interrogatory No. 14.

INTERROGATORY NO. 51:

Did your company or its predecessor(s) or subsidiaries ever stamp or place the name of the company, its initials, or any identifying logo on any of its asbestos-containing products? If so, please state the name brand names of such products, a description of such stamp or logo and the dates such were placed on the referred products.

ANSWER: Yes. GARLOCK has been manufacturing asbestos products since 1907. All of its products, both those containing asbestos and those without asbestos, have been sold under the GARLOCK name. In addition, a caliper and scale trademark was used on all products until 1968. A number of secondary trademarks have also been used over the years. These trademarks include Belmont, Guardian Chevron, Lattice Braid, Palmyra and Paper-Pak. It may be possible to identify GARLOCK asbestos-containing products depending on the products in question and the degree of expertise of the person making the identification. Some GARLOCK products have been labeled with the company name. The GARLOCK name has appeared on gasketing and sheet materials since the early 1900's. For braided packing product, the GARLOCK name or the trade names identified above does not appear on the materials and it could be difficult to identify them because many of GARLOCK's packing products are similar in appearance to products

manufactured and sold by competitors. However, the GARLOCK name does appear on the product packaging for braided packing materials.

The Belmont trademark has been used with a wide variety of gaskets, gasket materials, packing and seals. The Guardian trademark has been used on association with spiral wound gaskets. The Chevron trademark has been used in association with a wide variety of V-Ring packings. The Lattice Braid trademark has been used in association with a wide variety of braided packings. Each of these marks has been used for more than 50 years and each is still in use. The Palmyra trademark was used in association with a lubricated rubber and asbestos fabric packing for about 40 years, ending in 1960. The Paper-Pak trademark has been used in association with braided packings for use in the paper industry since 1960.

INTERROGATORY NO. 52:

Has your company, or your predecessor(s) or subsidiaries, ever devised a research plan to develop or actually developed or had developed, a product which did not contain asbestos and which could be substituted for one or more of your asbestos-containing products? If so, state the date that such research plan was begun and when such asbestos-free product was first placed on the market.

ANSWER: Yes. GARLOCK has always made available non-asbestos containing sealing products as well as asbestos-containing sealing products to its customers. This Defendant has not recommended asbestos containing products for any particular purpose. Customers specified the need for asbestos-containing material for certain applications requiring a heat resistant sealing product. GARLOCK has constantly been involved in supplementing and developing products to satisfy customer needs and meet specific application requirements of the customer. The non-asbestos products which most closely conformed to the properties of the asbestos-containing products were developed after 1970.

GARLOCK has made numerous changes in products over the years. Changes were made for many reasons, including cost

reduction, improved performance or because of the development of new materials. Introduction, distribution, improvement, modification and discontinuance of styles of all kinds has been a continuing process at GARLOCK. Over the years, GARLOCK has discontinued the manufacture and sale of numerous types of asbestos-containing products. Asbestos products were discontinued when new and better products became available. New products were put on the market after comprehensive design, development and testing was performed by GARLOCK's technical staff. The success of new products is dependent on customers acceptance of the product. Customers must determine if a new product meets its application requirements. Since 1970, many products have been developed by GARLOCK and been accepted by customers because these products have proven to be functionally equal or superior to the asbestos-containing products that previously were used for particular applications. However, there are certain applications for which there is no adequate replacement or substitute for asbestos-containing products. The dates asbestos-containing products were removed from GARLOCK's product line are shown on Exhibit B. GARLOCK also attaches Exhibit N, a chart which displays the "History of Gasketing." The non-asbestos substitutes for asbestos gasketing material and the years they became available are delineated in the chart.

Examples of non-asbestos gasket materials developed by Garlock for certain applications include Bluegard, Gylon, Guardian, HTC, Kevlar and Graphite.

GARLOCK developed potential substitutes and replacements for asbestos-containing packing material in the early 1980's. The new packing products include Synthepak, Carbon Packing, Kevlar, Thermosil and Fiberglass Packing. See catalogs previously produced to Baron & Budd in the Fulton County, Georgia asbestos litigation.

INTERROGATORY NO. 53:

Did your company or its predecessor(s) or subsidiaries ever recall any products containing asbestos from the market or stream of commerce? If so, state:

- (a) All details of such recall.

- (b) The name of the product recalled, including the reason for the recall and the names and current addresses of those individuals who determined that it should take place.
- (c) The dates of recall.
- (d) The purpose for the recall.

ANSWER: No.

INTERROGATORY NO. 54:

Before 1970, did you ever manufacture or sell products which did not contain asbestos and which could be substituted for your asbestos-containing products? If so, state the date such asbestos-free products were first placed on the market.

ANSWER: Yes. See Answer to Interrogatory No. 52.

INTERROGATORY NO. 55:

Have any products you identified in your response to Interrogatory Nos. 52 and 54 not performed as intended? Please list all such products that have not performed as intended.

ANSWER: Yes. All products occasionally display performance problems, and customers, have on occasion, reported that non-asbestos products developed since 1970, do not perform as well as the asbestos products designed for similar applications. The customer has the ultimate authority in choosing the particular product for a particular application and evaluating whether particular products perform as intended. For example, Bluegard manufactured with acrylic fibers did not perform well in steam applications and the accepted temperature range was downgraded to 350 degrees. GARLOCK asserts that all the products it manufactures and sells, asbestos and non-asbestos, perform their fluid sealing function in an efficient manner. They would not be marketed and sold if they did not have

the ability to perform the function for which they were designed. The customer chooses what product is appropriate for particular applications or operations. There are certain applications for which there are no adequate substitutes or replacements for asbestos-containing materials.

INTERROGATORY NO. 56:

Did your company or its predecessor(s) or subsidiaries ever make, order or arrange for any industrial hygiene surveys regarding asbestos or asbestos-containing dust? If so, give the date of such surveys and state who, or what entity, was responsible for completion of such surveys.

ANSWER: Yes. See GARLOCK's Exhibit Binder which has been produced in its entirety to Baron & Budd. GARLOCK identifies the following studies by author and exhibit number.

<u>Author</u>	<u>Garlock Exhibit Number</u>
1. Nielsen	33 - 38
2. Mangold	18 - 31
3. McCrone	39 - 40
4. Boelter	99 - 108
5. Spencer	111 - 112

INTERROGATORY NO. 57:

As to either the threshold limit values or maximum allowable concentrations of both asbestos dust and total dust provided by the American Conference of Governmental Industrial Hygienists, state:

(a) The year in which Defendant or any predecessor(s) or subsidiaries

were first advised of such limits or concentrations.

- (b) The name of the employee or official of the company receiving such advice.
- (c) How Defendant received notice of such limits or concentrations.

- ANSWER:**
- (a) GARLOCK learned of the ACGIH Threshold Limit Value in 1947.
 - (b) George Houghton
 - (c) Hemeon Report, Industrial Hygiene Foundation—prepared for the Asbestos Textile Institute in June, 1947 (previously produced to Plaintiffs).

INTERROGATORY NO. 58:

Were the threshold limit values or maximum allowable concentrations inquired about in Interrogatory No. 57 for total dust, and not asbestos dust alone?

ANSWER: Yes.

INTERROGATORY NO. 59:

State in detail what tests, if any, Defendant ever made with regard to the quantity, quality or threshold limit values of asbestos dust or particles to which workers were exposed while using, working with or around, or installing your asbestos-containing products.

ANSWER: See Answer to Interrogatory No. 56.

INTERROGATORY NO. 60:

Please state the following with respect to each expert witness that you expect to call during trial of these cases. Please designate with specificity the expert witnesses you may call, including:

- (a) The name, address, and job classification of each such expert witness.
- (b) The subject matter on which the expert is expected to testify.
- (c) The substance of the facts and opinions to which the expert is expected to testify and a summary of the grounds for each opinion.
- (d) Whether any person identified in subparagraph (a) above has provided a report or other documentation to you, and if so, identify each such document or report.
- (e) Identify all documents that you have provided to each person identified in response to subparagraph (a) above.
- (f) Describe in detail the education and work history of, and identify any books, treatises, articles, published and unpublished reports, studies or other scholarly works authored by any individual identified in response to subparagraph (a) above. Alternatively, in lieu of said response, attach a copy of a resume or curriculum vitae and a list of publications to your answers.

ANSWER: GARLOCK's Expert Witness Disclosure is attached as Exhibit O.

INTERROGATORY NO. 61:

Please state the name, present address and present telephone number, along with the experience and qualifications, if applicable, of each and every person, known to Defendant or to Defendant's agents, having knowledge of facts relevant to this case

involving, but not limited to:

- (a) Identification of asbestos-containing products to which each and every individual Plaintiff, separate and distinct from all other Plaintiffs within the group, allegedly was exposed or facts disputing the identification of asbestos-containing products in this case.
- (b) Each and every individual Plaintiff, separate and distinct from all other Plaintiffs within the group, alleged damages, injuries and/or facts disputing each and every Plaintiff's alleged damages and/or injuries.
- (c) The negligence of any person or entity other than Defendant which Defendant contends was a cause of each and every individual Plaintiff, separate and distinct from all other Plaintiffs within the group, alleged injuries and/or damages.
- (d) Each of Defendant's defenses enumerated in Defendant's last filed Answer in each of these cases.

ANSWER: This Defendant has no record or knowledge of any such persons at this time, other than the Plaintiffs' themselves. Discovery is continuing and Defendant will supplement in accordance with the Texas Rules of Civil Procedure and court order.

INTERROGATORY NO. 62:

Please identify documents which will be used at time of trial (Exhibit List, Deposition List), which are relevant to each of Defendant's enumerated defenses in Defendant's last filed Answer.

ANSWER: GARLOCK's Exhibit List is attached as Exhibit E.

INTERROGATORY NO. 63:

When, if ever, did Defendant or any of its predecessors-in-interest first receive a copy of the article entitled "A Health Survey of Pipe Covering Operations in

Constructing Naval Vessels", published in January, 1946 in the Journal of Industrial Hygiene & Toxicology, and authored by W. Fleischer and P. Drinker, et al ("the Fleischer-Drinker Report")?

- (a) Identify the name and position of the employee or officer who received same.
- (b) Please produce all documents generated by Defendant which discusses or in any way references the "Fleischer-Drinker" study prior to 1968.
- (c) Please produce all documents upon which your responses above are based.
- (d) Please identify the name(s) and addresses(s) of any person(s) who can verify your above response.
- (e) Did Defendant ever rely on the Fleischer-Drinker Report in whole or in part as a basis that Defendant's asbestos products could be used in the workplace without risk of asbestos-related health impacts to the consumer and/or bystander.
- (f) If so, please produce every document which evidences in any way that Defendant relied on the Fleischer-Drinker Report in whole or in part for the proposition stated in Interrogatory No. 63(a) above.
- (g) If your answer to 63(e) is yes, when was the first date Defendant relied on the Fleischer-Drinker report in whole or in part for the proposition stated in 63(e) above?

ANSWER: GARLOCK has no record, knowledge or recollection of receiving a copy of the Fleischer-Drinker Report during the normal course of business at any time prior to the commencement of the asbestos litigation. GARLOCK did receive a copy of the Fleischer-Drinker report for the first time from its attorneys through the discovery process at the beginning of the asbestos litigation.

INTERROGATORY NO. 64:

When, if ever, did Defendant or any of its predecessors-in-interest first receive a copy of the article entitled "A Study of Asbestos in the Asbestos Textile Industry", published in 1938 in Public Health Bill No. 241, U.S. Public Health Service and authored by W. (c)[sic] Dreessen ("the Dreessen Report")?

