

1 IN THE CIRCUIT COURT OF JACKSON COUNTY, MISSISSIPPI

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5 IN RE: ASBESTOS PERSONAL INJURY CASES - ABRAMS LEAD
6 GROUP I PLAINTIFFS

7 NOS.

8 88-5422(2), 89-5121(2), 90-5247(2), 88-5420(2),
9 89-5252(2), 90-5069(2), 89-5153(2), 90-5352(2),
10 89-5268(2), 90-5045(2), 90-5274(2), 88-5181(2),
11 91-5187(2), 91-5098(2), 91-5000(2), 90-5387(2),
12 91-5119(2), 90-5369(2), 91-5135(2), AND 90-5178(2)

13 *** VOLUME I ***
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18 THE FOLLOWING IS AN UNCERTIFIED AND UNPROOFREAD DAILY COPY
19 TRANSCRIPT OF THE PROCEEDINGS HAD IN THE ABOVE REFERENCED
20 CAUSE ON MONDAY, JUNE 28, 1993, BEFORE HONORABLE KATHY KING
21 JACKSON, CIRCUIT JUDGE.
22

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1 BY THE BAILIFF: All rise. The Circuit
2 Court of Jackson County is now in session. The
3 Honorable Kathy Jackson now presiding.

4 BY THE COURT: Bring the jury in.

5 (WHEREUPON JURY PRESENT IN COURTROOM.)

6 BY THE COURT: Be seated. Good morning.
7 Before we get started, I want to hand out -- and
8 everybody has seen this; correct, the revised
9 list of plaintiffs and claims; is that correct?
10 I'm going to have Mr. Bird give y'all a new
11 revised list.

12 Now ladies and gentlemen, I think y'all
13 already have -- I know you already have a list
14 of plaintiffs and who they have claims against;
15 but because of some legal motions that were
16 filed at the conclusion of the plaintiffs' case,
17 we've revised it, and some rulings that the
18 Court has made. So I've had them stamp on the
19 top of those list, "revised," in case you've
20 made any notes on your old list, you don't have
21 to throw it away. But I do want you to know
22 that that is the new and latest edition of who
23 has claims against which defendants. Has
24 everybody got them? All right. Who will be
25 your first witness?

1 BY MR. STUTTS: Dr. Hans Weill.

2 BY THE COURT: Doctor, if you would, raise
3 your right hand and face the clerk and she'll
4 administer the oath.

5 DR. HANS WEILL,

6 upon being called as a witness for and on behalf of the
7 defendant, and having been first duly sworn, testified as
8 follows:

9 DIRECT EXAMINATION BY MR. STUTTS:

10 Q. Good morning ladies and gentlemen. Good morning
11 Dr. Weill.

12 A. Good morning Mr. Stutts.

13 Q. Dr. Weill, would you tell the ladies and
14 gentlemen of the jury your full name and where you live.

15 A. Hans Weill. I live in New Orleans, Louisiana.

16 Q. And Doctor, what is your current occupation?

17 A. I'm a professor of medicine at Tulane University
18 School of Medicine.

19 Q. You are also a director of something called the
20 Center for Bio-environmental Research?

21 A. I am the -- that's right, director of the Center
22 for Bio-environmental Research, which is a university wide
23 research program federally funded.

24 Q. And that's associated with Tulane University,
25 also?

1 A. It is.

2 Q. All right. Doctor, we might be able to save
3 some time. Let me hand you a copy of your resume. Let's
4 talk about some of your background. First Doctor, where
5 did you receive your medical training?

6 A. At Tulane.

7 Q. And you received a medical degree from Tulane
8 University?

9 A. I did.

10 Q. Upon completion of Tulane at Tulane, what did
11 you do?

12 A. I took an internship in Mount Sinai Hospital in
13 New York City, then I returned to New Orleans to take a
14 residency in internal medicine, followed by a fellowship in
15 pulmonary medicine.

16 Q. All right.

17 A. Then I became chief resident and that completed
18 my training.

19 Q. You became chief resident at Tulane?

20 A. At Tulane.

21 Q. All right. Now, you then began to teach
22 medicine at Tulane?

23 A. Since 1962, which is when I completed my
24 training, I've been at Tulane on the faculty.

25 Q. What was your field or your specialty that you

1 were teaching?

2 A. Pulmonary medicine, lung diseases.

3 Q. Lung diseases?

4 A. Correct.

5 Q. And at some point you became a full professor of
6 medicine at Tulane and taught about lung disease?

7 A. That's right.

8 Q. Was there a time when you became chief of the
9 pulmonary disease section at Tulane?

10 A. Yes.

11 Q. What does that mean?

12 A. Well, it means that the individual who's chief,
13 is responsible for the other physicians in the department
14 that practice pulmonary medicine and do research in
15 pulmonary medicine.

16 Q. Doctor, I wonder if you could tell us something
17 about the Center for Bio-environmental Research, and what
18 activities that undertakes, and what duties you have as its
19 director.

20 A. In 1989, a very large amount of federal money,
21 33 million dollars, was awarded to Tulane and Xavier
22 University in New Orleans, to establish a center for
23 bio-environmental research. That is research on health and
24 the environment, and the effects of health from
25 environmental contaminants. I was asked to direct that.

1 The center had multiple faculty members of varying
2 disciplines -- some of them were physicians and biologists
3 -- to assess the health effects. Some were engineers who
4 measured and did something about contamination in water or
5 ground or air. Others were basic scientists who looked to
6 see what the mechanisms of disease were. It was a very
7 wide ranging program that we established. It's been going
8 on now for four years. It has been very successful in
9 competing for federal research dollars, and next month we
10 will be moving into a new building, which has been
11 expressly constructed for the laboratories of this center.

12 Q. Let me take you back now some to some of your
13 memberships and some organizations. What is the American
14 Thoracic Society? We've heard that society mentioned
15 during the course of this trial.

16 A. The American Thoracic Society is the medical and
17 scientific arm of the American Lung Association; the
18 Christmas seal people. It is a society that most chest
19 physicians, or lung doctors, such as myself and many
20 others, belong to. It holds the most important
21 international lung meeting each year. It has both clinical
22 and scientific components. It produces papers and
23 positions every once in a while that establishes a
24 consensus of the lung community on particular issues,
25 sometimes controversial issues, sometimes not so

1 controversial.

2 Q. Doctor, you've had a long association with the
3 American Thoracic Society?

4 A. I have.

5 Q. At one point were you its chairman or president?

6 A. I was its president; yes.

7 Q. Let me ask you about some of your other
8 activities with the American Thoracic Society. I see that
9 you were chairman of something called the Committee on
10 Health Effects of trimalite in 1989?

11 A. Yes.

12 Q. Would you describe the work of that committee.

13 A. The work of that committee started in 1989, and
14 finished about two years later. There was an issue about a
15 particular type of contaminating asbestos called trimalite
16 -- not a commercial form, but a form that appears in
17 deposits in the ground where chrysotile is mined, and it's
18 been found in other places -- and one of the issues is is
19 this contaminant particularly dangerous, and if it's
20 dangerous in terms of health effects, is it more dangerous
21 than chrysotile, is it more or less dangerous than other
22 fibers called amphiboles, of which it is a type, and so
23 forth.

24 There were a lot of unanswered questions about
25 that type of asbestos, so that I was asked to chair a

1 committee of all kind of folks; pathologists,
2 mineralogists, other biomedical scientists, to look at the
3 evidence. There are some issues about fibers that may have
4 different effects, whether they grow -- geologically grow
5 long to become a fiber, or whether they are cleavage
6 fragments; that is they break and have the same dimension.
7 It was a complex and turned out to be a very controversial
8 undertaking, because there were very strong opposite sides
9 of that particular issue.

10 Q. Now, was your work to be presented to the
11 government in some fashion?

12 A. Yes. It actually had several phases. We had a
13 draft report that was presented to the ATS membership at
14 one of their meetings, and broad comments and questions and
15 criticisms were given at that time. It then ultimately was
16 passed or approved as a physician paper, by the Board of
17 the American Thoracic Society, the executive committee.
18 And then OSHA, the Occupational Safety and Health
19 Administration, and the U.S. Department of Labor, asked if
20 I would present the findings on behalf of the committee at
21 a hearing in Washington, because they were, at that time,
22 considering issues that related to trimalite.

23 Q. Did you present those findings?

24 A. Well, I tried to.

25 Q. Well, what kept you from doing it?

1 A. Well, I went to Washington, and at that time our
2 report was just in the process of being approved by the
3 American Thoracic Society, but the final approval had not
4 yet come, so we couldn't provide anyone with a final
5 report. They had a draft report which was essentially the
6 same. I came there, I got on the witness stand like I'm on
7 today, and there were objections to my testimony from a
8 number of the industry members; mining companies and
9 others, because they didn't have a final report, and
10 because that then put them at a disadvantage or something.
11 The administrative law judge indicated that he would rule
12 in their favor, and I was not allowed to testify.

13 Q. Now, you've done some work also with the
14 American Lung Association, served on various committees
15 with that organization?

16 A. Yes, I have, particularly as it relates to ATS
17 matters. The two organizations work very closely together.

18 Q. By ATS again, American Thoracic Society?

19 A. The American Thoracic Society, which is part of
20 the lung association. And usually people who have high
21 office, in particular the president, is sort of a liaison
22 person between the two organizations, and I served on a
23 number of committees.

24 Q. You were on the Board of Governors at the
25 American Lung Association for a period of time?

1 A. Yes, I was.

2 Q. The American College of Physicians and the
3 American College of Chest Physicians. Could you tell us
4 what that is?

5 A. They're professional organizations of people who
6 do internal medicine. That's the College of Physicians, or
7 people who do pulmonary medicine -- the College of Chest
8 Physicians. They are -- They have certain criteria or
9 requirements for admission. I've been a member of those
10 for many years.

11 Q. The American Board of Internal Medicine. What
12 is that?

13 A. That's somewhat different. That's the
14 certifying board that makes policy and sets out
15 examinations that physicians take to become a certified
16 internist or a certified pulmonologist. If you've ever
17 heard that a doctor is certified in internal medicine, it
18 means he's met the -- he or she has met the requirements of
19 the American Board of Internal Medicine, passed the
20 examination, had the requisite training, and has a
21 certificate.

22 Q. All right. We've heard the term many times, and
23 I guess most doctors -- are you board certified in this --

24 A. That's right.

25 Q. -- or board certified in that. So this board of

1 internal medicine is a certification for doctors in
2 internal medicine, in that specialty?

3 A. And in my case, in the subspecialty of pulmonary
4 medicine.

5 Q. And you are board certified?

6 A. Well, I'm not only board certified, but I've
7 actually served on both of those boards nationally, to make
8 examinations and set policy for certifying others.

9 Q. All right. So you worked on the board for
10 certifying other physicians who sought board certification?

11 A. I did for eight years; yes.

12 Q. Doctor, I see you on your resume you have
13 something called editorial assignments, and under that,
14 American Review of Respiratory Disease, Chest Magazine,
15 Respiratory Diseases Digest. What is the function of a
16 doctor who serves on the editorial board of these
17 publications? First of all what are these publications?

18 A. Undoubtedly, the jury has heard about PEER
19 review, and when does a scientific article have a certain
20 amount of credibility; when do people in fact depend on or
21 rely on evidence in the scientific literature. It comes
22 when some research is done, it's written up, the paper is
23 submitted to the journal, the journal sends it out for
24 review by peers, meaning other people independent of the
25 author who work in that field. And if all the criticisms

1 are answered, are dealt with, the journal publishes the
2 paper.

3 The editors -- the editorial board, participate
4 in the PEER review, but they also adjudicate the responses
5 -- assess the responses and make decisions of the people
6 that are reviewing articles for these journals. Two of the
7 journals you mentioned, the American Review and Chest, are
8 the two major chest journals -- pulmonary lung journals in
9 this country. One is sponsored by the American Thoracic
10 Society, and the other by the American College of Chest
11 Physicians, both organizations that you mentioned.

12 Q. If I understand you correctly, there are
13 scientific journals such as these two, and researchers or
14 scientists who are interested in having research published,
15 will submit these publications, or submit their draft
16 reports to an editorial board for consideration?

17 A. Yeah. They actually submit what they hope is a
18 final report. It turns out to be less than final, usually,
19 because some revisions are very often asked for. But they
20 do submit it, it then gets reviewed, and almost always some
21 revision is necessary because of that review.

22 Q. And the revision and the review, I take it, is
23 to see whether or not the research paper has some
24 scientific merit, and would be worthwhile and helpful to
25 the scientific community?

1 A. That's right. There are a number of criteria.
2 One was the scientific question -- an appropriate one that
3 the research sought to answer -- secondly, were the methods
4 used to answer the question appropriate and properly done.

5 Q. Was the research good?

6 A. Was the research --

7 Q. Was the science good?

8 A. Right. And was the interpretation valid. That
9 is, were the conclusions drawn, supported by the research.

10 Q. The ladies and gentlemen of the jury have heard
11 a lot about different government agencies, NIOSH and OSHA,
12 usually in terms of their acronyms like NIOSH. Have you
13 done some consulting work for the government or any of its
14 agencies having to do with chest disease?

15 A. A lot.

16 Q. Tell us about National Institute of Occupational
17 Safety and Health, NIOSH, and what role you may have had
18 with NIOSH. Tell us -- First of all, remind us what NIOSH
19 is.

20 A. NIOSH is the part of Health and Human Services
21 -- Department of Health and Human Services, whose
22 responsibility it is to deal with issues of occupational
23 health; protecting the health of workers, helping to
24 develop information that will, in fact, lead to work
25 practices and standards that can reduce disease or even

1 prevent disease related to the work place and so forth.
2 They then make recommendations to OSHA, whose job it is to
3 enforce -- set standards and enforce those standards.