- (a) Identify the name and position of the employee or officer who received same.
- (b) Please produce all documents generated by Defendant which discusses or in any way references the "Dreessen" study prior to 1968.
- (c) Please produce all documents upon which your responses above are based.
- (d) Please identify the name(s) and addresses(s) of any person(s) who can verify your above response.
- (e) Did Defendant ever rely on the Dreessen Report in whole or in part as a basis that Defendant's asbestos products could be used in the workplace without risk of asbestos-related health impacts to the consumer and/or bystander.
- (f) If so, please produce every document which evidences in any way that Defendant relied on the Dreessen Report in whole or in part for the proposition stated in Interrogatory No. 64(a) above.
- (g) If your answer to 64(e) is yes, when was the first date Defendant relied on the Dreessen report in whole or in part for the proposition stated in 64(e) above?

ANSWER: GARLOCK has no record, knowledge or recollection of receiving a copy of the Dreessen report during the normal course of business at any time prior to the commencement of the asbestos litigation. GARLOCK did receive a copy of the Dreessen report through the discovery process in the asbestos litigation.

INTERROGATORY NO. 65:

Please identify documents or things, including x-rays, MRIs, CT-scans or other materials which will be used at time of trial (Exhibit List, Deposition List), which are relevant to each of Defendant's enumerated defenses in Defendant's last filed Answer.

ANSWER: Not applicable.

GARLOCK
ASBESTOS-CONTAINING PRODUCT LIST

EXHIBIT

Heffron 5
447-0325

STYLE	PRODUCT	ASBESTOS TYPE	PERCENTAGE ASBESTOS	BINDER TYPE	CESSATION OF MANUFACTURING YEAR
7021	Compressed Sheet	Chrysotile	75-85	SBR	Still Manufacturing
7705	Compressed Sheet	Crocidolite	85-86	SBR	1983
900T	Compressed Sheet	Chrysotile	85	SBR	Still Manufacturing
901	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	Still Manufacturing
902	Compressed Sheet / Gasket	Chrysotile	76-85	SBR	Still Manufacturing
903	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	1991
8038	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	1991
850	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	Still Manufacturing
1000W	Compressed Sheet with Wire	Chrysotile	75-85	SBR	Still Manufacturing
7003	Compressed Sheet	Chrysotile	75-85	SBR	2000
7006	Compressed Sheet	Chrysotile	75-85	SBR	2000
7008	Compressed Sheet	Chrysotile	75-85	SBR	2000
7009	Compressed Sheet	Chrysotile	75-85	SBR	1988
7021T	Compressed Sheet	Chrysotile	85	SBR	Still Manufacturing
7022	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	1957
7028	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	1991
70__	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	1991
7226	Compressed Sheet	Chrysotile	75-85	Neoprene	1988
7228	Compressed Sheet	Chrysotile	75-85	Neoprene	Still Manufacturing
7405	Compressed Sheet	Chrysotile	75-85	SBR	2000
7735	Compressed Sheet	Chrysotile	75-85	SBR	1992
7738	Compressed Sheet	Chrysotile	75-85	SBR	1991
7819	Compressed Sheet	Chrysotile	75-85	SBR	1991
7844	Compressed Sheet	Chrysotile	75-85	SBR	1981
8746	Compressed Sheet	Chrysotile	75-85	SBR	2000
8748	Compressed Sheet	Chrysotile	75-85	SBR	Still Manufacturing
8053	Compressed Sheet	Chrysotile	75-85	SBR	1991
8057	Compressed Sheet	Chrysotile	75-85	SBR	2000
8058	Compressed Sheet	Chrysotile	75-85	SBR	1991
9531	Compressed Sheet	Chrysotile	75-85	SBR	2000

EXHIBIT**B**

STYLE	PRODUCT	ASBESTOS TYPE	PERCENTAGE ASBESTOS	BINDER TYPE	CESSATION OF MANUFACTURING YEAR
9532	Compressed Sheet	Chrysotile	75-85	SBR	2000
9533	Compressed Sheet	Chrysotile	75-85	SBR	2000
950	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	Still Manufacturing
961	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	Still Manufacturing
1674	Compressed Sheet	Chrysotile	75-85	SBR	2000
7098	Compressed Sheet	Chrysotile	75-85	Neoprene	1974
7772	Compressed Sheet	Chrysotile	75-85	SBR	1986
270	Compressed Sheet	Chrysotile	75-85	Nitrite	2000
300	Compressed Sheet	Chrysotile	75-85	SBR	2000
400	Compressed Sheet	Chrysotile	75-85	Nitrite	1991
200	Compressed Sheet	Chrysotile	75-85	SBR	1991
424	Compressed Sheet	Chrysotile	75-85	SBR	1991
425L	Compressed Sheet	Chrysotile	75-85	SBR	1996
450	Compressed Sheet	Chrysotile	75-85	Neoprene	1991
459W1	Compressed Sheet	Chrysotile	75-85	SBR	1991
480	Compressed Sheet	Chrysotile	75-85	SBR	1996
480L	Compressed Sheet	Chrysotile	75-85	SBR	1996
4101	Compressed Sheet	Chrysotile	75-85	SBR	1992
4102	Compressed Sheet	Chrysotile	75-85	Nitrite	1992
4121	Compressed Sheet	Chrysotile	75-85	Nitrite	1992
4122	Compressed Sheet	Chrysotile	75-85	Nitrite	1992
4124	Compressed Sheet	Chrysotile	75-85	Nitrite	1992
1202	Compressed Sheet	Chrysotile	75-85	SBR	1991
1400	Compressed Sheet	Chrysotile	75-85	SBR	1960
7085	Compressed Sheet	Chrysotile	75-85	SBR	2000
8800	Compressed Sheet	Chrysotile	75-85	?	1962
7070	Compressed Sheet	Chrysotile	75-85	Nitrite	1991
7278	Compressed Sheet	Chrysotile	75-85	?	1956
7346	Compressed Sheet	Chrysotile	75-85	Polacrylate	1991
7486	Compressed Sheet	Chrysotile	75-85	?	1991
7640	Compressed Sheet	Chrysotile	75-85	SBR	1956
7647	Compressed Sheet	Chrysotile	75-85	SBR	1956

STYLE	PRODUCT	ASBESTOS TYPE	PERCENTAGE ASBESTOS	BINDER TYPE	CESSATION OF MANUFACTURING YEAR
7860 (red)	Compressed Sheet	Chrysotile	75-85	SBR	1991
7651	Compressed Sheet	Chrysotile	75-85	SBR	1991
7679	Compressed Sheet	Chrysotile	75-85	?	1956
8500	Compressed Sheet	Chrysotile	75-85	Natural	1972
8554	Compressed Sheet	Chrysotile	75-85	Poly-neoprene	1991
8614	Compressed Sheet	Chrysotile	75-85	?	1956
8688	Compressed Sheet	Chrysotile	75-85	SBR	1951
9529	Compressed Sheet	Chrysotile	75-85	?	2000
9582	Compress Asb. Direct	Chrysotile	75-85	Neoprene	1991
8806	Compress Asb. Direct	Chrysotile	75-85	Neoprene	1980
8388	Compress Asb. Direct	Chrysotile	75-85	SBR	1991
8553	Compress Asb. Direct	Chrysotile	75-85	SBR	1959
9151	Compress Asb. Direct / Gasket	Chrysotile	75-85	SBR	1956
9164	Compress Asb. Direct / Gasket	Chrysotile	75-85	SBR	1991
9731	Unaired Style 7021				1960
9055	Compressed Sheet	Chrysotile	75-85	Neoprene	2000
9209	SW Cane Treated Sheet	Chrysotile	75-85	SBR	1962
9256	Compressed Sheet	Chrysotile	75-85	Natural	1958
8082	Compressed Sheet	Chrysotile	75-85	SBR	2000
8090	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	1956
8126	Compressed Sheet	Chrysotile	75-85	SBR	1979
8285 (red)	Compressed Sheet	Chrysotile	75-85	SBR	1956
804	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	1991
8400	Flue Duct Expansion Joint	Chrysotile	75	UNK.	1980
7904	Chevron Packing	Chrysotile	40-50	Teflon	1981
8940	Chevron Packing	Chrysotile	40-50	Teflon	1981
8157	Chevron Packing	Chrysotile	40-50	Teflon	1981
555	Spiral Wound Gasket	Chrysotile	10	Paper	1988

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STYLE	PRODUCT	ASBESTOS TYPE	PERCENTAGE ASBESTOS	BINDER / LUBRICANT	CESSATION OF MANUFACTURING YEAR
17	Alabostine Packing	Chrysotile	87	Natural Rubber	1980
87	Extra Diagonal Packing	Chrysotile	Unk.	Petrolatum Wax & Graphite	1980
111	Rubber Pump Valves	Chrysotile	25	Natural Rubber	1981
114	Wire Wound Coil Packing	Chrysotile	17	SBR, Paraffin & Graphite	1961
115	Beaver Packing Round	Chrysotile	Unk.	Petrolatum & Graphite	1957
116	Wire Wound Ring Packing	Chrysotile	20	SBR, Paraffin & Graphite	1957
117	Beaver Packing Round	Chrysotile	42	Graphite	1965
127	Compressor Packing	Chrysotile	51	SBR	1980
144	Palmyra Coil Packing	Chrysotile	Unk.	Natural Rubber & Glycerin	1980
150	High Pressure Spiral Packing	Chrysotile	Unk.	Natural Rubber, SBR, Glycerin & Graphite	1980
161	Molded Valve Ring	Chrysotile	32	Paraffin & Graphite	1980
163	Molded Valve Ring	Chrysotile	64	Petrolatum & Graphite	1980
166	Molded Valve Ring	Chrysotile	Unk.	Nitrite & Graphite	1983
176	Hot Oil Packing	Chrysotile	79	Natural Rubber & Graphite	1980
220	Compressor Coil Packing	Chrysotile	Unk.	Natural Rubber	1976
221	Compressor Spiral Packing	Chrysotile	Unk.	Natural Rubber	1976
222	Compressor Spiral Packing	Chrysotile	Unk.	Natural Rubber	1976

STYLE	PRODUCT	ASBESTOS TYPE	PERCENTAGE ASBESTOS	BINDER / LUBRICANT	CESSATION OF MANUFACTURING YEAR
230	Square Braided Packing	Crocidolite	55-69	Petrolatum & Graphite	1980
231	Square Braided Ring	Crocidolite	55-69	Petrolatum & Graphite	1980
233	Derby Coil Packing	Chrysotile	55-69	Petrolatum	1980
234	Rolopac Coil Packing	Chrysotile	57	Petrolatum & Graphite	1980
235	Derby Ring Packing	Chrysotile	55-60	Petrolatum	1980
237	Thorndyke Coil Packing	Chrysotile	47-50	Glycerin & Graphite	1980
238	Thorndyke Coil Packing	Chrysotile	47-50	Glycerin & Graphite	1980
239	Rolopac Coil Packing	Chrysotile	54	Petrolatum & Graphite	1958
243	Derby Coil Packing Round	Chrysotile	56	Petrolatum & Graphite	1968
244	Rolopac Coil Packing	Chrysotile	55	Petrolatum & Graphite	1980
245	Derby Ring Packing	Chrysotile	56	Petrolatum & Graphite	1958
248	Mill Coil Packing	Chrysotile	Unk.	Copper Wire	1959
249	Rolopac Ring Packing Wire	Chrysotile	Unk.	Petrolatum	1957
251	Mill Ring Packing	Chrysotile	Unk.	Copper Wire	1958
252	Furnace Door Packing	Chrysotile	85	Copper Wire	1980
256	Expansion Joint Packing	Chrysotile	75	Petrolatum & Graphite	1980
257	Cold Oil Packing	Chrysotile	Unk.	Glycerin	1957
258	Blue Asbestos Packing	Chrysotile	75	Vegetable Lubricant & Graphite	1962
266	Rolopac Packing	Chrysotile	60-72	Petrolatum & Graphite	1980
356	"O" Center Forged Packing Coil	Chrysotile	Unk.	SBR & Glycerin	1965
357	"O" Center Forged Packing	Chrysotile	Unk.	SBR, Graphite & Glycerin	1965
358	"O" Center Forged Packing	Chrysotile	Unk.	SBR & Glycerin	1965

STYLE	PRODUCT	ASBESTOS TYPE	PERCENTAGE ASBESTOS	BINDER / LUBRICANT	CESSATION OF MANUFACTURING YEAR
377	Metal Marine Packing	Chrysotile	Unk.	SBR & Graphite	1980
530	Chevron Packing	Chrysotile	45-50	SBR & Mineral Oil	1974
531	Chevron Packing	Chrysotile	45-50	Neoprene	1974
605	Woven Asbestos Sheet Packing	Chrysotile	Unk.	Natural Rubber	1981
610	Asbestos Gasketing Tubular	Chrysotile	Unk.	Natural Rubber	1980
612	Asbestos Tape	Chrysotile	Unk.	Natural Rubber & Graphite	1981
625	Autoline Sheet Packing	Chrysotile	Unk.	Natural Rubber & Graphite (Wire?)	1981
644	Pacific Semi Metallic Coil Packing	Chrysotile	85	Petrolatum & Graphite	1980
730	Lattice Braided Packing	Chrysotile	Unk.	Vegetable Lubricant & Graphite	1980
731	Lattice Braided Packing	Chrysotile	Unk.	Vegetable Lubricant & Graphite	1980
732	Lattice Braided Packing	Chrysotile	Unk.	Vegetable Oil & Graphite	1980
733	Lattice Braided Packing	Chrysotile	Unk.	Petrolatum & Graphite	1980
734	Lattice Braided Packing	Chrysotile	Unk.	Glycerin	1980
736	Lattice Braid Blue Asbestos Packing	Crocidolite	Unk.	Petrolatum & Graphite	1985
813	Molded Cups Power Rules Gears	Chrysotile	45-50	SBR	1980
813 - a	Molded Cups—Power Reverse Gears	Chrysotile	45-50	Neoprene	1980
900	Compressed Asbestos Sheet Packing	Chrysotile	85	SBR	1980
908	Dry Plastic Packing	Chrysotile	Unk.	Neoprene & SBR	1980
909	Dry Plastic Packing	Chrysotile	Unk.	Neoprene & SBR	1980

STYLE	PRODUCT	ASBESTOS TYPE	PERCENTAGE ASBESTOS	BINDER / LUBRICANT	CESSATION OF MANUFACTURING YEAR
910	Dry Plastic Packing	Chrysotile	Unk.	Neoprene & SBR	1980
917	Pleated Lead Foil	Chrysotile	8	Vegetable Oil, Graphite & Lead Foil	1980
918	Lead Fill Packing Asbestos Cord	Chrysotile	28	Vegetable Oil & Graphite Lead Foil	1980
926	Plastallic Packing	Chrysotile	28	Petrolatum	1980
927	Plastallic Packing	Chrysotile	Unk.	Vegetable Oil	1980
928	Plastallic Packing	Chrysotile	Unk.	Vegetable Oil	1980
930	Plastallic Packing	Chrysotile	Unk.	Vegetable Oil	1980
931	Plastallic Packing	Chrysotile	Unk.	SBR	1961
1200	Power Reverse Gear Cyl	Chrysotile	Unk.	Molded Rubber & Graphite	1964
1700	Locomotive Cob Look Packing	Chrysotile	Unk.	Graphite	1980
2200	Locomotive Air Pump Packing	Chrysotile	Unk.	Natural Rubber	1979
5008	Gas Generator Door Packing	Chrysotile	42	Graphite	1980
5246	Furnace Door Packing	Chrysotile	Unk.	Jacket of Braided Copper	1980
5336	Braided Lead Foil Packing	Chrysotile	14	Graphite	1972
5861	"Teflon" Treated Asbestos Packing	Chrysotile	64	Teflon	1980
7051	Asbestos Gasketing Wire Insured	Chrysotile	Unk.	Natural Rubber & Graphite	1991
7085	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	2000
8035	Compressed Sheet / Gasket	Chrysotile	75-85	SBR	1974
7130	Chlorine Valve Ring Packing	Chrysotile	Unk.	SBR, Beeswax Graphite	1981
7228	Neoprene Compressed Asbestos Sheet Packing	Chrysotile	8	Neoprene	Still Manufacturing
7815	Chevron Packing	Chrysotile	40-50	Natural Rubber	1991
7954	Asbestos Tinning Machine Brushes	Chrysotile	Unk.	None	1975

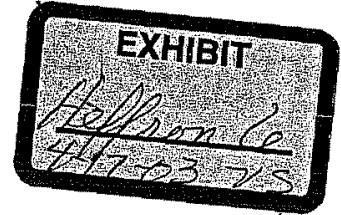
STYLE	PRODUCT	ASBESTOS TYPE	PERCENTAGE ASBESTOS	BINDER / LUBRICANT	CESSATION OF MANUFACTURING YEAR
8240	Neoprene Asbestos Gasketing	Chrysotile	Unk.	Neoprene	1980
8380	Neoprene Asbestos Tinning Machine	Chrysotile	Unk.	None	1970
8525	Neoprene Asbestos Tinning Machine Brushes	Chrysotile	Unk.	None	1980
5298	Asbestos Packing	Crocidolite	60	Teflon Lube	1980
5299	Asbestos Packing	Crocidolite	50	Teflon Lube	1980
5880	Asbestos Packing	Crocidolite	60	Teflon	1980
5884	Asbestos Packing	Crocidolite	50	Teflon Lube	1980

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INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 Fifth Avenue

Pittsburgh 13, Pa.



REPORT OF
PRELIMINARY DUST INVESTIGATION
FOR

ASBESTOS TEXTILE INSTITUTE

JUNE, 1947

By

W.C.L. Henson
Head Engineer

Industrial Hygiene Foundation of America, Inc.

By John F. McMahon
Managing Director

June 18, 1947

REPORT
of
PRELIMINARY DUST SURVEY
for
ASBESTOS TEXTILE INSTITUTE
June, 1947

OBJECT OF INVESTIGATION

This project was a preliminary investigation of the asbestosis problem in textile plants of members of the Asbestos Textile Institute, with the immediate object of defining the specific nature and the magnitude of the problem in all its phases. From such a definition, the character of a long-term project could be outlined. An original objective of most immediate importance was to facilitate the exchange of information between member companies on successful methods of dust control and otherwise to promote a general improvement in that field.

SUMMARY

The facts upon which this report is based were obtained on visits, during the past three months, to all plants of Institute members (except one, who wished the visit postponed to a later date). Complete cooperation was extended at all plants. Dr. C. Richard Walmer, Medical Director of Industrial Hygiene Foundation, participated in visits to three plants and in development of the medical concepts of this report.

The problem is seen to be composed of three aspects which are discussed in three sections of the report and summarized herewith, as ENGINEERING, MEDICAL, and PHYSICAL TESTING.

Engineering. -- Mechanical methods were seen in use in one or more plants which effected practical dust control in all operations, bringing dust concentrations down to five million or lower with one or two exceptions. It is proposed to prepare formal detailed descriptions of these methods for general distribution to members of Asbestos Textile Institute.

Medical Supervision of Workers. -- Only five plants have had any medical x-ray surveys of employees. In the others, therefore, there is a serious lack of information as to the incidence of asbestosis. The lack is more serious, in a sense, because in most of these plants no compensable cases of asbestosis have occurred to draw attention of top management to the problem. While the medical survey conducted by one plant recently shows only about three per cent of the employees with asbestosis, two other plants appear to have about 20 per cent of their employees affected.

Medical supervision of workers in this industry is of utmost importance for the protection of both employee and employer, not to mention other considerations. Therefore, it is strongly recommended that each plant institute a program of medical and x-ray examinations of all exposed workers as early as practical.

Physical Testing (Dust Counts, etc.) -- The "maximum permissible dustiness" for asbestos is commonly taken to be five million particles per cubic foot. This represents good attainment in the dust control program. It is emphasized, however, that dust elimination to this extent does not positively insure that no asbestosis will develop in some workers after a long working life (greater than 20-25 years). Scientific evidence is obscure on this point. It is recommended, therefore, that studies be initiated aimed to develop another

Preliminary Dust Survey for Asbestos Textile Institute,
June, 1947

3.

yardstick, because it is suggested that when control below five million is attained, present dust count methods may not properly measure the remaining hazard.

A detailed summary of recommendations for a long-term investigation is given at the end of this report.

I - ENGINEERING

PRESENT STATUS OF DUST CONTROL

Practically all plants visited have had one or more dust count surveys made of their operations and these data were available for the present study. In addition, a few samples were taken by the investigator in most plants.

These records were studied and a range of concentrations judged to be most representative selected for the summary given in Table I. Where relatively extreme values appear it is an indication of too few data to permit a closer estimate.

Figures in the last column are selected to indicate the magnitude of readily attainable dust concentrations with dust control measures now in common use; or judged to be most typical of an operation where no special dust control measures are employed, e.g., ring spinning.

Discussion of Concentrations

The available dust count data for operations in the preparation room are highly variable and reflect the poorer accuracy in sampling inherent in operations that are intermittent and miscellaneous in character. These figures are, therefore, considered much less reliable than those for other departments.

The figures for carding room dustiness indicate that with reasonably good enclosure and exhaust of the machines, concentrations well below three million are obtainable. Four of the plants visited exceed the five million limit materially.

All the data for mule spinners exposure indicate a wide variation in dustiness, ranging from two to eight million, but the volume of data are not

TABLE 1
PRESENT STATUS OF DUST CONTROL IN DIFFERENT PLANTS:
DESCRIBED IN TERMS OF AVERAGE DUST COUNTS

	A	B	C	D	E	F	G	H	I	J	Most Typical with Control
Preparation	-	1-3	5-7	3-9	-	1-8	2-7	-	20	7-11	Below 7
Carding	2-3	1-2	10-25	4-12	1-3	2-4	2-3	2-3	30-50	4-17	2-3
Mule Spinning	-	1-3	6	-	3-7	2	-	-	-	8	-
Ring Spinning	2-4	1-5	-	1-4	3-5	1-2	2-8	8	13-18	2-6	3-5
Twisting	2-6	1-5	5-7	2	5-8	2-4	2-10	-	13-18	4-9	4-7
Weaving	1-2	1-5	11-15	2-5	-	1-5	2-10	4-7	-	2-4	1-3
Spooling, Winding	2-4	-	-	2	2-7	-	2	5-7	3	5	-

great enough to yield a good average. Concentrations for ring spinning vary from one to five million although there is no strong indication in the available data of marked differences between this operation and mule spinning.

There is a similar wide variation in data for twisting (two to eight million), but there is some justification in these data for the opinion widely held that this is one of the dustier operations in the finishing end of the mill. It is believed that occasional high values in both ring spinning and twisting reflect in some cases the sampling procedure. If the large impinger is maintained in one location and there is a strand breakage in that immediate vicinity, the resulting whipping dust will be reflected in that single sample and would not, therefore, be representative of the worker's exposure.

Dustiness in weaving operations reflects the use of water for dust control in some plants and exhaust systems in others. The lowest concentrations of one to two million obtained in Plant A reflect highly efficient wet weaving methods there employed. Concentrations less than four to five million are readily attainable by local exhaust methods as indicated by the results in several plants.

The data for spooling and winding operations are included for completeness, but reflect miscellaneous operations and conditions. The dust reported is often due to the effect of other machinery in the same room. These considerations therefore affect the reliability of these data, as in the case of operations in the preparation room.

EXISTING DUST CONTROL PRACTICES

The following discussion of dust control practices in the industry is merely an outline. To be useful to those who are responsible for the engineering in each plant, they will need to be set forth in the form of detailed specifications describing details of construction, specifications for sheet metal contractors, for purchase of fans of proper capacity and for design and operation of dust collectors.