4 Q. All right. Over the years what relationship
5 have you had with NIOSH?

6 A. I've consulted with them on a wide variety of
7 issues dealing with different kinds of inhalants;
8 chemicals, dust, general issues of occupational lung
9 diseases and health, x-ray interpretation matters, pretty
10 wide range of things.

11 Q. You're a member of something called the National
12 Heart, Lung and Blood Institute Advisory Committee. What
13 is that?

14 A. The Health, Lung and Blood Institute is one of
15 the large -- second largest institutes of the National
16 Institutes of Health. The National Institutes of Health is
17 the major federal agency that supplies funds to the tune of
18 I think now of about ten billion dollars a year for
19 researchers and health matters all over the country.
20 Heart, Lung and Blood is one of those, and it has about a
21 one billion dollar budget. It deals with heart, lung and
22 blood conditions.

23 I was on the most senior of the groups there
24 called the Heart, Lung, Blood Advisory Group or counsel,
25 and that is the policy making and the statutory group that

1 approves the funding of grants and also makes policy.

2 Q. The funding of grants for research?

3 A. For research and training.

4 Q. And that budget is annually what?

5 A. About a billion dollars.

6 Q. A billion dollars. And you are now the
7 director? Tell me what your role is in --

8 A. You spent four years on this counsel, and then
9 you rotated off, and I've just recently rotated off. My
10 other relationship with that institute has been that for
11 many years -- 20 years, I was a grantee, a recipient of
12 these research funds -- my colleagues and I at Tulane --
13 and I directed a specialized center of research in
14 occupational lungs diseases, in dealing with a wide variety
15 of conditions, such as asbestos and silica and toxic gases,
16 organic dust such as cotton.

17 Q. We've heard a lot about OSHA, also. Have you
18 provided any advice or testimony with respect to OSHA,
19 Occupational Safety and Health Administration?

20 A. Yes. As I mentioned, their responsibility is to
21 set standards in the work place. And I've been a
22 consultant to them on several standards. The most recent
23 time was when they revised the asbestos standard, which was
24 promulgated in 1986. It lowered the permissible exposure
25 limit to .2 fibers per CC. I was their medical consultant,

1 and I testified in the public hearings as an OSHA witness.

2 Q. And I see that you've done something similar in
3 Canada. Do they have sort of a counterpart to OSHA in
4 Canada?

5 A. Yes. I've consulted with the federal agency in
6 Ottawa that also has that responsibility, also in Britain.

7 Q. And also the U.S. Environmental Protection
8 Agency; you've had some association with that?

9 A. Yes.

10 Q. Doctor, you've testified in court before. Have
11 you ever testified on behalf of the Court, as opposed to
12 one of the parties in the trial?

13 A. Several times.

14 Q. Would you explain how that happens. How it
15 happened with you having to testify for the Court.

16 A. Well, there were two categories of interest in
17 this regard. One was the local federal magistrate who was
18 dealing with asbestos issues, appointed individuals from
19 time to time, to advise her on asbestos cases; be the
20 Court's witness. And I examine the individual and come to
21 a conclusion and provide her with those conclusions. And I
22 think perhaps with the agreement of the parties, but I'm
23 not certain about that, and provide her with an opinion.

24 The other was a somewhat more formal process,
25 where the chief judge of the -- I guess it's the Southern

1 District of Ohio, Cincinnati, set up some panels where he
2 -- a panel of three individuals for each case. He
3 appointed as the Court's witness, the chairman of that
4 panel, and the two other individuals, one was appointed by
5 the defendant, and one by the plaintiff, and they would
6 advise him on the findings in the case. Testimony
7 sometimes was taken, either by deposition or in court. As
8 you might see, the Court's witness was the deciding vote.

9 Q. So you were selected by the Court as the Court's
10 witness to testify on its behalf basically and --

11 A. In three cases; that's correct.

12 Q. Okay. Doctor, I see on your resume a number of
13 publications as a researcher, as well as these other
14 functions. You have published a number of articles over
15 the years?

16 A. I have.

17 Q. Now, the number totals here about 170. Those
18 are publications that are research projects that you would
19 be involved in yourself and with other physicians?

20 A. Other physicians or other scientists who were
21 not physicians.

22 Q. All right. There seem to be a number of
23 articles dealing with the subject of health effects of
24 asbestos?

25 A. That's been a prominent, but not exclusive

1 interest of my research group since 1969.

2 Q. I guess I count over 20 here. So since 1969, at
3 least, you've been interested in researching on the health
4 effects of asbestos?

5 A. Yes.

6 Q. Would it be fair to say that your interest in
7 chest disease, pulmonary disease, has centered on
8 occupational lung disease, occupational dusts?

9 A. Dusts and other injurious inhalants, such as
10 gases, that's correct. It has centered on that. We've
11 expanded somewhat into nonoccupational environmental
12 exposures, as well. Most of it has been occupational;
13 that's right.

14 Q. Your interest since medical school has been in
15 the field of pulmonary disease?

16 A. Exclusively.

17 Q. Now, Doctor, let me ask you, you began to do
18 such research in the late 1960s in this field, asbestos?

19 A. That's right.

20 Q. You're familiar with some studies around -- that
21 were published around 1965 of Dr. Selikoff and others that
22 were reported in the New York annals?

23 A. Yes. I was and am familiar with those; yes.

24 Q. I wonder if you could describe for the jury
25 essentially what Dr. Selikoff's and others findings were

1 with respect to insulators that were published in the study
2 in 1965, and what was the significance of those findings?

3 A. Well, he found that insulators who had for
4 decades been exposed to asbestos in the course of working
5 with insulating materials containing asbestos, had the
6 gamut of asbestos-related diseases. Lung fibrosis, which
7 is called asbestosis, pleural thickening, either diffuse or
8 focal. When it's focal it's called the plaque. They had
9 excess risk of developing lung cancer, and very
10 importantly, excess risk of developing a cancer of the
11 lining of either the chest or the abdomen called a
12 mesothelioma. He also found some excesses in some other
13 tumors that he thought at one point, certainly, and maybe
14 throughout his life, that he thought they were related to
15 asbestos. Others have not been able to confirm that, and I
16 think the judgment on these other tumors is now running
17 against a causal association.

18 But certainly the things I mentioned were found
19 by him and by studies that I've done, and are unequivocally
20 related to asbestos exposure; asbestosis, pleural
21 thickening, lung cancer and mesothelioma.

22 Q. After Dr. Selikoff's 1965 studies, were you
23 interested in doing any continuing research in this field,
24 or did you feel that all the questions had been answered?

25 A. I didn't feel that all the questions had been

1 answered, but that didn't come -- that feeling didn't come
2 in 1965. It evolved actually in the period between 1965
3 and 1969 when I began to see cases of asbestos-related
4 disease coming from local plants manufacturing
5 asbestos-containing products.

6 Q. By local plants, do you mean local to where you
7 were in New Orleans?

8 A. That's correct.

9 Q. Now, in the late 1960s, did you develop a
10 particular interest in research and answering some
11 questions that concerned you about health effects of
12 asbestos?

13 A. I did.

14 Q. Describe for us what those interests or
15 questions were that you had.

16 A. All right, sir. The largest use of asbestos at
17 that time worldwide, was in the making of asbestos cement
18 building products. And no research had been done in that
19 industry to determine what the risk of asbestos-related
20 disease is; which of the conditions were seen in this
21 population, and who, in fact, was at greatest risk. Was it
22 related to how much exposure, fiber type, or both, and so
23 forth.

24 In addition to that, there were a lot of
25 questions that had been raised by others -- not by us --

1 that made it very important to clarify those questions.
2 For instance, some thought that the addition of cement
3 might in some way have an influence on whether an asbestos
4 fiber has harmful effect on the lungs, and there's cement
5 in these products.

6 Q. So I take it then the exact nature of the risk
7 associated with asbestos exposure, you felt needed to be
8 clarified?

9 A. In that industry it's not just the exact nature?
10 I mean, the nature, period, of the hazard, was not
11 recognized. Some people thought, for instance, that the
12 cement protected people from asbestos disease, because it
13 coated the fiber. Others thought that the silica, which is
14 another mineral in the mix -- in these products, which can
15 cause lung scarring by itself, might in some way modify the
16 risk. It might enhance it, or it might show separate
17 effects of silica called silicosis. There were a lot of
18 questions, and I thought it needed to be studied.

19 Q. Now, were you interested in answering the
20 question of the level of risk from exposure to asbestos,
21 and how that was related to the dosage of asbestos that a
22 particular worker might have?

23 A. That was one of the main questions to be
24 answered by a formal, what's called a cohort study, and
25 type of epidemiologic study, where estimates of past

1 exposure for each worker can be made and related to various
2 health outcomes that you measure.

3 Q. Well, Doctor, we've heard a lot about something
4 called threshold limit values, or permissible exposure
5 limits which have been in place, or at least recommended by
6 various organizations for a number of years. Is there any
7 relationship between what you're talking about now and
8 threshold limit values, or permissible exposure limits in
9 the work place?

10 A. There's a precise relationship. Thresh --
11 Setting occupational standards at levels where disease is
12 prevented, or mitigated to such an extent that it's
13 acceptable to workers, depends on knowing what levels
14 produce the disease, and just as importantly what levels do
15 not. And the whole idea of studying human populations who
16 have been exposed in the past, to see how dose -- that is
17 how much exposure relates to disease, presence or absence
18 and how much -- that's what standards are based on.

19 Q. All right. So your study, then, was to estimate
20 the dose -- the dose of exposure in the past for workers?

21 A. That was one part of it; yes.

22 Q. All right. And once you had estimated the dose,
23 then what was your idea? How would that help you?

24 A. Then we would do various things to estimate
25 health, or the absence of health called disease. And as

1 you know, we've had various phases in our study. But the
2 initial phase was focused on looking at evidence of
3 asbestosis and pleural effects. And we looked at x-ray to
4 find out whether or not there are shadows on the x-ray that
5 suggest or might be related to the exposure dose. We
6 looked at the lining of the lung -- the pleural lining of
7 the lung for the same purpose. We looked at lung function
8 -- breathing function, which also provides information
9 having to do with whether the lungs have become fibrotic or
10 stiff, which is what scarring does.

11 --

1 BY MR. STUTTS:

2 Q. Is this study called epidemiological study?

3 A. Yeah. And all of the studies that I have done
4 with the epidemiological studies.

5 Q. And Dr. Selikoff's study of the insulators was an
6 epidemiological study?

7 A. Yes.

8 Q. So the studies that we've heard a lot about
9 through a number of doctors a large group of populations or
10 workers, those are epidemiological studies?

11 A. Correct.

12 Q. Now, tell us, you began to do this study in 1969?

13 A. That's right.

14 Q. Give us some background about the workers who
15 participated in the study and how you happened to study
16 these particular workers.

17 A. There were two plants in the New Orleans area that
18 made these products, these asbestos building products.
19 Roofing shingles, pipe, siding and so forth. The disease we
20 were seeing clinically was coming from one of these two
21 plants.

22 It just so happened coincidentally that in
23 those years before '69, in the late '60s, New Orleans was
24 having an annual course for physicians all over the country
25 in pulmonary function.

1 One of the invitees or visiting lecturers of
2 that course on several occasions was a man by the name of
3 Dr. George Wright. He happened to be a consultant to and
4 also chaired a scientific advisory committee of in
5 inter-industry group called the Quebec Asbestos Mining
6 Association.

7 As we talked about occupational diseases and
8 how they effect physiology obviously it was a natural thing
9 for me to say, yeah, we've been seeing some of those
10 conditions. And he was interested in that. And before long
11 I made the point that this part of the industry which had
12 not been studied should be studied.

13 Q. Why did you think it should be studied?

14 A. Well, for all -- many of the reasons I have
15 already said, that there were too many unknowns. We didn't
16 know what effects they were having, adverse effects due to
17 the asbestos. We didn't know what levels of exposure
18 produced those effects. We didn't know the effect of silica
19 in the mix.

20 Q. Well, what could be the practical results of
21 answering those sorts of questions?

22 A. Prevention of those diseases. That's what it's
23 all about. Looking at those response relationships and
24 preventing disease.

25 Q. Okay.

1 A. One possibility, for instance, would be let's just
2 say for example fiber type tended to be more hazardous. One
3 practical thing would be to see whether or not the
4 manufacturing process could do without that fiber type.
5 There are lot of practical prevention kinds of things that
6 comes out of this kind of research.

7 Q. All right. Then let's continue on with your
8 discussions with Dr. Wright?

9 A. Yes.

10 Q. Tell us how that evolved into your doing the
11 study?

12 A. All right. After discussions he said, well, what
13 do you think should be done. I told him I thought a full
14 cohort population base study should be done. A similar one
15 was going on in the Quebec Beck asbestos mines up in
16 Canada. And I thought we should do one.

17 And he said, well, write a proposal I will bring
18 it up to the scientific committee. And if the scientific
19 committee thinks the science is good -- these were very
20 prominent prestigious people on this committee, if they
21 thought it was good we'll send it up to QAMA and see if they
22 would be willing to fund it.

23 Q. And you did that and QAMA did fund the initial
24 research?

25 A. The initial research was funded by QAMA, correct.

1 Q. All right. The research was ongoing for a number
2 of years as well as studies or analysis of the information
3 that you got out of the studies?

4 A. About twenty years.

5 Q. About twenty years?

6 A. From 1969 to roughly 1989.

7 Q. Was the QAMA the sole source of the funding for
8 this grant?

9 A. No, sir.

10 Q. What were the other sources?

11 A. Within three years I was successful, along with my
12 colleagues, in competing for an NIH grant, the specialized
13 center of research and occupational lung diseases, that was
14 funded in 1972. And one of the projects was this study of
15 asbestos cement workers.