Preparation

Highly variable practices prevail in different plants and the miscellaneous character of operations within a single plant makes it impractical to formulate many general statements. However, it may be said that such control as is realized results from the use of modern equipment that is well enclosed and which usually incorporates pneumatic conveyors with ceiling condensers. The large movement of air involved in pneumatic transport serves the useful additional purpose of preventing the escape of dust from the primary equipment. Discharge of stock from ceiling condensers into bins, stock boxes, or feed hoppers is a dust usually not under control. The blending operation is another source which is often not satisfactorily controlled. With the exception of these two common operations, most of the dust control procedures required will be more or less specific for each plant.

Carding

As has been noted, reduction of dustiness in carding to concentrations of three million or less is easily attained by good enclosure of the machine and carefully designed exhaust. Moreover, experience of several

companies proves that it does not interfere seriously with manufacturing operations nor with quality of roving produced.

Our investigations indicate the superior advantages of having side-walls of the enclosure of wood to facilitate small clearance by rubbing contact at the edge of the main cylinder, thus avoiding excessive air infiltration at that point. Wood covers have the advantage of resistance to crushing, which was evident in installations with sheet metal covers.

Connection of the enclosure to the exhaust system by means of chambers of ample dimensions, i.e., large cross-sectional area is of major importance to avoid localized high air velocities close to the webbing in the main cylinder. This detail was not always observed.

In view of similar degrees of success, judged by dust counts, between various installations, the best criterion of superior design as to details of exhaust from the machine was in the relative economy respecting volume of air exhausted per machine. Our observations indicated rather extreme variations as indicated in the following table of exhaust rates per carding set in five representative plants:

<u>Plant</u>	<u>Air Exhausted Per Set</u>
A	1500 cfm
B	2200 cfm
E	3800 cfm
G	5400 cfm
H	2000 cfm

It is apparent from this investigation that 2000-2500 cfm per set of breaker and finisher cards is ample exhaust capacity if the system is properly designed.

All five of the systems described in the table serve their purpose satisfactorily from the viewpoint of operation, but it does not mean that they would be equally satisfactory to others. Thus the plant with high exhaust capacity (G) has a unique interplant tunnel connection, so that excess heat from another plant supplies replacement air without added cost, for heat, or winter discomfort.

Plant H controls dust by completely housing each pair of cards in a spacious room, exhausted at a rate of 2000 cfm. Sidewalls are easily removed for repairs. Most plants would not prefer this arrangement.

As far as the dust count data can show, the card room of Plant B with 2200 cfm is equal if not superior to that of Plant E with 3800 cfm, a recently installed system.

The fundamental features of best card dust control systems observed are as follows:

1. Wood enclosure with hingeing arrangement.
2. Liberal clearance between worker rolls and curve of cover permitting air passage at low velocity.
3. Large chamber connection on cover, to duct.
4. Duct branch not over 5", preferably 4".
5. No blast gate dampers in branch line.
6. Exhaust influence over comb, either by extension of main cover or by separate hoods.
7. Exhaust space under machine, not over 4" duct.
8. Enclosure and exhaust of feed hopper, not over 4" duct.

Two installations include an exhaust branch to prevent the escape of dust originating in the space between the ring doffers and the main cylinder.

Spinning

One plant has installed ventilation for their ring spinning frames which management believes has reduced dust in this operation. It consists in a series of exhaust openings under the frame, near the floor, running the length of each frame. Time did not permit demonstrating to our own satisfaction whether a measurable improvement had been effected or not. This should be done by a series of dust measurements with exhaust on and off. The volume of air exhaust is insufficient to effect a true local exhaust action, and if it is effective it must, therefore, be an effect of simple dilution.

Twisting

Interest in control of dust from twistors is widespread in the industry and Plants A and B have installed an exhaust system like the one described for the spinning frames in Plant A. Here again the operators believe a marked improvement has resulted. Dust count data is needed that will measure the degree of improvement.

Winders

Cop winders have been exhausted in Plants A and B with reports of beneficial reduction in dustiness. We do not have quantitative data on this point. The exhaust arrangement for Foster winders was developed many years ago and is well known. The tendency to elimination of this machine makes the problem one of little practical interest now.

In most plants, dust from other equipment, such as spinning and twisting which are commonly in the same room, is of greater importance than that from winding operations.

Weaving

One plant has a superior method of suppressing dust in weaving by wet methods and dust count records indicate a complete suppression of dust. It involves a water spray head mounted above the warp at the rear of the harness with a mechanical screw arrangement for constant movement of the spray head transversely to the warp. They believe it to be more effective than the system common in several plants wherein the warp is passed over wetted rolls.

It is apparently not practical to recommend 100 per cent wet weaving throughout the industry. Moreover, we are satisfied that it is practical to control dust in this operation by local exhaust, where dry weaving is considered imperative for special properties of the cloth. One of the best exhaust arrangements includes an exhaust opening directly under the warp at the rear of the harness frame with a slot exhaust opening carried by the lay beam, the latter connected to the stationary part of the exhaust system, either by flexible hose arrangement or by an all metal swivel joint.

Duct Work

The actual arrangement of duct work and exhaust fan present no unusual problems where good practice in sheet metal fabrication is followed. Two points are of sufficient importance to require emphasis. Special care should be exercised in the fabrication to avoid sharp projections on the inside that create points of lodgement for fibers. Secondly, it must be designed to provide adequate transporting velocities. Velocities below 2000 fpm, in the experience of the industry, may permit settlement of material and gradual clogging. Therefore, allowing a margin of safety, the design should provide for velocities of 3000 fpm.

The problem of distribution of planned air flows to the different branches of the system is of importance in the design of all dust exhaust systems. The use of dampers in branches to adjust air flows is avoided in the best systems. Their function in effecting balance between branches is best attained in the original design. Design procedures to effect this objective are available but will not be elaborated at this point.

Dust Collectors

Five plants in the survey employ the well-known burlap dust house for filtering air from various exhaust systems. The favored filtering area is determined on the basis of one square foot for each air flow of 2 cfm. Most arrangements are such as to permit cleaning by whipping with a bamboo pole or a buggy whip by men who remain on the clean air side of the filter cloth. In one system, the men are required to enter the dust side for cleaning purposes, and final cleaning is carried out once weekly with the use of a central station vacuum cleaner. Practices in different plants are variable as to frequency with which the burlap filter is freed of its dust load by whipping.

While these dust collectors work well, we are not prepared to recommend them to the exclusion of some commercial types of filters having automatic shakers. Several engineering elements enter into the design of a dust collector system, involving principally a proper estimate of pressure drop in all elements of the system and especially that through the filter proper (back pressure). If the pressure drop estimate in the filter is incorrect, the system will not operate properly. If the basic resistance of the filter, i.e., that immediately after shaking the cloth, is subject to a constant increase over a period

of weeks, the system operation will suffer. Apparently, some of the older commercial flat bag type of collectors did exhibit that difficulty. Modifications in the design of such units have, however, been incorporated in more recent models and those difficulties may have been eliminated.

Two plants employ commercial collectors of the flat bag or envelope type. Another plant uses a cloth tube commercial collector and also one whose filtering element is of paper, which is replaced at intervals of several weeks. A study of operating details of these commercial collectors is indicated in this study, including considerations of original cost and operating cost.

Recirculation

Several plants return air from the dust collectors to the workroom to conserve heat in the cold weather. We are not prepared at this point either to condone or to condemn this practice except in cases where there is obviously leakage of dust through the filter and consequent recontamination of the air inside the plant. The practice is generally frowned upon where dusts that are hazardous to health are being handled. We believe there are certain circumstances where the practice might be permissible provided adequate safeguards are incorporated in operating procedures. The large volumes of air involved in dust control represent a tremendous problem as to heat loss and boiler capacity which cannot be passed over lightly.

II - MEDICAL

PRESENT MEDICAL FACILITIES AND PRACTICES

Every plant has connections with a local specialist in radiology who is employed for diagnostic work on an irregular basis. Three have their own x-ray machines used by the local specialist, but only one has a well-established schedule of periodic medical examinations.

Half of the plants have no positive information as to the incidence of asbestosis among their workers. The situation in these respects is indicated in Table II.

TABLE II.

PRESENT PRACTICES AND FACILITIES AS TO MEDICAL X-RAY EXAMINATIONS IN VARIOUS PLANTS

Plant	Recent X-ray ¹ Survey Made	Periodic X-ray Examinations Made	Have Own X-ray Machine
A	Yes	No	Yes
B	No	No	No
C	Yes	No	No
D	Yes	No	No
E	No	No	No
F	No	No	No
G	No	No	No
H	Yes	Yes	Yes
I	No	No	No
J	Yes	No	Yes

¹Within last few years, and results available to plant or its physician

ESTIMATED INCIDENCE OF ASBESTOSIS

The incidence of asbestosis among employees of those plants where employees were examined in recent years, shows a marked variation as indicated by the following:

Plant A has recorded cases diagnosed as asbestosis to the extent of about 20 per cent, and in the past nine years has compensated, on the average, two cases per annum. Total textile employment about 400.

Plant C on the basis of a recent systematic survey, estimates asbestosis incidence to be about three to four per cent.

Plant D has results from an incomplete survey in which four cases were found among those volunteering for examination with a total textile employment of around 150. They have compensated one case in about 10 years. Three more are pending.

Plant H with a textile employment of 300 finds five or six cases annually that the physician believes show early changes due to asbestos.

Plant J has counted potential cases of asbestosis amounting in number to about 20 per cent, comparable with Plant A.

The other plants have conducted no systematic x-ray surveys of their own and have no information as to incidence among their employees. None of these has had cases requiring compensation.

While we have no complete data on history of employment and labor turnover in the several plants, it is apparent that there is, at least superficially, a marked inconsistency in this picture. Also, it is clear that

a serious lack of information prevails generally on this aspect of the problem.

The story in North Carolina is worth special mention. This state instituted 10 years ago, a system of periodic medical examinations for all workers in dusty industries and, hence, all asbestos textile workers have been x-rayed and clinically examined for a longer period, on a periodic basis, than any other asbestos textile plant in this group. If the state examination finds that workers should discontinue their employment because of rapidly developing asbestosis they have the authority to effect this change. They also see to it that workers who should receive workman's compensation due to disabling asbestosis are processed. So far as we have been able to ascertain neither event has occurred to any employee of the two North Carolina asbestos plants in this group.

These observations suggest that there may well be a marked divergence in medical procedures, interpretations, and attitudes respecting the diagnosis of asbestosis.

There is a very urgent need for a concerted cooperative medical effort to develop improved diagnostic procedures and uniformity of interpretation.

IMPORTANCE OF PERIODIC MEDICAL EXAMINATIONS

One of the most important elements of a program of protecting health of workers in dusty occupations is the periodic medical examination. The lack of scientific information regarding all aspects of asbestosis is serious. This cannot be over-emphasized. The obvious procedure to help overcome this deficiency is to employ every tool now available that will throw more light on the facts. The importance of the periodic medical x-ray examination can perhaps best be emphasized by stating that dust count investigations cannot, in the present state of knowledge, give us assurance as to the extent of our success in eliminating the hazard.

Regular examinations serve to protect the worker by giving early indication of health impairment due to dust, and permit intelligent action to be taken to avoid further serious health deterioration. This is particularly true if the detection is early enough and there is no progression to late stage asbestosis.

More important, for the long term, the accumulation of factual information regarding the health status of exposed workers, statistically interpreted in relation to dustiness studies and to mechanical developments in dust control equipment, will eventually indicate when the battle of asbestosis control is being won. This aspect of the problem is elaborated in the following section.

The inventory provided by such a medical program is just as important to intelligent action in this problem, as material inventories are to the proper conduct of business.

The question as to whether a plant should purchase its own x-ray equipment is an economic one involving consideration of cost of local outside medical and x-ray facilities and of loss of employee time in travel, etc.

Diagnostic Panel

To further the objective of improvement and uniformity in diagnostic procedures, a medical section of the program is proposed in the form of a MEDICAL ASBESTOSIS PANEL to be composed of outstanding medical men in this field, and of the physician designated by each company as the one responsible for its medical and diagnostic work. The composition, as to outside medical personnel, of this panel would be determined by its objectives: the assembling of the best possible medical brains and the mutual education in diagnostic procedures that comes from exchanges of scientific experiences and information.

The panel would meet, perhaps semi-annually, and consider the significance of x-ray films and other clinical data brought to the group by each participating physician. Dr. C. Richard Walmer's services would be available for the organization and other details.

STATISTICAL STUDIES OF MEDICAL RECORDS

There are two very important questions concerning the physiological nature of asbestos that have not yet been answered by any published investigation:

1. What is the expectation of asbestosis in workers exposed more than 15-20 years to low concentrations of asbestos dust? Among the 500-odd workers who composed the subjects in the U.S. Public Health Service study, there were abnormally few who had been exposed for more than 15 years and practically none over 20 years. These facts seriously affected the conclusions that could be drawn.

2. Is there a progression to advanced asbestosis after exposure of an individual has been discontinued or has been reduced to very low levels, due to action of dust deposits from earlier exposure? This question is of very great importance to intelligent medical supervision of workers in these plants.

It is virtually certain that statistical investigations of existing records would throw valuable light on these questions.

None of the plants visited during this inquiry have sufficiently extensive and systematic records to provide satisfactory answers to these questions, but the medical department of Metropolitan Life Insurance Company, under Dr. A. J. Lanza, have x-rays of a number of men obtained in the early 1930's which could provide the nucleus of some useful information, depending on how many of the original group are available for re-x-ray.

The most outstanding store of information is in the records of the Division of Industrial Hygiene of the North Carolina Department of Health who, in accordance with state law have x-rayed workers in this, and other dusty industries, almost annually for the past 10 years. A study of these records would undoubtedly cast much light on the question of progression. Through officials of the company members in North Carolina, we already have assurances of their full cooperation in any investigations, and although we have not discussed the matter with them directly as to details, there is every reason to suppose that the desired information would be made available to us for the purposes described.

In addition, a general x-ray and medical survey of workers in one or two plants with a long history of high order of dust control would be of great value for this purpose.

III - PHYSICAL

SIGNIFICANCE OF DUST COUNTS

Correlation between development of asbestosis and some pertinent measure of dustiness, e.g., dust counts, can be developed by periodically observing and recording data on both aspects -- periodic medical examinations of exposed workers together with the periodically measured dust exposure of each. However, to be useful for preventive purposes, these procedures have to be extended into the past wherever data is available. This was the procedure employed in the studies of the U.S. Public Health Service in North Carolina plants (Public Health Bulletin No. 241, 1938).

The main value of dust counts in asbestos plants is to obtain data on dust concentrations that can be compared with that study, and thus lead to conclusions as to probability of development of asbestosis in the particular plant being studied.

In that study, dustiness of different occupations was measured in the usual manner, and also the incidence of asbestosis by medical and X-ray examinations of the men employed. A statistical comparison of the two sets of data led the investigators to the conclusion that new cases of asbestosis would probably not occur if dust control measures were undertaken to ensure that no dust exposures exceeded five million particles per cubic foot (measured in the same manner).

APPRAISAL OF REDUCED DUST HAZARD

Having reached a degree of dust control represented by the dust count limit of five million, it is then proper to ask: "What degree of assurance is afforded by existing knowledge that asbestosis will not, in fact, develop in the future if dustiness is kept below that level?"

If there are factors, at present unknown, that will indicate a need for still better dust control, what will that limit be?

The information available does not permit complete assurance that five million is thoroughly safe nor has information been developed permitting a better estimate of safe dustiness.

It is nevertheless of the greatest importance either that such assurances be sought or a new yardstick of accomplishment be found for accurately measuring any remaining hazard in the dust zone below five million for the elimination of future asbestosis depends upon the degree of control effected now.

Measurement of Dustiness

One basis of uncertainty as to applying present conventional dust counting techniques to the measurement of asbestos dust hazards below the five million level is summarized in the question -- are the fibers of asbestos the causative agent or the non-fibrous "cubical" particles that look like those of other industrial dusts? The non-fibrous particles in most textile operations comprise 80-95 per cent of the total dust seen in dust counting.

While it is proven that asbestos dust is the cause of asbestosis, there is no certain information as to what shape or size of dust is the causative factor. The correlation studies of the U.S. Public Health Service

employed conventional dust count techniques which, in effect, related incidence of asbestosis to the number of non-fibrous particles of a size ranging from one to five or 10 microns.

For illustration, suppose the causative dust element is something different, e.g., fibers that are less than 50-60 microns long, and less than 1-2 microns in diameter. The conventional dust count method would be satisfactory only if there were a fairly constant ratio between the two types of dust; it would, in that case, provide an adequate index.

Preliminary Studies on Qualities of Asbestos Dust

With a view to eventual development of supplementary methods for measuring asbestos dust concentrations on a weight basis, we have conducted some preliminary studies directed to the colorimetric determination of total silica in the minute quantities of asbestos dust obtained in a typical atmospheric sample. This requires development since it could provide a valuable tool for further investigation.

Sub-microscopic particles and fibers.

Another aspect of the dust examination problem on which preliminary work has been done involved studies with the electron microscope. We posed the two following questions:

1. Ordinary dust particles, one to three microns in diameter, comprise most of the particles in the dust count. They look like ordinary industrial dust and we refer to them as "cubical" as distinguished from "fibrous" particles. The question is: are these particles in fact non-fibrous or are they bundles of fibers?

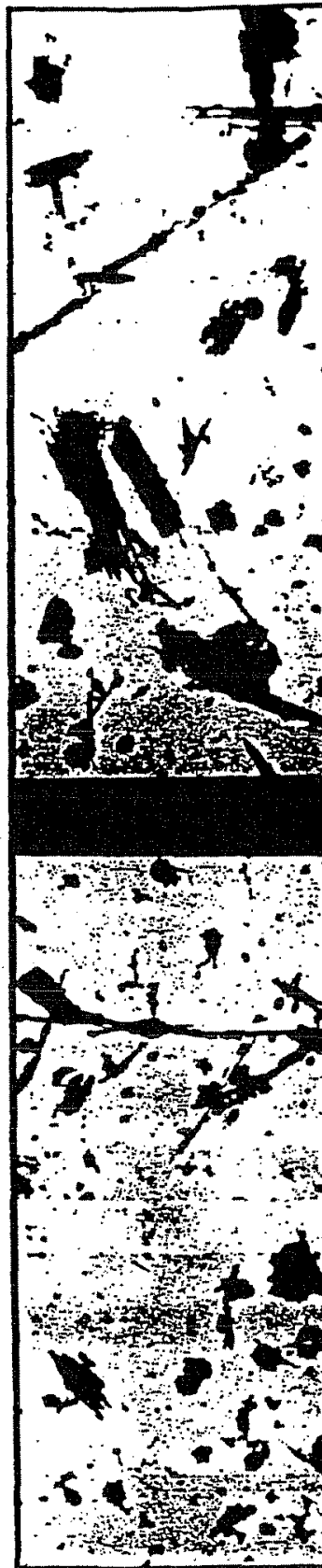
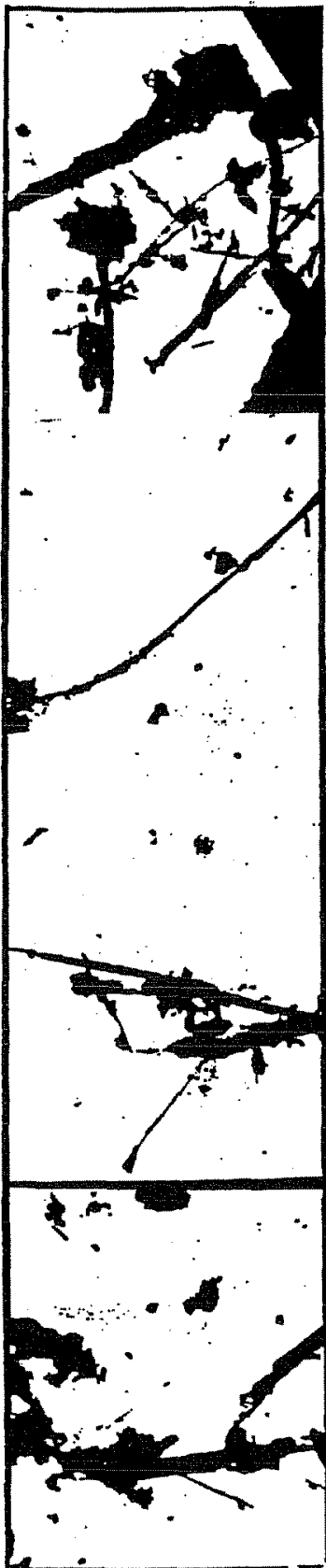
2. Secondly -- since the limit of resolution of the microscope lenses used in dust counting does not permit seeing particles very much smaller than one micron, one may ask if there are many fibers of great length, but of such small width that they are invisible?

Samples of atmospheric dust were obtained for examination by the electron microscope, by mounting the small specimen slide used with this instrument, in the dust collecting zone of the electric precipitator. In order to eliminate very large fibers, the air being sampled was caused to pass first through a glass spiral coated with adhesive on its interior. This subjected the dust particles to centrifugal force and the largest ones would be precipitated out, much as they might be in the nasal passages of man.

Studies with other industrial dusts employing this spiral indicate that very rarely do cubical particles larger than three to five microns succeed in passing through the several turns of the spiral.

In samples obtained with this apparatus in a card room having a good dust control, we obtained pictures, some of which are reproduced in the attached Figure. They demonstrate first, that the cubical particles seen by a low power light-microscope are in fact bundles of fiber resembling a life-size handful of partially opened fibers.

The picture further demonstrated that there are many fibers of considerable length, some fully 50 microns, whose other dimension is only a fraction of a micron; the fiber is therefore invisible in the dust counting microscope.



ELECTRON PHOTOMICROGRAPHS OF AIR-BORNE ASBESTOS DUST - MAGNIFICATION 5500 X

THIS CIRCLE 1 MICRON DIAMETER -

They also showed some fibers a few microns in length whose diameter is only 0.01-0.02 microns, although the commonest particles are bundles of fibers about 0.1 micron in width.

In addition to the light these observations throw on the sub-microscope character of asbestos dust, they are cited to indicate the other qualities that might be pertinent to evaluation of dust exposure, to supplement the dust count technique now in use.

INHERENT DUSTINESS OF STOCK

In investigations of the type being presently considered, a primary aim must be to develop improvements in dust control with the minimum of waste motion and expensive experimentation on a plant scale. At the stage of development of the industry, causes of dust are very often not obvious. An examination of dust count records made available to us, combined with the few tests we performed ourselves, provide numerous instances of variation, the cause of which is not apparent.

We undertook recently to measure the amount of dust in the roving of different manufacturers by suspending a measured quantity of roving in alcohol, then making a dust count in the same manner as with air samples. The result would be expressed in millions of particles per yard of roving or per gram, etc., and would be of great advantage in relating differences in dustiness to the causative factor. Such a measurement technique would be essential in appraising the actual value of oil.

We do not have sufficient data on this effort on which to draw conclusions. There are difficulties to be overcome, and the solution depends on more laboratory experimentation.

Another test method which would be of value is a standardized mechanical abuse of roving in a small vessel while sucking a stream of air with resulting dust as in the sampling for ordinary dust counts. A test of this kind, in conjunction with the dustiness index would be of value in evaluating the oiling practice, or it might take the place entirely of the procedure previously outlined.

OUTLINE OF RECOMMENDED PROCEDURES
FOR ASBESTOSIS INVESTIGATIONS

I. ENGINEERING

A. Dissemination of Existing Information

Provide factual information to Institute members with least possible delay; prepare bulletins with design sketches on some or all of the several subjects listed below, to be distributed singly as ready. Additional field observations required in many cases.