16 And for a number of years, because epidemiologic
17 studies are rather expensive, joint funding by the NIH and
18 QAMA allowed us to do the work. Ultimately the QAMA funding
19 was discontinued.

20 Q. And the NIH funding continued on?

21 A. Continued on.

22 Q. The studies of these workers in New Orleans, tell
23 us what the plant settings were, what companies were
24 involved.

25 A. Well, there were two plants. One was on the New

1 Orleans side of the river, there was a National Gypsum
2 plant; the other was on the other side of the river.
3 Mississippi river. And that was the John's Manville plant.
4 The Manville plant was larger and had various components
5 which allowed us actually to separate the risk by some
6 things that became very important.

7 Q. Like what?

8 A. Well, like fiber type things.

9 Q. You mean they were using different types of fiber
10 at different parts of the plant?

11 A. That's right. They had a pipe plant which was
12 quite distinct which was the only place where crocidolite
13 was used, as an example.

14 Q. Okay.

15 A. We worked with the union representatives of those
16 plants, we told them what we were going to do. We developed
17 informed consent. We told people that we would like them at
18 the time they agreed to participate to give us name of a
19 physician or, if they like the plant physician to send
20 information that we would consider important to their
21 immediate medical condition or health, a mass that looked
22 like it could be a tumor or a large heart or an aneurysm or
23 something that we needed. And that we would in fact make
24 that information available.

25 Now, as far as the information about what we were

1 studying, that is, the small opacities on the x-rays -- do
2 you want me to just continue this?

3 Q. Yes.

4 A. That was a matter that we didn't know what the
5 significance was yet, because we hadn't done the study. We
6 didn't know wherein fact the dose response relationship
7 would ultimately emerge. Whether it would be at these
8 lowest levels of opacities, which would mean a dust effect
9 or something higher.

10 So we became aware and they made us aware of the
11 fact that these workers were all being monitored and had
12 been for many years for dust affects with counseling by
13 physicians, either Manville physicians or their contract
14 physicians. And that was going on concurrently
15 simultaneously. That's where the health and medical
16 physician-patient relationship was. We were doing the
17 research, we weren't making diagnosis, this was not a
18 one-on-one medical event.

19 What, in fact, was happening on a given day 4 or 5
20 workers would come into the laboratory, they'd get their
21 x-rays, they would have their lung function tests done, they
22 would have their blood pressure done, they would do an
23 exercise test and they would go back. I wouldn't see them
24 actually.

25 Q. Then you would put this information on standard

1 forms?

2 A. Standard forms.

3 Q. So that everything was standardized for the
4 workers. Now, was there a time -- we're talking about
5 National Gypsum and Johns-Manville, was there a time that
6 your relationship with National Gypsum and its workers who
7 were part of the study became different from the work you
8 were doing at Johns-Manville?

9 A. Yes. One of the plants, it was National Gypsum,
10 asked me if I would -- this was now in my role not as a
11 researcher but as a chest physician, would I undertake the
12 by then OSHA mandated annual examinations of their workers,
13 report to them, counsel them, do all the things that
14 physicians do when in fact they have that medical
15 responsibility. That was sometime in the '70s, sometime
16 after '72. I can't remember exactly when that started.
17 Maybe 73, '74, something of that sort.

18 I did that. And whenever I found any
19 evidence on the chest film that might have been a dust
20 effect, this was now my responsibility because there wasn't
21 anybody else doing it, my responsibility to ask the plant to
22 arrange to have the worker come to my office, I would talk
23 to them, write a note about what I found, advise him and the
24 plant usually about recommendations concerning further
25 exposure or absence of further exposure. And do whatever I

1 could to help them make a decision on that.

2 Q. This work was being done out of Tulane pulmonary
3 disease section at Tulane?

4 A. That's right. This was not research funded
5 through all the things I've already talked about. This was
6 a different medical responsibility that I undertook to do
7 these examinations on individual workers. Which I did for a
8 number of years.

9 Q. Let me ask you about the information that you
10 gathered from the studies. How long did the study or the
11 information gathering part go on?

12 A. Until about 1980.

13 Q. All right. And that information consisted of
14 getting an estimate of dosage for each of the workers, that
15 is, their historical dosage?

16 A. Right.

17 Q. Pulmonary function tests?

18 A. Yes.

19 Q. Chest x-rays?

20 A. Right.

21 Q. Anything else?

22 A. No. That's essentially it. The lung function
23 tests were pretty comprehensive. I mean they measured more
24 than use spirometry, but yes that's it.

25 Q. Now, was the goal to try to answer in one paper

1 the question that you've talked about earlier, that is, the
2 risk and dose, or were there a number of questions that you
3 were hoping to be able to answer from this study?

4 A. Well, there was a number of questions. First, the
5 being able to develop dose response relationships was, of
6 course, very important for asbestosis and pleural
7 thickening. And that's all we've been talking about so far,
8 those affects. Those affects you measure in living
9 individuals.

10 We also wanted to see whether or not they were
11 differences in how the lungs responded to different fiber
12 types. Clearly we wanted to know something about
13 progression of the disease. That is, if condition were
14 present in 1970, and you took repeated x-rays for the next
15 decade, the next ten years, how often would it get worse
16 during that period of time. And if it got worse what did
17 that relate to. What made the difference about whether it
18 got worse or whether it didn't. Those were all things we
19 were looking at.

20 Q. And the analysis of the information that you had
21 then was put into your scientific papers, your research
22 papers and published?

23 A. Everything we're going to talk about today and I
24 have talked about for years has been published.

25 Q. About how many studies do you think came out of

1 this research in New Orleans?

2 A. Well, we had --

3 Q. By studies I mean papers.

4 A. -- about four studies but a lot of papers. And it
5 depends on what you -- well, you've probably counted, and
6 the number you suggested earlier, the formal papers focusing
7 on one study. But there are a number of other papers that I
8 and my colleagues have written that included the research
9 that we've done. It might be as many as forty, or perhaps
10 more.

11 Q. In looking at some of the titles I see that there
12 are some that deal with the effect of asbestos on the immune
13 system?

14 A. Yeah, that kind of thing.

15 Q. So it was a fairly broad range of study done by a
16 number of researchers, that is, the data was shared?

17 A. I had a lot of help.

18 Q. All right.

19 A. Those are the people that really did the work.

20 Q. Doctor, I want to put on the screen up here -- and
21 it may be easier if you can could down and come to this TV
22 screen here. But the graphs, the first one on dust
23 response.

24 I'm going to ask you, could you come down here and
25 then we can talk about what your studies -- what you found.

1 BY THE COURT: Yeah, you can step down.

2 BY MR. STUTTS: If that's acceptable
3 to the court.

4 BY MR. STUTTS:

5 Q. Why don't you come right here and we can look at
6 this screen.

7 A. Okay.

8 Q. Okay. Now, this first page they were looking at
9 it says studies of cement workers, and I think this is a
10 description of the studies.

11 A. Yeah, very quickly. This was the initial study
12 that I mentioned, we studied about a thousand workers. We
13 estimated how much asbestos they had been exposed to, we
14 looked at the x-rays, the lung functions and so forth and we
15 developed dose response relationships. How much exposure
16 did what to the workers. And that's called a
17 cross-sectional study because you're looking at people at
18 one point in time.

19 The longitudinal study is taking some of those
20 people and following them repeatedly over time. And that's
21 where you get information about progression. I mean if
22 asbestosis is present and it's doing such and such now, does
23 it get worse and if so what makes it get worse. That has to
24 do with dose as well.

25 Mortality, we hadn't talked very much about. But

1 a mortality study can be done one of two ways. One is you
2 could identify a population today and then follow them for
3 the next thirty or forty years. That's difficult. Some of
4 us don't work that long but sometimes we can do that and I
5 will show you how would we did that in a moment.

6 But most of the time the way you do a mortality
7 study, which is the main way to find out about cancer risk,
8 is how Dr. Selikoff found out about the insulator risk is
9 how most people found out, is they identify a group of
10 people exposed to something, in this case asbestos, in the
11 past. Say from 1930 or 1940 or whatever on. You identify
12 those people, you follow them up, you find out who is dead
13 and alive and if they're dead what did they die of. You
14 again you estimate their exposures to asbestos in this case
15 and that's sort of a classical retrospective cohort study.

16 Q. All right. That's taking exposures in the past
17 and then looking at the experience as it progresses?

18 A. Exactly.

19 Q. All right.

20 A. And what -- we did that and we found the same
21 kinds of diseases that others had found. And I suspect
22 we're going to look at that in a minute.

23 Q. Yes.

24 A. Now, the last study had a special purpose.

25 Remember I said we started the study in '69, let's just use

1 '70 because we really went from '69 to '70 and to '71. So
2 let's just us '70 as a convenient time.

3 What we did in the mid-'80s is to look at
4 everybody we had seen in 1970 and prospectfully now, not
5 retrospectfully, but going forward from that point looking
6 to see what their health outcome was. Some people in the
7 period like that, certain ages, as you know, will. What did
8 they die of and so forth.

9 And the point there was to see what -- not just
10 where the dose of asbestos influenced lung cancer risk, but
11 the question of what role does asbestosis have in the lung
12 cancer.

13 Q. Asbestosis being?

14 A. Lung fibrosis.

15 Q. Lung fibrosis?

16 A. Due to asbestos.

17 Q. Okay.

18 A. All right. That really -- it's only four little
19 lines here, but it's twenty years worth of work.

20 Q. All right. The most recent publication in this
21 area --

22 A. Is that one.

23 Q. -- is this one and that would have been when?

24 A. 1991.

25 Q. 1991. Let's see. Terry, can you put up the

1 British journals.

2 Now, we have -- the title of your paper, tell me
3 which one that is.

4 A. All right. Up here it says British Journal of
5 Industrial Medicine, 1991.

6 Q. British Journal of Industrial Medicine. Now, is
7 that a peer review research journal?

8 A. Yes, it is. And the title was, "Asbestosis As A
9 Precursor Of Asbestos Related Lung Cancer, Results Of A
10 Prospective Mortality Study." Great advantages of doing it
11 prospectfully, as I will perhaps mention in a moment.
12 Authored by Dr. Janet Hughes.

13 I might just mention who Dr. Hughes is. Dr.
14 Hughes is my statistical colleague. She's the quantitative
15 person.

16 Q. All right.

17 A. And we work together.

18 Q. And you worked together for how long?

19 A. We've worked together for a long time. Fifteen
20 years.

21 Q. Okay. Let's put up the first -- what I think is
22 the first study. Let's see if I'm right.

23 Now, this is 1973, I believe?

24 A. I think that's right.

25 Q. And what is this -- this was the first paper to

1 come out of your research?

2 A. Yeah, that was the cross-sectional, the first
3 thing that we saw on that list of phases or studies. And it
4 was the study that showed that both x-ray evidence of lung
5 fibrosis, asbestosis as well as lung function evidence it
6 was related to how much exposure there had been.

7 Q. All right. So your studies then, at least your
8 publications, your papers, span the period '73 through '91?

9 A. Right.

10 Q. Okay. Let's go back to the next graph here.
11 Let's start with some of your early findings. And if you
12 can tell the Ladies and Gentlemen about this.

13 A. This is just to introduce the concept. We've been
14 talking about dose response this morning and I'm sure you
15 have heard it in the months past as well.

16 Let me just -- once again just mention what we're
17 really talking about. We're saying that if you look at a
18 population and they have different levels of exposure. Some
19 had -- just using simple numbers here, these numbers of
20 course don't mean anything the one, two, three, four, five
21 but there are numbers that might be a ten, a twenty, a
22 thirty or a hundred or whatever. But one is less exposure
23 than two and so forth.

24 Increasing exposure this way, increasing risk of a
25 disease as you go from here, a hundred, if it's a

1 standardized mortality ratio means there's no excess risk
2 and the two hundred means it double the risk of the general
3 population.

4 But generally speaking, if you find that even
5 though everything doesn't fit on an exact line the
6 observations are, you know, scattered around, that there is
7 a linear, a proportional relationship between how much
8 exposure and how much disease.

9 So that if you're exposed up here you're likely to
10 have -- you have a greater chance of disease. If you're
11 exposed down here, you have a much lower chance of disease.

12 Q. So that's the dose response?

13 A. Yeah.

14 Q. All right. Let's have the next one, please. Now,
15 does this get into what your findings actually were?

16 A. It does. And again in getting these dose response
17 relationships everything isn't perfect because our measuring
18 isn't perfect. For instance, at the low end of the x-ray
19 pattern that at some point clearly means asbestosis, there's
20 a lot of uncertainty because little opacities at very low
21 levels happen in a lot of people due to a variety of other
22 things, other than mineral dust, such as silica or
23 asbestos.

24 So this doesn't go quite to zero, nor does the
25 lung function abnormality because again people have lung

1 function abnormalities for a lot of reasons. So at the very
2 lowest working exposure of this working population you can
3 see nothing much happens until this exposure level and then
4 you start to get when we call a dose response relationship.

5 Q. Let me ask you a question.

6 A. Sure.

7 Q. How do you know what the dose would have been for
8 a particular worker? Can you know that precisely?

9 A. Can we know that precisely, no; can we know that
10 reasonably well, yes.

11 Q. Now?

12 A. What we do is this. Let's just take a simple
13 example of a man or a woman, these were mostly men, working
14 in a plant for twenty years. And there were measurements of
15 how dusty various jobs were. And he had -- he worked in one
16 job for the first five years, making it simple, another job
17 for the second five years and so forth.

18 So we take the first five years and we have a time
19 that and we make an estimate of what his level of exposure
20 on average each day would have been by the measurements in
21 that job in that period, '60 to '65.