1. Carding dust control: for various makes of machines
2. Dust in preparation, miscellaneous operations
3. Wet weaving equipment
4. Exhaust for Dry weaving
5. Exhaust for winders, etc.
6. Design of duct work
7. Design of dust house

B. Development of New Techniques for Dust Control

In this category, the problems for which there are no present answers: like twisting, spinning, appraisal of operation, efficiency and cost of commercial dust collectors, etc.

II. MEDICAL

A. Institution of Periodic Medical Examinations

This is urgently recommended to all companies. Medical advice as to organizational procedures will be given by the Foundation upon request.

B. Organization of a Diagnostic Panel for Asbestosis

Arranged by the Foundation's Medical Director and organized to meet in Pittsburgh at suitable intervals for scientific review of diagnostic problems, reading of x-ray films, etc. Panel to consist of individual company physician or medical consultants together with other medical authorities to be determined.

C. Statistical Study of Existing Medical Records

Designed to find answers to important questions concerning medical and physical nature of asbestosis; especially concerned with records of State of North Carolina, Metropolitan Life Insurance Company, etc.

III. PHYSICAL TESTING -- (Further Dust Studies)

Studies of physical and chemical characteristics of asbestos dust designed, in conjunction with medical studies, to provide more significant information concerning the nature of the dust exposure; to develop supplementary techniques for measuring remaining asbestosis hazard after reduction of dust to meet the present standard; to insure that effective control of dust has been attained.

This is a step by step program aimed at the elimination of asbestosis cases from the plants of Asbestos Textile Institute members.

INDUSTRIAL HYGIENE FOUNDATION OF AMERICA, INC.

4400 Fifth Avenue

Pittsburgh 13, Pa.

July 11, 1947

Memorandum on Plant of
The Garlock Packing Company

Supplementing The

General Report

"Preliminary Dust Investigation for Asbestos Textile Institute"

Of June, 1947

Dustiness

This plant is designated as G in the general report and an appraisal of its dustiness is summarized in that column of Table 1, page 5.

The difference between these values and those of other good plants are, on the whole, not significant and we rate this plant as average "good." However, this does not mean that dust control is entirely satisfactory in all respects as indicated in the general report.

There is an insufficient number of dust counts in the company files to constitute an adequate record of dustiness. Normal variations require a number of counts at each operation to provide a useful average.

Our own single dust counts taken at the time of the visit are given below.

Number	Elapsed Time (Hrs.)	Operations	Dust Counts
1	5	At operator end of 4 carding machines (Nos. 1, 2, 7 and 8)	1.5
2	5	General air in aisles of twisting machines	3.0
3	5	General air, along row of looms; most windows open along the working aisles	3.1
4	5	General air in aisles of spinning frames	1.7

Dust Control Practices

Carding dust control is discussed on pages 7 and 9 of the general report. Reference is made to the exhaust system in this plant which accomplishes as good dust control as almost all the other "good" plants but at exhaust rates that would not be practical for other northern plants.

The dust collectors in use at this plant are of considerable interest because they include two types not in use in any other plant (Air Mat and Parsons) because commonly thought to be impractical. Test data on these unit would therefore be valuable.

Engineering studies planned for the long term investigation of particular interest to this plant and outlined in the general report are: dust control in preparation, twisting and weaving, and efficiency of dust collectors.

Medical

In the medical section of the general report reference is made to the several companies who have no information as to the incidence of potential asbestosis in their plant. This company is one of these and therefore wish to underscore here the recommendations concerning periodic x-ray examinations discussed particularly on page 14 to 18.

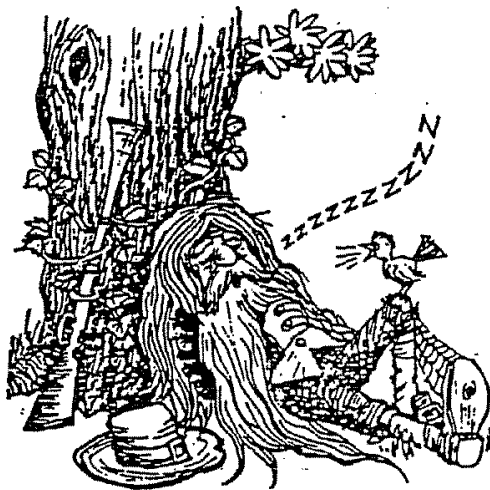
W.C.L. Hanson
Head Engineer

EXHIBIT

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**before
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begin**

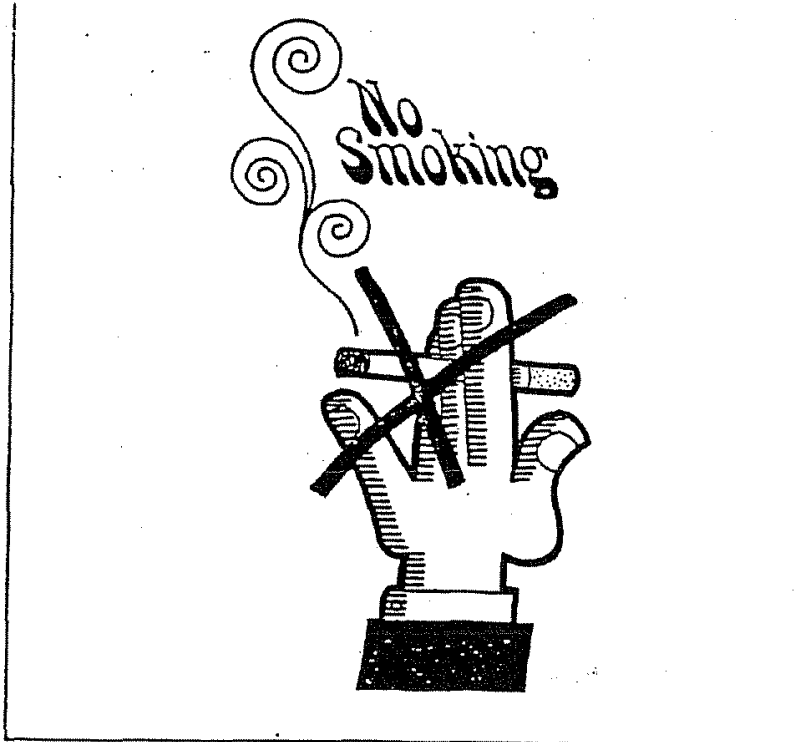
There are Some Things You Should Know...



Every person employed at GARLOCK where asbestos fiber is used should know that breathing excessive amounts of asbestos causes certain health problems.

GARLOCK has taken many steps to protect you from exposure to harmful amounts of asbestos fiber. To make these steps effective, you must follow safe working rules on the job.

The health problems



The health problems that have been connected with exposure to asbestos are these:

- Breathing excessive amounts of fiber in the air might result in a disease called asbestosis — a scarring of the lung tissue, which when severe makes it difficult to breath properly.
- Persons who smoke cigarettes and inhale excessive amounts of asbestos dust are at a greater risk of developing lung cancer. Asbestos alone does not appear to cause this disease, but it can make people who smoke cigarettes more likely to develop this cancer. Studies show that if you don't smoke cigarettes, asbestos exposure does not increase your risk of getting lung cancer.
- Persons exposed to excessive amounts of asbestos have a greater risk of developing Mesothelioma which is a rare cancer of the lining of the chest or abdomen. There also is some indication from unconfirmed studies that there might be a greater incidence of cancer of the digestive tract in persons exposed to excessive amounts of airborne asbestos.

The health problems

You will be required to do certain things on the job to help us protect you. Some of these are:

1 You must do everything you can to prevent dust or getting asbestos fiber into the air where it could be inhaled.

2 In some areas you may at times be required to wear a respirator temporarily or other forms of personal protective equipment. You must wear this equipment properly whenever it is necessary.

3 You will be requested not to smoke on the job if you might be exposed to asbestos. You will be urged for your health's sake to quit smoking completely.

4 You will not be permitted to take any asbestos material home from the plant in order to prevent exposing others. You will use facilities provided to change work clothes, and wash before going home.

5 If equipment is not working correctly, you must report it to your supervisor immediately.



Be concerned — not alarmed. Present cases of health problems we mentioned are related to working conditions that existed many years ago. As we became aware of risks, we began spending considerable sums of money to upgrade dust control systems to prevent excessive asbestos exposures. We are confident that as long as employees follow safe work rules and equipment is operated properly, no employee will be exposed to hazardous amounts of asbestos fiber in our operations.

To assure continued control of risk, the company will regularly check asbestos-using operations with trained personnel. You must cooperate with these trained employees when they check your work areas.

Government inspections may be made of our facilities to make sure you are not being exposed to hazardous levels of asbestos. The government has set standards that limit how much asbestos you can be exposed to. We have taken steps to abide fully with those regulations.

**Be concerned,
not alarmed**

VIOLATION OF HEALTH WORK RULES CAN RESULT IN DISMISSAL.

After you begin work, you will be given an opportunity to learn more about the potential health risks of asbestos and what the company is doing to protect you on the job. You will be taught how to use personal protective equipment and other methods of protecting yourself. Because of the efforts of GARLOCK and your own efforts, it is likely that you will be as safe working for GARLOCK as in any other occupation or endeavor.

That is the way we want it. We will not take chances with your health and we won't allow you to take chances with it.

Violation of health work rules can result in dismissal.

After you begin work

Tear off this form on the dotted line.

Hand in the form but keep this booklet and refer to it often

Have you read the whole
booklet?

_____ Yes _____ No

Do you understand the health
risks connected with asbestos?

_____ Yes _____ No

Do you understand that
smoking cigarettes increases
the health risks connected
with asbestos?

_____ Yes _____ No

Do you understand that you
will have to follow certain work
rules set by the company to
protect you?

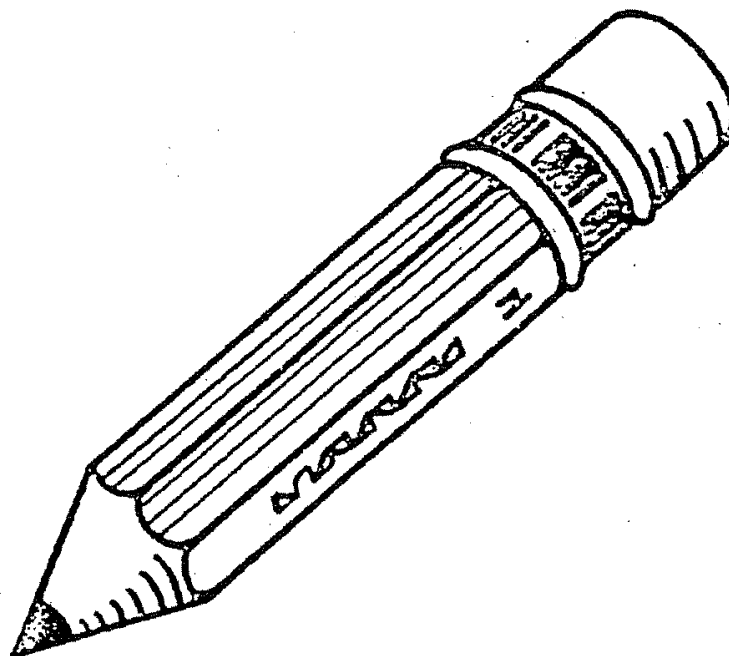
_____ Yes _____ No

Please sign your name and put today's date below.

Signed _____

Date _____

REFER TO THIS BOOKLET OFTEN



So we can be sure you have read this booklet and know about the potential risks connected with your job and the strict rules you must follow, we would like you to fill out the form at the right and return it to us. The form must be forwarded to your supervisor before your first pay period ends.

BERKELEY OCCUPATIONAL MEDICINE ASSOCIATES

Practice limited to occupational medicine,
internal medicine, epidemiology, toxicology

Thomas H. Milby, M.D., MPH
Diplomate American Board
of Preventive Medicine in
Occupational Medicine

RECEIVED

JUN 5 '80

Donald Whorton, M.D., MPH
Diplomate American Board
of Internal Medicine
Diplomate American Board
of Preventive Medicine in
Occupational Medicine

April 10, 1980

LAW DEPARTMENT
GARLOCK INC.