22 Q. Where do you get the measurements?

23 A. From measurements that were actually taken in the
24 plant. So that's the first part of his cumulative
25 exposure. Then the next time you can already tell what's

1 happening here, now the next time we say he was in another
2 job, he was a finisher of a product. And we know what the
3 exposures in that job were in that time period. Both things
4 have to be taken into account.

5 But we give them product a time, the time times
6 the exposure for that five years. Well, we're going to get
7 four numbers and we add them altogether. Four products of
8 time and concentration. We add them together and that's the
9 cumulative exposure.

10 We're not the only one who has done this, it's a
11 pretty standard way of doing it when you have the
12 opportunity to do it. Now, there are a lot of helpful
13 studies, such as the insulator studies, which you mentioned
14 earlier, where no dose could ever be determined.

15 Q. Why not?

16 A. Because they didn't have any measurements.

17 Q. Let's continue on with this graph right here.

18 A. Well, again, it just shows that at some point here
19 what was being seen on the x-ray and what was being measured
20 in the lung function was related to how much dust that
21 individual was exposed to. There's dose dependency starting
22 here and starting here.

23 Q. So on the vertical side here this says percent of
24 abnormalities?

25 A. Right.

1 Q. All right. And so this number goes up as the
2 cumulative exposure goes up then?

3 A. Correct.

4 Q. All right.

5 A. And for lung function you have to figure that in a
6 slightly different way. It's the other way that on average
7 lung function goes down as cumulative exposure.

8 Q. In other words, the ability of the lungs to
9 perform, the function goes down as the cumulative exposure
10 goes up?

11 A. When it produces fibrosis or severe pleural
12 effects.

13 Q. Okay. Let's go to the next graph.

14 A. I said that we also were able to look at one part
15 of this population, the ones actually who had been most
16 heavily exposed over time, because they were the oldest and
17 had been there the longest. We did that over a ten-year
18 period. Approximately 1970 to 1980.

19 And what we found was how many, out of this whole
20 group, what percentage got worse over that ten-year period,
21 if they had asbestosis, or included in this percentage of
22 about thirteen or fourteen percent, included in that would
23 be somebody who didn't have anything on the x-ray in 1970
24 but developed it by 1980. Which would also be progression
25 of asbestosis.

1 And we did the same thing for the pleural effects
2 and the percentage there was somewhat higher, closer to
3 thirty percent. And then any abnormality means either this
4 or this.

5 Q. All right. What's the significance of that
6 finding?

7 A. Well, the significance is that you can tell about
8 how many people in a ten-year period are getting worse and
9 what is shown only by these words very important is the
10 likelihood that someone is going to be in this thirteen
11 percent was determined by how much exposure they had, that
12 is, the dose dependency.

13 Q. All right. So progression also depended on dose?

14 A. Exactly.

15 Q. Okay. Let's see the next one.

16 A. Well, there is just a slightly different way of
17 showing the same thing. It actually shows again the
18 progression. If instead of looking at the 1970 and 1980
19 x-ray side by side and asking these readers who don't know
20 anything about the cases, they just see the films, instead
21 of doing that you shuffle all the first films and all the
22 second films and ask them to read them independently and you
23 find that this percentage had abnormalities suggesting
24 asbestosis in 1970, this percentage had it in 1980. And if
25 you look at pleural it's this percentage and this

1 percentage. It shows you there was progression. But it's
2 different technique and perhaps not important for this
3 purpose.

4 Q. Let's rook at the next one.

5 A. Now, one thing that I think is of interest and is
6 important, is that whether or not in this ten-year period
7 asbestosis progressed, was very dependent on whether the
8 first film, the 1970 film actually showed asbestosis. And
9 this shows that point here.

10 For instance, the dash line is when the first film
11 was positive. You can see that across these exposure
12 groups, even in the lowest exposure group if you already had
13 a positive film plenty of fiber in the lungs, you already
14 had close to forty percent chance of progression.

15 If you were in the highest exposure group and your
16 first film was positive you had over seventy to seventy-five
17 percent. If the first film was negative, that is, didn't
18 show any evidence of asbestos-related effects in the lungs,
19 the percentages are very much lower from about close to
20 eight percent to twelve percent.

21 Q. Okay.

22 A. And the reason for that is that asbestos fiber
23 does have a long-term effect and that the people who had the
24 films positive the first time had a higher exposure than --

25 Q. Again dose related?

1 A. -- dose. That's the story.

2 Q. All right. Now, we have a graph dealing with lung
3 cancer. Explain that to us.

4 A. The first thing you can see here is that all
5 research doesn't come up with one line. You actually have
6 little jigs jugs jags. But basically you have a linear
7 relationship here. This was the retrospective cohort
8 mortality study.

9 And what we found -- let me review again, these
10 are standardized mortality ratios for a lung cancer. You
11 get that by comparing the -- in a particular exposure group
12 the number of lung cancers with the number you would expect
13 in the general population if they hadn't been exposed to
14 asbestos.

15 Now if -- and you multiply it by a hundred. You
16 don't have to multiply it by a hundred, and then you get a
17 one instead of a hundred. So you can do it either way and
18 you'll see it both ways. Some people do it both ways.

19 Anyway, if you have a hundred it simply means that
20 there was no excess risk. If you have say twenty-five it
21 means there was a twenty-five percent of increase in risk.

22 Q. Twenty-five percent increase in risk for the
23 exposed group --

24 A. Versus the comparison.

25 Q. -- compared to the general population?

1 A. That's right.

2 Q. Okay.

3 A. And if you get up here and you have say a two
4 hundred in one of these exposure groups it means you have
5 twice the risk. That those workers overall had twice the
6 risk of developing lung cancer than someone in the general
7 population not exposed.

8 Q. Okay.

9 A. And that's it.

10 Q. Let's go to the next one.

11 A. Now this goes to the last phase of our research.
12 There has been suspicious for many years, wide suspicious
13 internationally that asbestos produces a lung cancer risk
14 because it first produces asbestosis. That in fact it's the
15 fibrosis and the things that make the fibrosis, the tissue
16 response that makes the fibrosis, that is probably the
17 important factor in excess lung cancer risk.

18 So what we did -- in order to assess this, you
19 couldn't do it on that retrospective study because you
20 didn't have the x-rays, number one, you didn't have smoking
21 history and smoking confounds or interferes with appropriate
22 analysis on that.

23 But what we did and without over -- making this
24 overly complicated, we took those people where we all this
25 information in 1970, followed them to the mid-1980s, some of

1 them died, some of them died of lung cancer and we looked to
2 see by x-ray category in 1970 what in fact their final -- or
3 their outcome was.

4 And we found that if they didn't have any x-ray
5 changes at all, in the lungs or the pleural surface -- let's
6 just concentrate on this darker bar.

7 Q. Now, what's the darker bar?

8 A. Lung cancer risk. Remember if it's a hundred and
9 I've drawn a line across there it's normal. It can even be
10 above or below and it may not be significantly different.
11 And that's why we have people like Dr. Hughes who you do the
12 statistical analysis.

13 But there was no excess risks in those people who
14 did not have x-ray evidence of asbestosis. And actually for
15 what we did further was to see well let's be sure it's not
16 just to how much exposure they had and we separated the
17 long-term employees who didn't have x-rays changes and again
18 no excess risk.

19 Q. So you had some long-term employees in the cement
20 plant who did not have x-ray changes?

21 A. Right.

22 Q. You put them into a separate group?

23 A. That's right.

24 Q. And studied them?

25 A. Yeah.

1 Q. And found no excess risk of cancer?

2 A. Right, now we did the same thing to people who had
3 only pleural effects, like plaque or pleural thickening.
4 And this bar, as I warned you, goes above this line little
5 bit. But what this is -- really represents is two cases
6 with one and a half expected and it comes nowhere near being
7 statistically significant. So that is not different than
8 this from a statistical standpoint.

9 Now, small opacities -- and you may hear more
10 about those, are these little shadows that at some point
11 means there's asbestosis or some other pneumoconiosis. The
12 trouble is they're nonspecific.

13 Q. What do you mean by that?

14 A. A small opacity on x-ray doesn't say it's due to
15 asbestos, doesn't say it's due to silica, doesn't say it's
16 due rheumatoid arthritis or sarcoid or anything else. All
17 it is is a shadow.

18 Now, when we seal the shadows and we have an
19 occupational history to asbestos or silica and the pattern
20 is right we're very likely to -- and there's no reason to
21 make one of these other diagnosis, we're very likely to say
22 this is asbestosis. And that's what we did do when we are
23 in fact making a diagnosis. In the research we don't always
24 make diagnosis, but when we do that's what we do.

25 But in fact what we have here is the very lowest

1 A. Our study would show, and others have confirmed
2 this now and whatever evidence there is is concurrent with
3 this, that there is no excess lung cancer risk in such an
4 individual.

5 Q. And if the excess lung cancer risk is present --

6 A. But remember I said excess. Which is different
7 than saying there's no long cancer risk. Of course there's
8 a lung cancer risks because most lung cancer is due to
9 smoking. There's no excess which we would attribute to
10 asbestos.

11 Q. No excess that you would attribute to asbestos
12 over the general population?

13 A. Of smokers.

14 Q. Okay. All right. But then there is an excess
15 risk, if I understand you, once asbestosis is detected?

16 A. Big time.

17 Q. And asbestosis, I think the title of your '91
18 article is something like asbestosis as a precursor to
19 development of cancer. What does that mean?

20 A. Well, it means it comes first.

21 Q. All right. And that it's necessary for it to come
22 first in order to attribute a lung cancer to asbestos
23 exposure?

24 A. That's what we believe. And as I have said, there
25 are others who also have that view and there are more

1 studies now that suggest that.

2 Q. All right. You can take your seat.

3 A. (Witness complying).

4 Q. Doctor, have there been studies having to do with
5 the risk or the incidents of disease, studies done by
6 occupational type -- you mentioned insulators, have there
7 been other studies?

8 A. Yes, there have.

9 Q. Okay. Now, why would studies be done concerning
10 particular occupations and whether or not they were --

11 A. Well, because the -- there has been an enormous
12 variability, there have been enormous differences in risks
13 of these conditions based on which part of the industry
14 workers have been.

15 For instance, in making friction materials,
16 brakes, clutch facings, the two main studies on both sides
17 of the Atlantic failed to find an excess lung cancer risk
18 like we did.

19 The Asbestos Textile Industry has a higher level
20 of risk in the major study that was done in this country on
21 that. Mining and milling of asbestos has a rather low, not
22 as low as friction materials, but a very low level of risk.
23 Our studies of asbestos cement manufacturing workers, the
24 risk is sort of intermediate.

25 So there are striking differences. And those

1 differences if you are trying to model or do quantitative
2 risk assessment, those differences are important to plug in
3 to get the right estimate of risk.

4 Q. All right. Now, I don't mean to insult you by
5 this question, but I assume that the risk is not because of
6 the occupation, that is, the lungs of a brake worker are the
7 same as the lungs of a textile worker. What is it that
8 enhances the risk?

9 A. Well, in my view it would have to be one of the
10 things that go into determining asbestos fiber potency.

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1 The mention of a fiber -- just for example, textile fibers
2 may be longer than fibers in some other part of the
3 industry; how much fiber is airborne, and that may have a
4 lot to do with the product and its potential for releasing
5 fiber.

6 Q. All right. How much is airborne? I assume that
7 that basically is what dose is.

8 A. Dose, yeah.

9 Q. All right.

10 A. Or concentration.

11 Q. All right.

12 A. Fiber type. And, that is, whether it's
13 chrysotile or amosite or crocidolite, we know from certain
14 of these conditions is important. And it's probably easiest
15 to think of the third and the fourth that I'm about to give
16 as really probably the same because it's the fiber type that
17 probable determines tissue persistence. How long does the
18 fiber stay in the lungs? It used to be thought that all
19 asbestos fibers stayed in the lungs forever. They don't.
20 Some tend to dissolve and disappear.

21 Q. You mentioned releasability and I think I cut you
22 off when you were about to explain that. What did you mean
23 by that?

24 A. Well, if you have a bag of crude asbestos, as
25 people did at the beginning of the industry that I studied,

1 dumped it into a wet slurry, all you've got is pure fiber
2 that's ultimately releasable. You could call that a
3 hundred. It's very releasable. It's dusty. And what you
4 get up there is fiber, because that's what's packaged.
5 That's what's in the bag.

6 Q. Well, its dose -- its potential is to produce a
7 heavy dose?

8 A. That's right. Then you have products that are
9 manufactured to be pretty loose in terms of the cohesion of
10 one fiber to another, or they just result that way from the
11 manufacturing process. Insulating materials are good
12 examples. Asbestos cloth are other examples. Those are
13 pretty dusty products because fiber can get out pretty
14 easily. That is, if it's manipulated, if it's torn, if it's
15 cut, it's easy for the fiber to become airborne. And that's
16 moderately releasable. Pretty releasable. Then you have
17 fibers, such as I mentioned brake linings, in a matrix where
18 in fact it is bound. Asbestos cement products at the very
19 end probably fit generally into that category. That is, for
20 the person who is using the asbestos cement product in the
21 field, fiber releasability is less than it would be if they
22 were using another product.

23 Q. But for the asbestos cement product I take it, it
24 depends on what that worker is doing with the product.
25 We've seen films of a test Dr. Millette did showing cutting

1 of a combination of Micarta and Marinite -- Johns-Manville
2 Marinite. It was a very dusty operation. So I think it
3 depends on what you do with the product.

4 A. Right. That's right. I'm not even sure that
5 Marinite is what I was referring to. I'm thinking of the
6 asbestos cement products that were made in the plants that I
7 studied such as corrugated siding or pipe where there was a
8 tighter bind be, I believe.

9 Q. Dr. Weill, have you had any experience in looking
10 at exposures or dosage in shipyards?

11 A. Well, I've visited shipyards. I've also
12 examined -- now again, not my role as a searcher but my role
13 of consulting physician examined and talked to hundreds of
14 shipyard workers. I am somewhat familiar with the potential
15 for asbestos exposure in shipyards.

16 Q. So you've examined shipyard workers as a
17 physician in order to diagnose whether or not there was
18 disease present?

19 A. Right.

20 Q. And did you take occupational histories?

21 A. Yes, I did.

22 Q. And learned various sources of exposure that the
23 shipyard workers would have encountered over their working
24 history?

25 A. Well, it would depend on what their job was and

1 1 what part of the ship that were working in. Marine
2 2 engineers, for instance, and people who work in engine rooms
3 3 were exposed to insulating materials around boilers and
4 4 pipes. They continually have to move boiler's insulation
5 5 for inspections, for repairs and so forth. We studied,
6 6 actually, a group of marine engineers that had evidence of
7 7 asbestos-related disease.

8 Q. The group of marine engineers came from where?

9 A. They were members and this is who funded our
10 study -- members of the Marine Engineers Beneficial
11 Association, which is an AFL-CIO union.

12 Q. So it was a union funded study?

13 A. Yes, that's right. Other workers might be
14 involved in bulkhead insulation. Others would put on
15 preformed pipe insulation. Others, such as welders, would
16 use asbestos cloth and blankets extensively. Others would
17 use products like Marinite, siding or paneling as you said.

18 Q. Now, we're here, the ladies and gentlemen of the
19 jury, we're here and have been here for months to talk about
20 and assess products, certain specific products in the
21 shipyard. Have I asked you sometime ago to become familiar
22 with a product known as Micarta?

23 A. Yes, sir.

24 Q. And what have you done to familiarize yourself
25 with that product?

1 A. Well, I've read the product material which was
2 provided by the manufacturer. I've actually visited the
3 plant which makes Micarta.

4 Q. In Hampton, South Carolina?

5 A In Hampton, South Carolina. I've watched a
6 videotape that reminded me of the various procedures,
7 actually which was done around the time of my visit. And,
8 of course, I have some familiarity with the product in
9 general, as anyone who might have seen some glistening,
10 shiny material on various -- on various surfaces.

11 Q. So you've become familiar with Micarta. You are
12 familiar with usage of other products in the shipyard. You
13 are familiar with usage of insulation products such as pipe
14 covering?

15 A. Yes.

16 Q. And the fact that insulation cement is used
17 heavily throughout the ships?

18 A. Right.

19 Q. Let's talk about the exercise that you would go
20 through, or someone in your field, to try to determine
21 sources of exposure and the significance of various sources
22 of potential exposure to a worker in the shipyard. In other
23 words, if you were given the job of assessing the
24 significance of various products and their potential to
25 expose the worker a meaningful way, how would you do that?

2 1 A. Well, that's pretty much how I do do it. I ask
2 2 the worker to what product -- first of all, what he did.
3 3 What his job was, whether it was always the same or did it
4 4 change; how long was he there; and to what products that
5 5 might have contained asbestos did he -- did he work with.
6 6 Ultimately, some judgments are made as to where likely
7 7 exposures might have come from. And once you decide where
8 8 exposures might have come from, if asked, one makes a
9 9 judgment as to whether all the exposures were the same or
10 10 some tended to be very much higher than others.

11 Q. We've heard a lot over the course of the past two
12 months about asbestos effects, asbestosis, whatever the
13 change may be, whatever the effect may be; that is, a
14 cumulative effect?

15 A. Yeah.

16 Q. And that's depends on the cumulative -- I guess
17 to use your studies -- dose?

18 A. Yes.

19 Q. And we've heard testimony from various doctors
20 who will say that each exposure, each fiber contributes to
21 that cumulative dose. And you agree with that, don't you?

22 A. Yes, as long as it is, in fact, considered in the
23 following way: That all exposures, if you know about the
24 exposures, make up a cumulative exposure. That's the way
25 it's calculated, as I explained earlier. You look at all

2 1 the exposures and it is a cumulative exposure. Part of that
2 cumulative exposure would be any of the exposures in that
3 matrix or that period. Now, there are a lot of other
4 questions I would have to ask, now having said that.

5 Q. Such as?

6 A. Well, I mean, are all these exposures equivalent
7 in amount? Would some of these exposures, if they were not
8 associated with the other exposures, have had any potential
9 of producing disease? Those kinds of questions.

10 Q. All right. So, in looking at the question of
11 exposures in a shipyard, you are looking at the question of
12 the significant exposures and insignificant exposure?

13 A. Well, that -- one could use those terms. They
14 usually don't mean very to people. Exposures are different
15 in amount. They are quantitatively different. And I guess
16 one looks at very, very minimal or small or negligible
17 exposures, which we've all had as we walk around a building,
18 never working with asbestos in a job. And then there are
19 very high exposures which are likely and have in the past
20 produced disease, and everything in between.

21 Q. Given your experience in the shipyard and what
22 you've seen of the use of asbestos products in the shipyard,
23 I assume that it's the products that have the greatest
24 release potential and are used in the greatest quantity that
25 have the greatest potential for exposure to the workers in

1 the shipyard?

2 A. That's exactly right.

3 BY MR. STUTTS: Your Honor, if we might take
4 the morning break.

5 BY THE COURT: We'll go a few more minutes.

6 About five more minutes

7 BY MR. STUTTS (continuing):

8 Q. Those sources of exposure or products in the
9 shipyard -- I think you've described insulation cement that
10 came in bags, loose lags?

11 A. The raw materials.

12 Q. Yes.

13 A. They came in bags, yes.

14 Q. All right. And block insulation. Are you
15 familiar with that?

16 A. Yeah. Now, which context are we talking about?

17 Q. Talking about use of asbestos products in the
18 shipyard.

19 A. In the shipyard.

20 Q. Yes.

21 A. Yes, block insulation. Right.

22 Q. All right. Now, if you take a given worker and
23 you want to assess or you need to assess whether or not, or
24 what potential exposures may have been significant during a
25 working lifetime, how would you go about doing that? What

1 factors would you take into account as they relate to that
2 worker?

3 A. Well, what you would do, if that were the
4 question being asked, is you would try to order the
5 exposures from, as I've already said, a very minimal or
6 perhaps even negligible, all the way through increasing
7 exposures to very high. And you -- one could even put
8 numbers to this -- and that's what statisticians do. And go
9 through a formal risk assessment, quantitative risk
10 assessment process, and say, well, if the exposures were to
11 product "A", this would be the risk. And it would be a very
12 low risk, one in a million or something. If you go through
13 the middle, it would be a much higher risk -- say one in ten
14 thousand or whatever. And a very high risk might be quite a
15 few in one thousand. So you don't always do that in every
16 case, of course, because that isn't usually the question,
17 except in a place like this.

18 Q. Except in a courtroom?

19 A In a courtroom. That's not usually the question
20 being asked. But you can do that. And I think we all do it
21 implicitly; that, in fact, where were the serious exposures?
22 That's what a physician would --

23 Q. Let's take product "A." Would the occupation of
24 the person that you are looking at be important to know?

25 A. Yeah, very important.

1 Q. Why?

2 A. Because, depending on -- well let's just say
3 product -- you said product "A" -- it would be important to
4 know did that individual have primary responsibility to deal
5 with product "A" or did he just come in contact with product
6 "A" on an occasional basis -- once a week, once a day, once
7 an hour? So, what he did, that is, what his job was in
8 relation to product "A" would give you some additional
9 information about exposure.

10 Q. Well, that gets me back to the question of dose.
11 Your answer doesn't suggest that dose may consist of a
12 couple of different things. One is the amount or
13 concentration that you get from a particular product?

14 A. Yeah.

15 Q. As well as the frequency with which you are
16 exposed to that?

17 A. Frequency comes into the second part of that
18 product called duration. You add all the frequencies
19 together, if you know how long the frequencies were, how
20 long the frequent or infrequent exposures were, and you get
21 duration of exposure. That's right.

22 Q. And those two products -- not the products. The
23 sum of those two things is the dosage?

24 A. The Cumulative dose.

25 Q. All right. Cumulative dose?

1 A. Right.

2 Q. And to sum that up every day over a twenty-five
3 year working history, you have a twenty-five year cumulative
4 dose of whatever products you've analyzed?

5 A. Right. Of course, no one has ever done that. I
6 mean, you -- there's no way that you can actually get every
7 day over a twenty-five year period someone's concentration
8 of asbestos exposure to be able to sum that up over the
9 twenty-five years.

10 Q You mean all the studies that we've had over the
11 years, that hasn't been done?

12 A. Well, not what you've just said. What has been
13 done, as I indicated before, is you take a time period,
14 whether it be five years, three years or whatever, and you
15 make estimate based on measurements and job. You make an
16 estimate of what the average concentration was for that time
17 period. You know what the time period is, so that's the
18 product for that part of the cumulative exposure and you add
19 them all together.

20 Q. So if you wanted to be perfectly accurate, I
21 mean, if you could create this sort of hypothetical
22 situation where you would know exactly over the twenty-five
23 years what the exposures were, you would need to have some
24 kind of a measuring device every day or you'd need to have a
25 notation about what that person was doing every day and what

3 1 their relationship was to products A through Z.

2 A. That's right.

3 Q. But we don't have that?

4 A. That comes as a surprise? We don't.

5 BY THE COURT: All right, Mr. Stutts, we'll
6 take our break now. Ladies and gentlemen, we'll
7 take about thirty minutes.

1 8 (AFTER A SHORT RECESS, THE FOLLOWING
9 PROCEEDINGS WERE HAD IN THE PRESENCE OF THE
10 JURY.)

11 BY THE COURT: Ladies and gentlemen, I have
12 another list I forgot to give you. This is the
13 one that's broken down by defendants

14 BY MR. WILKINSON: Your Honor, may we
15 approach for a minute?

16 (OFF-THE-RECORD DISCUSSION AT THE BENCH.)

17 BY THE COURT: Go ahead, Mr. Stutts.

18 BY MR. STUTTS: Thank you, Your Honor.

19 BY MR. STUTTS (continuing):

20 Q. Dr. Weill, is your mike on?

21 A I think so.

22 Q. Speak and we'll know.

23 A. I think it's on.

24 Q. Okay. Dr. Weill, just before the break we were
25 talking about dosage and exposures in the shipyard and how

1 1 you would assess, to kind of analyze sources of exposure for
2 2 the worker in a shipyard. I wonder if you could come down
3 3 and let me write some things on this graph here or this
4 4 board that we can talk about.

5 BY THE WITNESS: Is that all right, Your
6 6 Honor.

7 BY THE COURT: Sure. Go ahead.

8 BY MR. STUTTS (continuing):

9 Q. Doctor, why don't you come over here. And just
10 to make sure that I've got some things straight about what
11 you've been saying -- I asked you about cumulative dose.
12 And as I understood you to say, that's the accumulation, the
13 sum of all exposures over a working lifetime?

14 A. Yes.

15 Q. That's a cumulative dose. And we've heard the
16 phrase cumulative exposures used the same?

17 A. The same.

18 Q. Now, as I understand your testimony, every dose
19 of asbestos from whatever source -- I guess kind of common
20 sense tells you that it adds to the cumulative dose; is that
21 correct?

22 A. Yes.

23 Q. Your common sense tells you that. And medically,
24 in your view, that's the case?

25 A. That's the case.

1 Q. All right. Now, I've written up here significant
2 or substantial dose. Now, is every dose, whether it's for a
3 day or for a week, every dose from every source a
4 significant or substantial dose, medically, when it comes to
5 looking at the effect on the worker?

6 A. No. If it were, we would all have an
7 asbestos-related disease because we all have some fiber in
8 our lungs.

9 Q. All right. Now, then in looking at a worker in a
10 shipyard and trying to assess significant or substantial
11 sources of dose, which is why we're here, as I understand
12 it, there's several things you would look at. One would be
13 the trade or occupation of the worker?

14 A. Right.

15 Q. And as I understand it, that trade or occupation
16 would then tell you something about the day-to-day work of
17 that particular worker?

18 A. Yeah. It would provide two kinds of information.
19 One is proximity to asbestos products, just being near them.
20 And the other, what activity with such products is the
21 individual engaged in. Probably awful syntax, but --

22 Q. All right.

23 A. How often is he close to it and what does he do
24 with it when he is close to it.

25 Q. Okay.

1 A. Or what does somebody else do to it when he's
2 close to it.

3 Q. Okay. I think this is probably saying the same
4 thing. Proximity, nearness to the source of the exposure?

5 A. Yes. That's the same thing.

6 Q. And then also I understood that releasability or
7 the amount that could come out of a particular source --

8 A. Very important.

9 Q. That's important. Okay. So product dose -- now,
10 that would be important in looking at the significant or
11 substantial dosages. You would look at the product dosages
12 over the entire lifetime of the worker, correct?

13 A. Right.

14 Q. And you've talked about some of the insulation
15 cements and other types of asbestos used in the shipyard.
16 Where the product is used, when it's used -- Now, you
17 understand in this case that there are a number of welders.
18 We have some mixed trades in this case. The majority are
19 welders?

20 A. I understand that, yes.

21 Q. And do you understand that Micarta is actually
22 cut, when it was cut aboard ship, in the staterooms or the
23 superstructure of the cargo ships, in the staterooms of the
24 passenger ships?

25 A. Yes.

1 1 Q. And do you understand that joiners did that work
2 when it was cut aboard ship?