M.P. Dailey
Attorney at Law
2102 Almaden Rd.
San Jose, CA 95125

RE: Martin D. Honore

Dear Mr. Dailey:

The following is the report of my special medical examination of Mr. Martin Honore, done in my office on March 13, 1980, at your request. The report has been delayed until receipt of Kaiser medical records for my review.

CURRENT PROBLEM

Mr. Honore, a 42 year old retired disabled fire fighter, was referred for evaluation of his pulmonary status. Approximately three months ago he had an episode of upper left chest pain without radiation. The pain was stabbing in nature when he took a deep breath. He was told that he had pleurisy. His chest x-rays, however, showed some type of spot on the right side of his lung. The physicians at Kaiser became more concerned with this than the pleurisy, which has abated. He has had a variety of pulmonary evaluations, including multiple chest x-rays, tomograms, pulmonary function studies, and many blood tests. Apparently he had an abnormal chest x-ray two years ago but there was no follow-up. He is currently being evaluated at Kaiser Santa Clara. He had an appointment on Monday (3-17-80) for possible biopsy. His physician at Kaiser is Dr. Zwaamstra.

WORK HISTORY

At age 18 he worked for Triple AAA Shipyard. It was his first job out of high school. He was a sheet-metal worker helper. His work involved cutting through asbestos insulation and crawling through heating and air conditioning ducts. The ship was being repaired and refurbished. The cutting of the asbestos was done with a knife. Remarking on the quantity of dust, he said he would, "go to work one color and return home another color."

2150 SHATTUCK AVE SUITE 414 BERKELEY, CALIFORNIA 94704 (415) 840 1902

RECEIVED

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B & R
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OTHER

APR 21 1980

EXHIBIT

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4-17-83 JJS

M.P. Dailey
RE: Martin D. Honore
April 10, 1980

page 2

From January 1956 to November 1958 he was in the U.S. Army. He was in intelligence service.

In 1959 he worked for Garlock Packing Company making gaskets. One day a week (4-8 hours per day) he made asbestos gaskets. The the asbestos came in rolls and Mr. Honore would take it off and roll it over and form the gasket. There was no cutting or grinding; however, he did punch holes in the gasket after it was formed. He had to stretch the asbestos to make it reach the proper size. There was asbestos dust whenever he would unroll the roll of asbestos.

In 1960 for six or seven months he worked on Bethlehem Shipyards in San Francisco, primarily as a welder. He knows of no asbestos exposure. He describes multiple episodes of metal fume fever, secondary to welding galvanized steel. For the next six months he did construction work. He was primarily a hod carrier and worked on patios, sidewalks, etc.

In January 1961 he went to work as a firefighter for Santa Clara, where he worked until he retired in 1975. He last worked in March 1975 but officially retired in October 1975. The retirement was caused by back and knee injuries. He was a captain in the fire department for the last five years prior to retirement.

Since retirement he has worked occasionally doing construction. However, he recently injured his elbow and knee and now he has two bad knees.

PAST MEDICAL HISTORY

He had pleurisy at age 12. He does not remember which side. He had a pylonidal cyst removed in 1972. He currently takes Clinoral for knee swelling. He has smoked cigarettes for the past 30 years, approximately a pack and a half per day.

PHYSICAL EXAMINATION

General: Well-developed, well-nourished adult white male who appears to be in no distress. Walks with bilateral limp.

Chest: Good chest expansion, no dullness to percussion, clear breath sounds, no rales.

M.P. Dailey
RE: Martin D. Honore
April 10, 1980

page 3

Heart: Regular heart size. No cardiomegaly.
Regular rhythm. No gallop or murmur.

Extremities: No evidence of clubbing of fingernails,
no cyanosis, no pretibial edema.

REVIEW OF MEDICAL RECORDS

The medical report of Dr. James B. Ludwig dated November 25, 1975, was reviewed. This concerns back and knee problems. A physical examination and medical history done by Santa Clara County in February 1970 shows that Mr. Honore has had hay fever and sinus problems ever since moving to Santa Clara County in 1960. An examination of June 6, 1972, shows rhonchi as well as a pylonidal cyst needing repair. An electrocardiogram was borderline normal with left axis deviation and nonspecific ST changes.

The medical report of Dr. Arthur Holmboe relates to lumbosacrael problems. There is a DFRWI report of industrial injury dated 4/6/74 involving an injury to the right eye. A DFRWI of 6/21/74 was laceration of the right index finger, and another on 3/29/75 was back pain.

A medical report of Dr. Phillip Pippe, dated August 20, 1975, was for a neurosurgical consultation for a back problem and persistent low back pain. Dr. Pippe believed that whatever disability was present was purely subjective as he could not demonstrate any objective evidence of a significant problem.

The medical records from Permanente Medical Center, Santa Clara, were reviewed.

He was admitted on 8/15/72 and discharged on 8/22/72 for a pilonidal sinus and cyst.

In January 6, 1977 he was seen in a medical clinic. Comparison of a chest x-ray taken December 1976 and one taken in January 1977 showed no real changes. There was a quite sharply demarkated area in the right middle lobe which appears to be scarring.

He was seen at the Medical Clinic on February 22, 1980 by Dr. Zwaanstra for an evaluation of the abnormal x-ray. He had pleursy at age 12. Chest x-rays showed scarring and distortion of the right middle lobe area. The pleura appeared thick, but this appearance could have been fluid. Dr. Zwaanstra's impressions were pleural scar,

M.P. Dailey
RE: Martin D. Honore
April 10, 1980

page 4

pleural fluid, or pleural tumor. He was seen in surgical clinic on March 17, 1980 by Dr. Porter. The plan was to biopsy the abnormal area. However, Mr. Honore did not want this procedure until after returning from a long planned vacation in late April 1980.

Chest x-rays of February 22, 1980 show several linear densities of the right lung fields associated with a tubelike six centimeter ellipsoidal density which may be within the right middle lobe, but also may be in the fissure behind the right middle lobe. These densities were not present in the patients' earlier chest films. On 12/20/76 there was some pleural reaction along the right anterior lung. The same findings were present in January and February of 1977. Lateral tomograms showed the density is either in the middle fissure behind the right middle lobe or might be within the right middle lobe itself. No shifting pleural fusion could be identified. No mediastinal or hilar adenopathy was present. The left lung was clear. The overall impression was, "The densities appear to be pleural in nature, their slow progression since 1977 suggests that the patient may have a pleural ----- such as a mesothelioma. A benign pleural plaque seemed unlikely a ----- of extensive nature." (The blanks indicate words which were obliterated in the copying process).

DISCUSSION

Mr. Honore, a 42 year old retired firefighter, has been disabled due to musculoskeletal disorders. However, over the course of the last three and a quarter years he has had a yet undiagnosed abnormality noted on a chest x-ray. This abnormality appears to be increasing in size. He is asymptomatic from this condition.

Mr. Honore's initial job after high school required him to work with and around asbestos at the Triple AAA Shipyard in San Francisco. In 1959 he worked for Garlock Packing Company making gaskets, some of which were asbestos. Subsequent to that latter job, he was a firefighter until his disability retirement.

Mr. Honore is currently being evaluated for this pulmonary abnormality. A biopsy procedure is planned for later this month. Rather than speculate on the findings, it would be more prudent to wait until a diagnosis has been established before making a final report. It is certainly reasonable to assume that this pulmonary abnormality could be associated with his previous asbestos exposure.

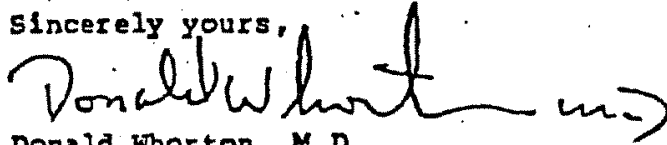
M.P. Dailey
RE: Martin D. Honore
April 10, 1980

page 5

I will be happy to write an addendum to this report once his medical evaluation is completed. Please send me the relevant records at the appropriate time.

If you have any questions, please contact me for clarification.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Donald Whorton", followed by a long horizontal flourish and a small arrow-like mark at the end.

Donald Whorton, M.D.

DW/bp



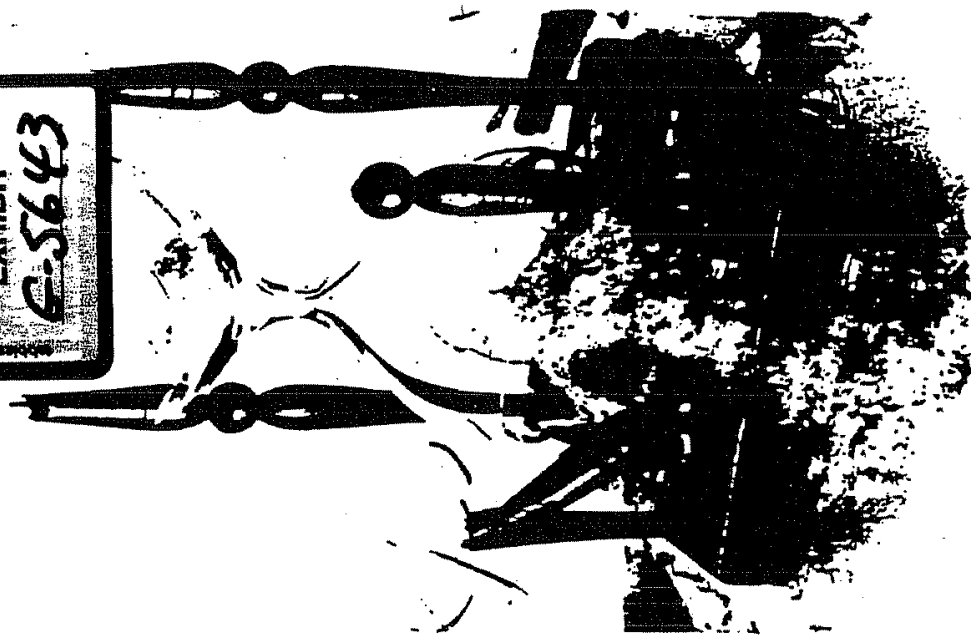
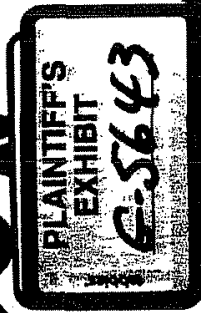
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Coltec Industries



**IT'S TIME TO
STOP USING
ASBESTOS.
AND NOBODY
HAS BEEN
MORE AWARE
OF IT THAN
GARLOCK.**

**TIME IS
RUNNING
OUT.**



A TIME FOR REAL ANSWERS.

QA

Will asbestos-free products cost more in the long run?

such as frequent adjustments and equipment repairs, excessive downtime and product loss, all make asbestos-free products far less costly in the long run.

No. The reason is that problems typically associated with asbestos sealing.

QA

I realize leakage costs my company money, but what comparisons can you make?

drops/minute. Our asbestos-free packing can work successfully at 8-10 drops per minute. And whenever Garlock asbestos-free packing is tested in identical applications, it seals 10 times better than premium grade asbestos.

Using asbestos in pumps, acceptable leakage rates run about 60 drops/minute and under ideal conditions the best was 35

QA

Control valves are critical to my operation. What's the advantage of asbestos-free?

often overloads the valve stem—causing a costly binding or overworking of the actuator. Garlock valve packings not only seal with the lowest possible emission (0 to 600 ppm), but do so at the lowest actuation torque. So you have the best of both worlds.