3 A. Yes.

4 Q. Did you understand that not every sheet of
5 Micarta in the shipyard was cut?

6 A. That's my understanding, yes.

7 BY MR. MOTLEY: Mr. Stutts, I object to your
8 spelling of the word --

9 BY MR. STUTTS: "Were." What's wrong with
10 that?

11 BY MR. MOTLEY: You left the most important
12 factor out, the main factor.

13 BY MR. STUTTS (continuing):

14 Q. Okay. Not every sheet would have to be cut. You
15 understand that some of the cutting was done off the ships?

16 A. That's my understanding, yes.

17 Q. And do you understand that not every ship had
18 Micarta installed on it at all?

19 A. I understand that as well, yes.

20 Q. And if you took an average of, let's say, a
21 welder of twenty-five year history working in the shipyard,
22 occasional -- in the area where the Micarta was cut
23 occasionally, say four out of five ships that the welder
24 worked on did not have Micarta. And that will vary among
25 workers. That's not a precise number. Given those facts

2 1 and what you know about shipyard exposures and products used
2 in the shipyard, do you have an opinion about whether
3 Micarta, with these general factors, would be a substantial
4 or significant dose, assuming that welder had some effects
5 from being exposed to asbestos?

6 BY MR. MOTLEY: Excuse me.

7 BY MR. BENTON: I'd like to make an
8 objection to -- this is a hypothetical -- to the
9 extent that it leaves out facts which are in
10 evidence and contains fact which are not in
11 evidence; particularly, that the joiners were the
12 only trade which cut the Micarta that was cut on
13 board ships. That's the specific objection.

14 BY MR. STUTTS: Your Honor, the
15 hypothetical, I think I made it fairly clear, was
16 a general hypothetical applying to welders in
17 general. I think the evidence has been that that
18 is not their role or trade to cut Micarta. So, I
19 think I've made that clear in my hypothetical.

20 BY THE COURT: Objection is overruled.

21 BY MR. STUTTS: I'm sorry?

22 BY THE COURT: Overruled.

23 BY MR. STUTTS: Oh, thank you.

24 BY MR. STUTTS (continuing):

25 Q. And let me add to this hypothetical. Suppose

2 1 that the welder in this case worked, say, twenty-five or so
2 years in the shipyard and out of those twenty-five years
3 that he worked, if Micarta was even in the shipyard at all
4 and cut sometimes aboard ship, maybe ten years out of those
5 twenty-five years, and given all of those general facts, let
6 me ask you again; do you have an opinion, if that welder had
7 some adverse effect from exposure to asbestos, whether or
8 not the Micarta would have been a significant or substantial
9 dose, medically, as far as that worker is concerned?

10 A. In addition to your hypothetical, taking all of
11 these factors into account; is that correct?

12 Q. Yes.

13 A. Yes, I do have an opinion.

14 Q. And what is that opinion?

15 A. I think that the Micarta would have contributed
16 in a negligible or insignificant amount to any
17 asbestos-related disease.

18 BY MR. STUTTS: Let's put up the last piece
19 on the studies. The last page on the studies.

20 BY THE STUTTS (continuing):

21 Q. Doctor, I'm putting up here what's a summary that
22 really went at the end of your -- the graph that you did.
23 And I'd like you to just walk us through the summary of your
24 research findings and the findings of others who have looked
25 at this issue concerning dose and response.

2 1 A. Well, the first deals with the issue of
2 asbestos in a population exposed to asbestos. The risk of
3 developing asbestosis is related to the amount of exposure.
4 That is, it is dose dependent, as I showed in my graphs.
5 Secondly, the worsening or progression of asbestosis is also
6 dose related. That is, the more the exposure, the more
7 likely asbestosis is to progress. And, very importantly,
8 once there is asbestosis due to past exposures, then it's
9 more likely to progress than if there wasn't asbestosis at
10 the beginning of any follow-up period. Third, the risk of
11 lung cancer increases with an increase in cumulative
12 exposure to asbestos. But very importantly, in addition to
13 that relationship, the dose response relationship, that
14 excess risk, due to asbestos in our study was limit to those
15 who had x-ray evidence of asbestosis, lung fibrosis.

16 Q. Thank you, Doctor. The last area I will go into
17 with you, once you have a seat.

18 (Witness returned to the witness stand.

19 BY MR. STUTTS (continuing):

20 Q. Doctor, there are some things that I failed to do
21 and to ask of you, questions on direct. It's part the
22 litany of where we're at. One, you are not here for free.
23 What do you charge for the time that you have devoted to
24 studying issues that I've asked you to look at and for being
25 here today?

1 A. Three hundred dollars an hour.

2 Q. And if you were not here today, I assume you
3 would be at the Center for Bio-environmental Research?

4 A. I would.

5 Q. I also forgot to ask you whether you were married
6 and had children.

7 A. I'm married and I have three children.

8 Q. Children in -- that have gone separate ways as
9 far as legal issues and medical issues?

10 A. Yeah, they -- one of them is a lawyer, one's a
11 physician and one's a teacher.

12 Q. All right.

13 BY MR. STUTTS: Just one second, Your Honor.

14 BY MR. MOTLEY: Which one do you like the
15 best?

16 BY THE WITNESS: The lawyer.

17 BY MR. STUTTS: Which one do you trust the
18 most? Thank you, Doctor. Pass the witness.

19 BY THE COURT: Any other defendant with
20 questions? Mr. Tyner.

21 CROSS-EXAMINATION BY MR. TYNER:

22 Q. Dr. Weill? Am I pronouncing it correctly?

23 A. Yes.

24 Q. Tom Tyner, sir. I have just a few questions for
25 you. One of the things you mentioned earlier dealt with

1 some of the experience you had doing OSHA mandated
2 examinations; is that what I understood you to say?

3 A. You did.

4 Q. Was this a part of the 1972 OSHA regulations?

5 A. Yes, sir.

6 Q. Did those regulations require an employer to do
7 asbestos dust count studies and to cause testing of those
8 employees whose exposure exceeded certain levels?

9 A. I think that's right, sir, yes.

10 Q. I mean, is that what you were doing then?

11 A. We were not doing the dust levels. I was doing
12 the medical part of it, yes.

13 Q. So you would then depend upon the employer, or
14 the employer was mandated by OSHA to make that determination
15 as to who was was exposed and at what levels?

16 A. Right.

17 Q. Do you recall what those levels might have been?

18 A. I'm sure that I saw levels from time to time, but
19 I really couldn't characterize them for you accurately at
20 this time.

21 Q. The reason I ask the question is you just gave an
22 opinion a few moments ago regarding exposure and levels of
23 exposure and increased risk, the conclusion of your
24 testimony with Mr. Stutts.

25 A. Yes.

3

1 Q Would that have been the sense behind the OSHA
2 regulation, that if you had a guy that started having
3 changes that you would then take him from the exposure,
4 reduce that exposure in the work place?

5 A. I would certainly think that that was a purpose,
6 yes.

7 Q. All right, sir. And the purpose then would have
8 been so if a person who was employed in an area where a lot
9 of asbestos was being used, in order to decrease his risk of
10 further asbestosis or further lung changes and to decrease
11 his risk of lung cancer, you wanted to find out early?

12 A. That's right.

13 Q. So that prevention could take place and those
14 increased risk of exposures would then not be likely?

15 A. Right.

16 Q. All right. In doing all of your work, and I
17 appreciate that Avondale is in the area of Tulane, did you
18 ever make a study or read any studies or surveys concerning
19 whether or not shipbuilding in the '40s and the '50s and the
20 '60s was a fairly dusty type of operation?

21 A. We've not done any studies at Avondale or
22 studies -- formal research studies of any shipyard.

23 Q. Are you familiar with the works of Dr. Selikoff?

24 A. Yes.

25 Q. Dr. Selikoff described it as being a very dusty

3 1 type of work environment?

2 A. Yes, he has. Others have.

3 Q. But you don't have any information that would
4 disagree with that?

5 A. No.

6 Q. All right, sir. Now, have you ever been hired or
7 retained by a gasket and packing company or lawyers
8 representing gasket and packing companies?

9 A. Yes.

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1 Q. Now have you ever been hired or retained by a
2 gasket and packing company or lawyers representing gasket
3 and packing company?

4 A. Yes.

5 Q. And in those circumstances were you asked to
6 review studies dealing with gaskets and packing and to
7 render certain opinions concerning exposure levels of
8 workers to gaskets and packing?

9 A. I believe that's right.

10 Q. All right, sir. Have you rendered opinions
11 concerning whether or not the fibers released by gaskets and
12 packing were on the very low end or the bottom of the
13 asbestos fibers that might be placed in the work
14 environment?

15 A. They were very low levels.

16 Q. Would you have an opinion, Dr. Weill, as to
17 whether or not a person who merely worked with gaskets and
18 packing during his entire work career would have an
19 increased risk of contracting the disease asbestosis, lung
20 cancer or mesothelioma? Or if you want to divide that up,
21 you can.

22 A. I think dividing up would be helpful because the
23 different conditions might require a different answer. I
24 think that in general the risk of asbestosis and therefore
25 in our view, and views of an increasing number of

1 scientists, is that the risk of lung cancer would be very
2 very low, if any risk were seen at all.

3 Mesothelioma, I think, is the difficult, more
4 difficult question to answer because there it has to do with
5 not just dose, but dose does play a role but maybe not the
6 same dose. But also fiber type.

7 BY MR. TYNER: Speaking of dose, Cheyle,
8 could you show me the quote on the ELMO,
9 please.

10 BY MR. TYNER:

11 Q. Let me ask you, Dr. Weill, if you can look up on
12 the screen, if we can get it up there. I have pled
13 technological ignorance before the jury before. I plead it
14 again.

15 If you could read that statement up there that
16 says, "My first impression is that there is now less
17 certainty that asbestos inhalation is associated with
18 pulmonary neoplasia than there was ten or twenty years ago.
19 Perhaps this is due to the greatly reduced dust exposures.
20 Asbestos may after all prove to be carcinogenic only in
21 overwhelming dosages." Are you familiar with that
22 statement?

23 A. I've never seen it before.

24 Q. If I told you that that statement was made by
25 Gerrit Schepers, a doctor who has previously testified in

1 this case, at the mid '60s Selikoff conference. Would you
2 tell me, sir, whether or not that at the time was prevailing
3 opinion or a minority opinion concerning asbestos exposure?

4 A. Well, the easy response is that I wasn't a part of
5 the prevailing or nonprevailing opinion at that time. I
6 didn't get into it until late in the '60s. I don't know
7 whether that was the prevailing opinion or not. I can
8 comment on whether or not it's my opinion now.

9 Q. Yes. That's what I was going to ask you to do.
10 Can you tell me whether or not that opinion today, in 1993,
11 is a prevailing or minority opinion?

12 A. No, I think it's overly simplistic. I would not
13 subscribe to that statement as its written.

14 Q. Would you agree, Dr. Weill, that what medical
15 science and technology knew in mid '60s and mid '70s and
16 what we know today, are not necessarily the same?

17 A. That's correct.

18 Q. A lot of positions have changed both in industry,
19 manufacturing, as well as medical science?

20 A. A lot has can changed in the last couple of
21 decades in both, yes.

22 Q. All right, sir. Let me ask you to look at another
23 think on the screen.

24 BY MR. TYNER: Cheyle, if could you do

25 Page 23 for me.

1 BY MR. TYNER:

2 Q. Over on the left-hand column, Doctor, and I'll
3 read this to you and --

4 A. I can't read it at all.

5 Q. Oh, you can't read it at all.

6 A. From where I am, no.

7 Q. Well, let me read this to you. And then if you'll
8 just listen for me a moment. "Confronted with the evidence
9 of job exposure to asbestos and other dust hazards, the
10 first urgent task was to seek to identify the sources of
11 exposure." And that's talking about preventing
12 asbestos-related diseases. Were you a part of that effort,
13 to seek to identify sources of exposure?

14 A. Well, I don't know what context. I think I
15 answered, in questions of Mr. Stutts, that that's what I do,
16 is to seek exposure sources and levels and come to
17 conclusions. But I don't know anything about what you have
18 up there.

19 Q. All right. Let me read this further statement to
20 you: "It is known that a large proportion, something over
21 fifty percent of the asbestos used in this country for the
22 past forty years has gone into the construction industry in
23 one form or another. It is fortunate that the great part of
24 this has been in products in which the asbestos is, quote,
25 locked in, close quote. That is, it is bound with cement or

1 plastics or other binder so that there is no release,
2 certainly no significant release of asbestos fiber in either
3 working areas or general air. Such products as floor tiles,
4 roofing felts, asbestos cement products, siding material and
5 the like contain the locked in fiber."

6 I'm going to hand you this document, sir, and ask
7 you if you would take a look at the language which I just
8 quoted to you, find it marked there. And tell the Court and
9 the jury whether or not you agree, disagree or take
10 exception with the statement which I marked and which I just
11 read to the jury?

12 A. I think I agree with the general concept.
13 Certainly I agree that many of these products do have fiber
14 encased in something else which has been called locked in.
15 And that's -- we were calling it something else. We were
16 calling it less fiber releasing potential. But,
17 nonetheless, that's right. That's one of the reasons we
18 looked at asbestos cement manufacturing is because of that
19 component. There are other products that have fibers as an
20 integral part of a another product, such as a polymer or
21 something, cement.

22 Q. Such as the binders?

23 A. Binders, right.

24 Q. Used in asbestos gaskets and packing?

25 A. That's another example. So I agree with that. As

1 I listened to you read it, you know, it's hard sometimes to
2 stick with comments like "no release," you know, there are
3 no absolutes. This is written by Dr. Selikoff. And I'm a
4 little surprised he said it that way, but, anyway, he did.

5 Q. He said it in 1970; did he not?

6 A. Yeah.

7 Q. And so would you agree then that the state of the
8 medical knowledge and the state of the medical literature at
9 least in 1970 would have been consistent with the opinions
10 that Dr. Selikoff advanced in that article and in the
11 statement which I just read to the jury?