Asbestos has all the lubrication properties of a rock. The high friction that results along with the compression required to seal

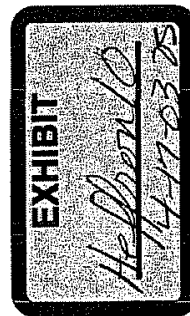
Garlock

Mechanical Packing Division

Collec Industries



1616 Division Street, Palmyra, NY 14522

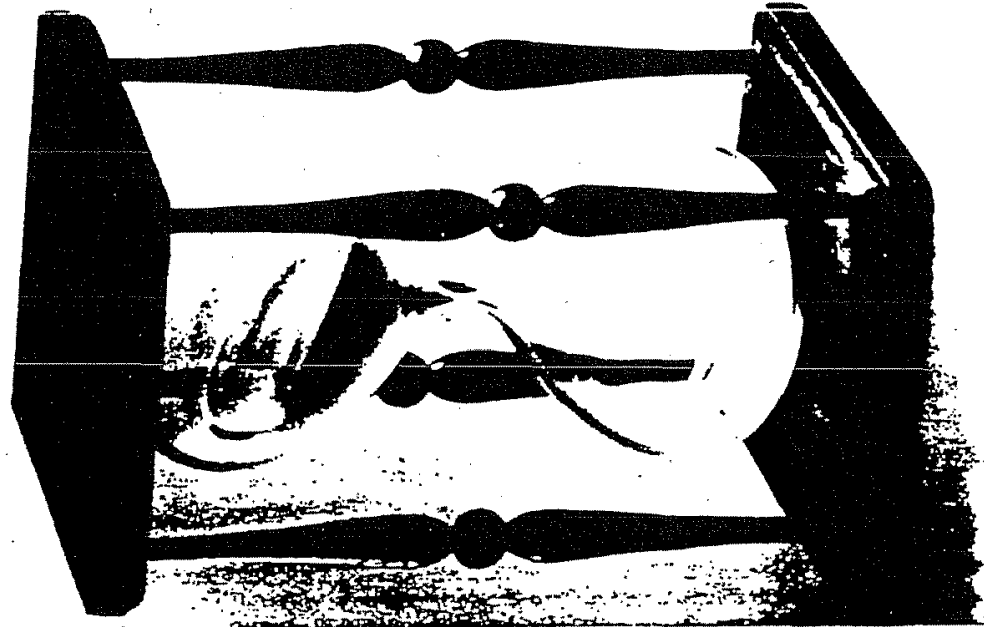


Time is running out for asbestos. This time it's for good.

And it's not by choice alone that industry is losing asbestos. This time, asbestos products are being mandated out of existence by federal regulations.

The manufacturing deadline for most asbestos sealing products is *August 25, 1993*. (For distribution, the deadline is August 25, 1994.)

Beginning in the early 1960's, Garlock extended its R&D programs to include the search for better performing materials.



Then in the 1970's, Garlock began introducing a series of cost-effective and highly successful *asbestos-free* sealing products. Familiar gasketing products like *Cylon** and *Blue-Gard**, and *Styles 98* and *1298* in braided packing.

We became the leader in high quality, *asbestos-free* gasketing and packing materials for process industry equipment. No competitor comes close to matching the depth of these product lines or their customer acceptance.

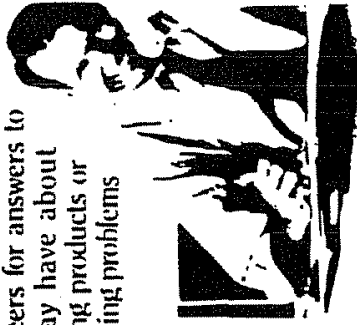
That's because we started our R&D program for *asbestos-free* at a time when asbestos materials were being widely used in many industries. And long before federal regulations were being considered, Garlock was up and running with proven *asbestos-free* products.

Developing this new generation of *asbestos-free* products required new sophisticated testing capabilities to give customers comprehensive performance data. The Garlock functional test lab, which tests by domestic and international standards, is unequalled by any competitor.

And Garlock has its own textile plant, where state-of-the-art equipment is used in manufacturing operations. It is this kind of advanced technology—whether in testing, manufacturing, or R&D—that gives Garlock a strong advantage over competitors in the *asbestos-free* market.

Our competitors have arrived too late to achieve the *asbestos-free* solutions that are needed in the next few years.

So while time may be running out for some gasketing and packing manufacturers, don't let it run out for you. Call Garlock today at 800-448-6688, 800-622-2366 (NY), or 315-597-4811. You can talk directly to one of our applications engineers for answers to questions you may have about *asbestos-free* sealing products or your particular sealing problems and needs.



Or write, Garlock, Mechanical Packing Division, 1666 Division Street, Palmyra, NY 14522.



Garlock
Mechanical Packing Division

Coltec Industries



*Proven Products Today
for an Asbestos-Free
Tomorrow*

A TIME FOR REAL ANSWERS.

QA
I've read that asbestos-free products are more resilient. What does that mean and why is it important?

Asbestos is a mineral fiber and very dense by nature. When installed and compressed initially to seal the asbestos will take a set. Which means it doesn't have any resiliency or

QA
Are asbestos-free sealing products any easier to remove?

Because Garlock asbestos-free gasketing and packing will not harden like asbestos, removal generally is much easier. Asbestos

QA
Is there one asbestos-free product to replace asbestos?

The more diverse your applications, the greater the chance more than one product will be needed. However, with Garlock's experience in asbestos-free applications, inven-

QA
ability to "bounce back." Garlock's asbestos-free sealing products are more resilient. Garlock packings support a gland-load resulting in less frequent adjustments to control leakage, and our gasketing products have 25% more recovery to compensate for greater pipe movement.

QA
Packing is particularly difficult to remove. Its removal can actually damage equipment like shafts, sleeves and valve stems. In addition, the rest in downtime often runs in excess of \$75 per hour.

QA
Tory can be held to a minimum. For example, one premium Garlock packing line, Style 50, will service the full pH range except for strong oxidizers, while Cylar® gasketing will handle the full pH range and temperatures up to 500°F.



Garlock
Your name in the very strongest of lines.
Garlock Industries



1666 Division Street, Palmyra, NY 14522

TIME TO CLEAR THE AIR.

WITH TIMELY
ASBESTOS-FREE
SOLUTIONS
TO AGE-OLD
SEALING
PROBLEMS.

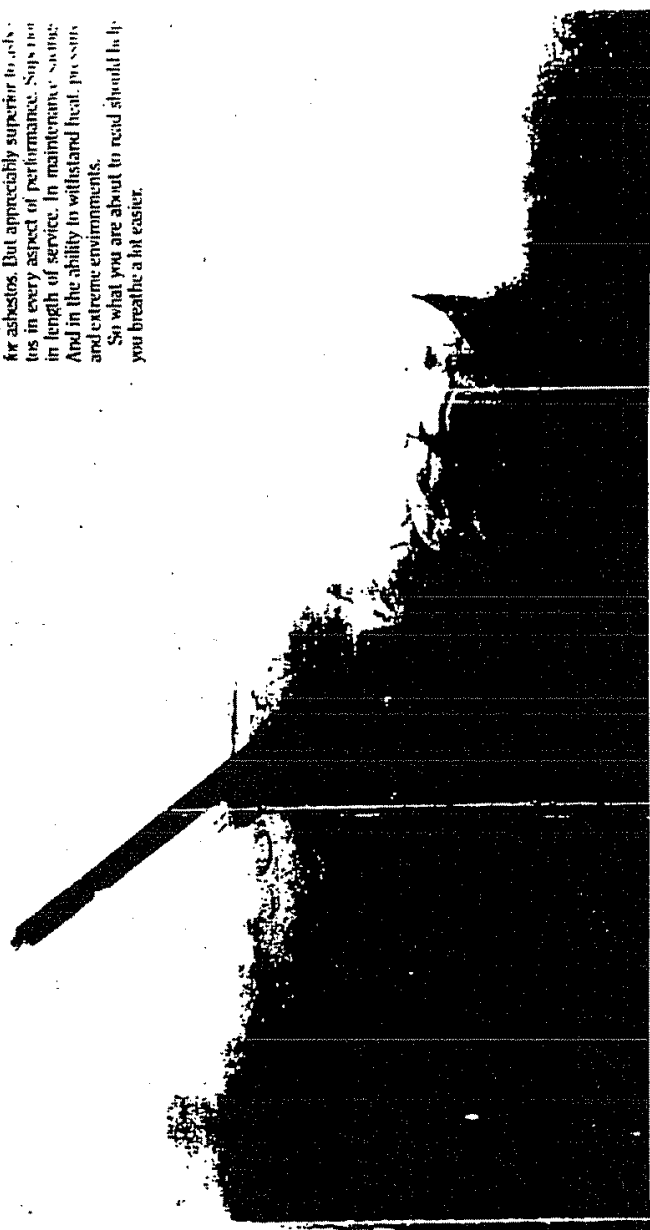
Recent discussions in trade publications and elsewhere have challenged the worthiness of asbestos-free sealing products as successors to tried and true asbestos.

Garlock would like to clear the air.

First, because like it or not according to the EPA regulations, after August 23, 1991 American industry will use only asbestos-free sealing products in most applications.

And secondly, because Garlock already has over 25 years experience innovating and perfecting asbestos-free gasketing and packing products that are not merely substitutes for asbestos. But appreciably superior to asbestos in every aspect of performance. Superior in length of service. In maintenance savings. And in the ability to withstand heat, pressure and extreme environments.

So what you are about to read should help you breathe a lot easier.



Asbestos-free products seal better.
The lack of any long-term scalability is also the worst failing asbestos could have. That's always had it.

In contrast, Garlock asbestos-free gasketing and packing products deliver superior scalability in virtually every application. In every area, providing your company with the benefit of longer scalability: reduced maintenance, negligible product wear and high productivity.

Asbestos-free products dissipate heat so they run cooler, stay flexible, and last longer while assuring the level of reliability you require.

Because of their natural resiliency and ability, asbestos-free products permit easy wear adjustments to maintain the proper seal compression for maximum leakage control, without causing internal damage. In addition, Garlock's superior sealing performance, scalability of asbestos-free products also results in longer sealing life.

Asbestos-free products are versatile.

For handling high pressures and extreme environments, Garlock's asbestos-free gaskets and packings have no equal. Both offer excellent resiliency and recovery. Without the loss in scalability caused by the creep relaxation of asbestos gaskets. Or the hardening and consequent loss in volume and scalability that asbestos packing undergoes when it is highly compressed. Sealing damage to equipment is intensified by asbestos packing materials, particularly those with Inconel® alloy wire around the outside of the asbestos.

Because Garlock manufactures its own yarns, we were the first to develop the technology that encapsulates Inconel wire within the core of the yarn itself.

With this technology, we also developed the capability to produce a wide range of products.

The Garlock Sealant Division

ity to custom blend exclusive packing yarns for specific applications, such as those in caustic chemical and petro-chemical processing. In these extreme environments, asbestos packing sets often go through their entire service life in just six months.

Asbestos-free products minimize equipment wear and damage.

Asbestos is incredibly abrasive. It causes major scoring damage to the shafts and sleeves in pumps and on valve stems. In addition, it pits flanges, causes aggravation for mainline

nance people, and often increases the cost of removal many times over that of asbestos-free products.

Case studies have shown that you can depend on our asbestos-free gasketing and packing materials to help your equipment last considerably longer than it has in the past with asbestos. Because Garlock asbestos-free products are considerably less abrasive, more resilient, and they don't trap heat, problems associated with asbestos are virtually non-existent. And making problems disappear is an excellent way to clear the air.

With Garlock's experience in asbestos-free applications engineering, you can improve productivity and minimize your inventory.

Undoubtedly questions will remain concerning your conversion to asbestos-free products. We suggest you talk directly to one of our applications engineers for answers to any questions you may have about your particular sealing problems and needs. Just call 800-448-6688, 800-622-2366 (NY), or 315-597-4811. Call and we will help you clear the air.

Or write, Garlock,
Mechanical
Packing Division,
1666 Division
Street, Palmyra,
NY 14522.



Garlock

Mechanical Packing Division
Garlock Industries



*Proven Products Today
for an Asbestos-free
Tomorrow.*