12 A. Well, his opinions at that time were very
13 influential, I think.

14 Q. Would you agree -- would you agree with his
15 conclusion that has been shown by subsequent studies and
16 subsequent reports and subsequent analysis that products
17 such as gaskets and packing which are bound together with
18 polymers and other binding substances, have a very low
19 likelihood of releasing airborne fibers in the atmosphere
20 sufficient to cause an asbestos-related disease?

21 A. Yes, I think I would agree with that
22 characterization that fiber release is a low probability
23 event, less likely.

24

25 BY MR. TYNER: Thank you very much. I

1 have no further questions, if the Court please.

2 BY THE COURT: Does any other defendant
3 have questions? Cross-examination.

4 CROSS-EXAMINATION BY MR. MOTLEY:

5 Q. Good morning ladies and gentlemen, Your Honor,
6 counsel, Dr. Weill.

7 A. Good morning, Mr. Motley.

8 Q. How do you do?

9 A. I'm fine. How are you?

10 Q. Fine, thank you. Doctor, in the course of
11 introducing you to the jury, Mr. Stutts went into the
12 various consultantships you've had. Do you recall that,
13 nIOSH, OSHA and the like?

14 A. I do.

15 Q. He didn't ask you about this one, though. Let me
16 ask about it. The Asbestos Information Association. Were
17 you the medical consultant to the Asbestos Information
18 Association of North America in the mid 1970s to the mid
19 1980s?

20 A. I was. Early 1980s.

21 Q. He asked you about different presentations you've
22 made over your career. I have a copy of a CV you were kind
23 enough to give us when we took your deposition in this
24 case. I ask you to look at that, please, sir.

25 A. Yes. I don't think I gave you this one recently.

1 It's '86, but --

2 Q. Okay. You have a series of lectures in there, do
3 you not, that you had given?

4 A. Yes, this particular one had lectures. We haven't
5 done that for a number of years.

6 BY MR. MOTLEY: Excuse me one second,
7 sir.

8 BY MR. MOTLEY:

9 Q. Dr. Weill, the first case where you testified on
10 behalf of an asbestos manufacturer where the issue was did
11 the man have asbestosis and mesothelioma from products he
12 was exposed to in a thirty-three year work career was
13 twenty-two years ago in Beaumont, Texas. Do you recall
14 that?

15 A. I do.

16 Q. And that gentleman who died names was Clarence
17 Borel; was it not?

18 A. Yes.

19 Q. And that trial took place in 1971; did it not?

20 A. I think that's right, yes.

21 Q. And you began doing work for National Gypsum and
22 Johns-Manville and the Quebec Asbestos Mining Association in
23 1969, did you not?

24 A. No.

25 Q. Sir?

1 A. No, sir.

2 Q. Well, would you like for me to show your --

3 A. I would like to change the wording because you
4 mischaracterize it.

5 Q. All right. When did you begin consulting with the
6 Quebec Asbestos Mining Association and officials of National
7 Gypsum and Johns-Manville?

8 A. Let's not put them all together. I never
9 consulted with the Quebec Asbestos Mining Association. I
10 began on certain cases consulting with the Johns-Manville
11 Company sometime in the early '70s. And that was probably
12 the case with the National Gypsum Company.

13 Q. Did you apply for money from the Quebec Asbestos
14 Mining Association in April of 1969? Which I have your
15 application here, I'll be glad to refresh your memory.

16 A. I don't need any refreshing of the memory. Tulane
17 University and I applied for research support. We talked
18 about that earlier this morning in this courtroom, at that
19 time, and was awarded grant support to do research.

20 Q. In your lectures will you kindly see, sir, whether
21 you include a lecture you gave on February the 1st, 1971 at
22 the law offices in Houston, Texas of Vinson, Elkins, Searls
23 & Connally to lawyers to were defending the case of Clarence
24 Borel versus Johns-Manville Corporation so that you could
25 teach them how to defend the case that Mr. Borel had

1 brought?

2 A. Again, your characterization, Mr. Motley, is
3 misleading. I didn't teach them how to defend anything. At
4 that time the lawyers, like yourselves, hadn't had much
5 experience with asbestos. I was asked to give a seminar or
6 an informal discussion regarding asbestos-related disease.
7 And as the Borel case transcript shows, there was still at
8 that time marked confusion, even about the difference
9 between asbestosis and mesothelioma. I don't teach people
10 to defend anything.

11 And as far as why it isn't on this CV, that isn't
12 the type of activity that appears on CVs of people in
13 scholarly work, at least the ones I've seen.

14 Q. Dr. Weill, I hope you can see this on the screen.
15 But here's a letter. Maybe you haven't seen this in some
16 time, dated in January of 1971, to one, two, three, four,
17 five, six, seven, eight, nine, ten, eleven, twelve,
18 thirteen, fourteen, fifteen, sixteen, seventeen, eighteen,
19 lawyers, all who were representing asbestos companies in the
20 Borel case.

21 Next page, please. Actually, there's about
22 twenty-five of them. Up at the top, please.

23 A. All right.

24 Q. You've got the wrong page. The first page of the
25 letter, please.

1 A. I have the same page that was up there, but if
2 you'd --

3 Q. January 5th, 1971?

4 A. Yes.

5 Q. The next page says, "Gentleman. Asbestos
6 litigation. You're invited to attend a medical seminar to
7 be conducted in Houston, Texas at nine o'clock. This
8 meeting will be under the direction of Dr. George Wright and
9 Dr. Hans Weill, both of these imminent physicians are
10 specialists in internal medicine and pulmonary diseases."

11 Next page, please. They go on to describe your
12 qualifications. And they say, "The purpose of this meeting
13 will be to generally review the medical and scientific
14 knowledge with respect to asbestos and human health as it
15 pertains to common law actions."

16 What was a -- what did you understand a common law
17 action to be, sir?

18 A. Oh, I had no idea. I didn't write that. The
19 first part of that sentence is what I was doing. The second
20 part of the sentence, I don't know. It has to do with how
21 that information was being applied by the people at the
22 meeting, I suppose. That's why they were there.

23 Q. Sir, do you see at the bottom, you got a copy of
24 this letter?

25 A. Pardon?

1 Q. Up, please, ma'am. Do you see that you got a copy
2 of this letter?

3 A. Yes, sir, I apparently did.

4 Q. Doctor, is it not true, sir, that five years after
5 that as part of your job with the Asbestos Information
6 Association you were asked to, quote, recruit expert
7 witnesses to help the asbestos companies defend themselves
8 in cases brought by people who claim they were sick from
9 products?

10 A. No, that's not what I did.

11 Q. And indeed, sir, that you not only helped recruit
12 the expert witnesses --

13 A. Mr. Motley, I just said I didn't recruit expert
14 witnesses.

15 Q. I'm going to show you the documents in just a
16 second. In addition to helping them recruit expert
17 witnesses, sir, did you help the lawyers rate them, that is
18 give them a grade; is this an A grade witness or a B grade
19 witness or a C grade witness. Did you do that?

20 A. I have no recollection of doing that. But I'd
21 like the opportunity to tell you what I did do.

22 Q. I'm going to show you the document in just a
23 second.

24 A. Well, may I tell you what I did? You just raised
25 an issue.

1 Q. Sir, I'll ask the questions, please, and you
2 answer them. And I'll show you the documents in a moment.

3 Did you, sir, provide the lawyers for the asbestos
4 industry with a list of expert witnesses that they could use
5 to testify against human beings who claimed they had cancer
6 and asbestosis from asbestos products?

7 A. I gave them a list. If, in fact, I gave them a
8 list. I suggested the names of people around the country, I
9 -- President of the American Thoracic Society, I knew a lot
10 of outstanding lung physicians all over the country. I gave
11 them a list of competent, objective, lung physicians, chest
12 physicians who could evaluate cases for them if they had
13 individuals where there was a medical question to be
14 answered.

15 And it was clear to me, and I suppose it was clear
16 to the people I talked to at their request, that if they are
17 asked to give their opinions in a courtroom, that that would
18 be something which would follow their evaluation and their
19 opinion. If their opinion was useful to the people who sent
20 the worker to them. That's what I did. That's all that I
21 did.

22 Q. Sir, did you also give them a list of witnesses
23 who could come in and convince a jury that nobody knew
24 anything about asbestos when Dr. Selikoff came along, called
25 the state-of-the-art defense? Did you give them a list of

1 those witnesses?

2 A. Not -- I don't even know what you just said, Mr.
3 Motley. Where did Dr. Selikoff come into this?

4 Q. Give me Exhibit 733, please, ma'am; and June the
5 10th, 1976; and October the 5th, 1976; and March the 2nd,
6 1977.

7 By the way, sir, let me do this in chronological
8 order. First of all, please hand the July 29th, 1975
9 minutes of the Asbestos Information Association.

10 Did you know, sir, that the Asbestos Information
11 Association met in executive session on July the 29th, 1975
12 to discussion hiring you and that they said your duties were
13 to include, their words --

14 BY MR. STUTTS: Objection, Your Honor.

15 May we approach?

16 (WHEREUPON THERE WAS AN OFF-THE-RECORD DISCUSSION AT
17 THE BENCH.)

18 BY MR. MOTLEY:

19 Q. Dr. Weill, when you were retained by the Asbestos
20 Information Association of North America did you come to
21 meet a Mr. Al Fay?

22 A. I don't recall.

23 Q. You don't remember Mr. Fay was the safety
24 director --

25 A. I didn't say I didn't remember who he was. I

1 don't remember going to meet him. That was your question.

2 Q. Who was Mr. Fay?

3 A. He worked for National Gypsum, I don't know what
4 his position was.

5 Q. And National Gypsum was one of plants you were
6 studying, correct?

7 A. Absolutely.

8 Q. And you met Mr. Sottlo from Johns-Manville?

9 A. Sometime. I met Mr. Sottlo, yes.

10 Q. Mr. Marsh from Raybestos Manhattan?

11 A. Yes.

12 Q. You weren't told, sir, that one of the
13 considerations in hiring you in 1975 was overall
14 consideration about lawsuits and compensation and the
15 medical problems coming from lawsuits?

16 A. I remember no such thing.

17 BY MR. MOTLEY: Exhibit 733, please.

18 I move the admission of Exhibit 733 against
19 Garlock Industries, Your Honor, and Dresser
20 Industries.

21 BY MR. DREHER: Could we see that
22 document, please?

23 BY MR. MOTLEY: Sure. It may already be
24 in evidence, but just in the event that it's not.

25 BY MR. GRISSOM: We renew our objection

1 as previously stated.

2 BY THE COURT: I understand.

3 BY MR. MOTLEY:

4 Q. Are you ready?

5 BY THE COURT: Does Garlock have any
6 objection.

7 BY MR. DREHER: I've just been handed
8 it, Your Honor. I can't read it quite that
9 quickly. I'm reading as quickly as I can.

10 BY MR. MOTLEY: I think it's already in
11 evidence, Your Honor.

12 BY MR. DREHER: Well, if it's already in
13 evidence, then, I can't say much about it.

14 BY THE COURT: You could.

15 BY MR. DREHER: Would you let me?

16 BY THE COURT: All right. Go ahead, Mr.
17 Motley.

18 BY MR. MOTLEY:

19 Q. Did you know that there was a meeting of the
20 board of directors of the Asbestos Information Association
21 in December of 1976 after you had been hired, and that they
22 had created something called a legal-medical research
23 program and that you met periodically with a gentleman named
24 Guy Gabrielson. Do you remember that?

25 A. I certainly remember meeting Mr. Gabrielson

1 periodically. I do not remember this committee or whatever
2 it was.

3 Q. And you met periodically with Mr. Windall Alcorn.
4 Do you remember him?

5 A. Yes.

6 Q. Tell the ladies and gentlemen of the jury who he
7 was?

8 A. I think he's a lawyer.

9 Q. For the Asbestos Information Association, correct?

10 A. I think that's right.

11 Q. Did they -- did they discuss with you -- next
12 page, please. That Mr. Alcorn had commenced interviews with
13 various physicians, suggested by Dr. Weill for recognized
14 knowledge in asbestos-related disease who might qualify as
15 expert witnesses in any injunctive proceeding initiated by
16 the association or in other litigation. It was suggested
17 that two types of witnesses may be required in court cases
18 in order that both the condition of the plaintiff and the
19 state of the medical art could be addressed. Do you deny
20 that that happened, sir?

21 A. Not only have I not denied it, Mr. Motley, and I
22 resent that characterization. I said that's what I did. I
23 told them who people that I respected who were honest,
24 objective, chest physicians around the country who could
25 tell the patient and anyone else about the health status of

1 that individual as it relates to asbestos exposure.

2 Q. State of the medical art deals with the history of
3 asbestos disease, doesn't it?

4 A. Well, that's right. And they may very well have
5 asked, well, who has been in this field who might know
6 something about historical events of that sort. And I may
7 very well have given them some names on that. Now what --
8 yeah.

9 Q. You did a little more than that, didn't you?
10 Didn't you help them recruit somebody to write a paper that
11 they could put in the literature to claim that nobody knew
12 that asbestos caused cancer before 1965?

13 A. I don't remember any such thing.

14 Q. You don't. Well, let me show it to you, sir. May
15 I have the Alcorn letter, please.

16 Did you write a letter, sir, on October the 26th,
17 1977 to this Mr. Alcorn, the lawyer for the Asbestos
18 Information Association.

19 A. Yes, I did. May I read it, please?

20 Q. Yes, sir. Take your time. So the jury knows what
21 we're talking about, this is a letter from you to Mr.
22 Alcorn, the lawyer for the Asbestos Information
23 Association.

24 A. I've read it. It doesn't say anything about what
25 you said, sir.

1 Q. Sir, did you know -- I just showed you what they
2 were doing the meeting before that.

3 A. I can't -- I can't be responsible for what they
4 were doing. Mr. Motley, this letter is a very erudite, if I
5 may say so, review of the state of scientific knowledge
6 about asbestos conditions by date. That's all this letter
7 is.

8 Q. And you wrote it?

9 A. And I wrote it. Absolutely. And, as a matter of
10 fact, I would stand by what this letter -- this is 1977.
11 Here we are, fifteen or whatever years later, and I think
12 the dates and the assessments are as valid today as they
13 were then.

14 Q. Very good, sir.

15 BY MR. MOTLEY: I move its admission
16 against Westinghouse.

17 BY THE COURT: Any objection?

18 BY MR. STUTTS: No objection.

19 BY THE COURT: Let be it marked.

20 (WHEREUPON SAME WAS RECEIVED AND MARKED INTO EVIDENCE
21 AS PLAINTIFFS' EXHIBIT NEXT.)

22 BY MR. MOTLEY:

23 Q. Now, that letter we were just talking about was
24 written by Dr. Phillip Enterline, wasn't it?

25 A. No, I wrote the letter.

1 Q. I mean the article that you were reviewing was an
2 article written by Dr. Enterline, wasn't it?

3 A. Yes.

4 Q. And that was a scientist at the Asbestos
5 Information Association hired to write a paper that they
6 could put in the literature to talk about asbestos and
7 cancer, wasn't it?

8 A. Well, you have to ask Dr. Enterline that. I don't
9 know. There was a relationship. They may have supported
10 the work he did on that. I don't know, Mr. Motley. I can't
11 say that it happened like you've just said it.

12 Q. Did you get a copy of the letter from Mr. Alcorn
13 that you wrote that we just showed the jury to the Asbestos
14 Information Association legal-medical research committee
15 about expert witnesses that you had provided them the names
16 of?

17 A. I don't recall getting a letter, this letter. All
18 it says, he's interviewed a number of physicians recommended
19 by Hans Weill, M.D. as potential experts. I did that. I
20 said I did that.

21 Q. Did they discuss with you that they were rating
22 the doctors?

23 A. I didn't know they were rating the doctors. They
24 may have asked some opinions about them and they may have
25 had some scheme for rating them. I have no idea.

1 Q. Page 6, please. Ratings of the screened expert
2 witnesses will be provided to the company.

3 A. Well, Mr. Motley.

4 Q. Yes, sir.

5 A. Wait. I don't see anything on that on Page 6.

6 Q. You don't?

7 A. Where is it?

8 Q. Look on the -- see what's highlighted, sir, on the
9 screen.

10 A. I can't read the screen from here.

11 BY THE WITNESS: May I go down, Your
12 Honor?

13 BY MR. MOTLEY: Yes, sir. Please.

14 BY THE COURT: Sure.

15 BY MR. MOTLEY:

16 Q. You can come here, if you'd like. The lawyers
17 will rate --

18 A. Is it safe to come this close to him.

19 Q. Yes. I hope so. I have a TLV. I don't know what
20 it is.

21 A. TLV.

22 Q. Yeah.

23 A. Okay.

24 Q. I'm a TLM, tender loving Motley.

25 A. Okay.

1 Q. Did you know about the rating?

2 A. No, sir.

3 Q. Would you like to see the rating they gave you?

4 A. No. It's probably not a very good one.

5 Q. No. It was pretty good. They said you're a
6 pretty good witness. May I see Dr. Weill's rating, please.

7 You knew Mr. Bob Andre, didn't you? Johns-Manville lawyer?

8 A. I don't recall the name right off hand.

9 Q. You've never seen this? I'll give you a copy of
10 it.

11 A. This has ratings in here?

12 Q. Yes.

13 A. I'd love to have that.

14 Q. Well, go ahead. You can have that one.

15 A. Thank you very much.

16 Q. Sir, in 1972, did you appear in California as an
17 expert witness for the Asbestos Information Association to
18 discuss the Environmental Protection Agency's proposal to
19 ban certain asbestos products?

20 A. Mr. Motley, I've been asked this before. And my
21 recollection is I either gave written testimony or I may
22 have gone out there. I simply don't remember. It was
23 twenty years ago. I could easily have gone. And I won't
24 contest it if you show that I had gone. But I do remember
25 involvement in that.

1 Q. Is this the testimony that you gave in February of
2 1972 on behalf of the Asbestos Information Association?

3 A. Well, I don't know whether your characterization
4 "on behalf" is correct. It says, "EPA hearings on proposed
5 emission control standards, LA, February of '72. Statement
6 of Dr. Hans Weill, Tulane University School of Medicine, New
7 Orleans, Louisiana."

8 So I would say that I gave it on behalf of myself.

9 Q. I see.

10 A. Now was I a consultant at that time, I might very
11 well have been.

12 Q. Well, do you see what the Asbestos Information
13 Association said about you. Said, on February 28th, 1972.
14 Up, please. The following three individuals will present
15 testimony on behalf of the AIA, Mr. Fay, vice president,
16 National Gypsum; Mr. Swetonic, the jury's heard his name
17 over and over again; and Dr. Hans Weill. That was you,
18 correct?

19 A. That is, I plead guilty. That is me.

20 Q. Did you ever help the Asbestos Information
21 Association lawyers prepare a public relations release to
22 criticize OSHA's attempts to lower the asbestos standard?

23 A. Let me answer that as directly as I can. My job
24 was to check scientific accuracy of statements drafted by
25 the Asbestos Information Association. Some of those dealt

1 with regulatory matters, some dealt with public information
2 matters. And if -- if there was something having to do with
3 OSHA, I might very well have looked at it. Perhaps even
4 participated in the drafting of it.

5 - - -

1 Q. Sir, do you remember on September the 19th,
2 1978, attending a meeting of the Asbestos Information
3 Association?

4 A. Your memory is much better having all these
5 papers. I don't have all of these papers in front of me.

6 Q. Look midway down there and you'll see somebody
7 from Tulane University there on the list of attendees.

8 A. I do see it now; yes.

9 Q. Do you see your name?

10 A. I didn't remember it until I saw it; yes.

11 Q. Now, sir, do you remember, sir, that at that
12 particular meeting, the Asbestos Information Association
13 decided to sell -- offer for sale to any asbestos company
14 that wanted to buy it, that paper that said asbestos didn't
15 cause lung cancer until 1965?

16 A. I don't -- Would you tell me what you're
17 referring to, please.

18 Q. Well, the Enterline study that you wrote a
19 letter about, where Dr. Enterline was hired to say nobody
20 knew about asbestos causing cancer until 1964. Did you
21 know they had offered it for sale at that meeting for
22 \$2,000 a copy?

23 A. Oh, I didn't -- No, I didn't know that, and I
24 still don't know that. And I'm not even sure that
25 Enterline said that. But I'm not here to characterize what

1 he said.

2 Q. Look on Page 4, please, of this meeting that you
3 attended.

4 A. All right.

5 Q. You are there now. And Mr. Gabrielson said,
6 this committee met yesterday and reviewed the state of the
7 medical art memorandum prepared by special counsel. He
8 said that this document covers a legal -- legal issues
9 involved in the presentation of the state of the medical
10 art defense. The document incorporates the work of
11 Dr. Enterline in his review of the medical literature on
12 asbestos-related disease. This document is now being
13 revised following the committee's review, and should be
14 available to members and their lawyers trial counsel within
15 a month. Did you know that before this document article by
16 Dr. Enterline was published in the medical literature, all
17 the lawyers sat around the room and edited it?

18 A. Mr. Motley, I don't know what exactly the
19 question was. Do I dare know that; the answer is no. Does
20 this have anything to do with me; the answer is no.

21 Q. You were there, weren't you?

22 A. Well, I was -- At the annual meetings of the
23 Asbestos Information Association as their medical
24 consultant, I was asked each year to provide them with an
25 update on what was new in the scientific literature dealing

1 with asbestos health effects. I was there. These minutes
2 say I was there. I don't contest that I was there. But I
3 had nothing to do with what you've just described.

4 Q. Well, let me ask you something, sir.

5 A. Yes, please.

6 Q. Have you ever in your life, before you published
7 an article in the medical literature, let a bunch of
8 lawyers sit down and rewrite it?

9 BY MR. STUTTS: Objection, Your Honor.

10 He's already said that he knows nothing about
11 this.

12 BY MR. MOTLEY: I'm asking himself.
13 himself, Mr. Stutts.

14 BY MR. STUTTS: I'm sorry?

15 BY MR. MOTLEY (continued):

16 Q. Let me rephrase the question so you'll
17 understand. Have you, Dr. Weill, ever submitted a paper to
18 the lawyers for the asbestos industry and said, here's what
19 I'm getting ready to publish, you boys take a look at it
20 and make sure there's nothing in there that will hurt you.
21 And then a couple of them said, well, take this out,
22 Dr. Weill, because that will hurt us, or add this,
23 Dr. Weill, because that will help us. Have you ever done
24 that?

25 A. Of course not.

1 Q. Well now here you are at this meeting as their
2 advisor when they're passing this paper out for the lawyers
3 to give their comments. Did you stand up and say, don't do
4 that, that's unethical?

5 A. Mr. Motley, I have no recollection of that
6 happening in my presence. I don't know anything about it.
7 I wouldn't have had any comments about that, because I
8 didn't know about it.

9 Q. Fair enough. Fair enough.

10 A. You know, I'm hearing this for the first time.
11 I don't know -- I had nothing to do with it.

12 Q. Well, you agree the minutes reflect that's what
13 went on, don't you?

14 A. What?

15 Q. Show the minutes again, please.

16 A. No, I've got the minutes. They show what; that
17 I was at the meeting.

18 Q. And they show that what I just said happened,
19 happened. That they passed the paper around for the
20 lawyers to give their comments.

21 BY MR. STUTTS: Make sure you get it up on
22 the screen so we can see it.

23 BY MR. MOTLEY (continued):

24 Q. Sure. Page 4. The committee met yesterday and
25 reviewed the state of the medical art memorandum prepared

1 by special counsel. The document is -- The document
2 incorporates the work of Dr. Enterline and his review of
3 the medical literature on asbestos-related disease. That's
4 what we talked about and you wrote a paper about that we
5 just introduced into evidence. The document is now being
6 revised following the committee's review, and should be
7 available to members and their trial counsel within a
8 month. So, sir, were you not there when they passed it
9 around to all the lawyers and had them make comments?

10 A. I know this is going to be hard for you to
11 believe, Mr. Motley, but I do not recall 15 years ago
12 whether somebody passed out some papers to lawyers that
13 were at that meeting. I'm sorry, I just don't remember. I
14 didn't do it, I know that. I had nothing to do with it.
15 Now did they do it while I was in the room, I don't know.

16 Q. Let me ask you this: Did you have anything to
17 do with setting the price for sale of it at \$2,000?

18 A. You know the answer to that; of course not.

19 Q. Sir, I'm -- On February the 14th, 1978, were you
20 authorized by the Asbestos Information Association to
21 gather up a group of doctors to go to the New York Academy
22 of Sciences to a meeting arranged by Dr. Selikoff, so that
23 the asbestos industry could formulate its response to the
24 medical aspects of federal regulations to refute or clarify
25 positions for the contrary, and to advise the industry as

1 to the overall situation and recommend appropriate courses
2 of action?

3 A. I have no idea, but I know I didn't attend that
4 meeting, because I was not invited to give a paper that I
5 submitted for that meeting. So I didn't have anything to
6 do with that meeting.

7 Q. Look at Page 2 for a second, sir. Sir, I just
8 want to find out if this meeting took place, whether you
9 went or not.

10 A. Same document?

11 Q. No, sir. This is two days before. February 14,
12 1978.

13 A. Do you want me to come down there?

14 Q. I'll give you a copy of it, sir. Here, I'll
15 just give you mine.

16 A. That's very kind of you.

17 Q. Thank you, sir. Special activities, Page 2.
18 Page 2, please. Up a little. It says, the meeting of
19 physicians involved in formulating industry position with
20 regard to asbestos regulation. Dr. Weill encouraged such a
21 meeting prior to the New York Academy of Science's
22 conference in June. Suggest who were to be there at this
23 meeting and what they would do. Did such a meeting take
24 place?

25 A. It might have. I must say that I don't recall.

1 As I said, I was not at the New York Academy of Science's
2 meeting. Whether this meeting took place or not, I'm not
3 sure. I just don't remember. It might have.

4 Q. Doctor, did you, in 1976, assist of Asbestos
5 Information Association in presenting a scientific
6 criticism of the efforts of OSHA to lower the standard of
7 asbestos exposure in the United States?

8 A. Well, that's not, again, the way I would
9 characterize it. It comes as no surprise. I reviewed our
10 evidence that I showed this morning -- our early evidence
11 -- about what levels of exposure were not associated with
12 increased risk of asbestosis.

13 Q. Sir, on May the 25th, 1976 --

14 BY MR. STUTTS: Do you have another one?

15 BY MR. MOTLEY: I don't have one yet. I'm
16 going to introduce it against Garlock. This has
17 not been introduced. Do you want a copy? Would
18 you like to see a copy. Here you go.

19 BY MR. MOTLEY (continued:

20 Q. Do you recall, sir, that there was a meeting in
21 June, 1976, between the Asbestos Information Association
22 and the OSHA advisory committee on construction, safety and
23 health, and that they were concerned about the negative
24 publicity that would result from further lowering of the
25 standard, and that Dr. Weill could be at the meeting and

1 speak for the industry from a medical standpoint. Do you
2 recall that?

3 BY MR. STUTTS: Your Honor, same objection
4 that was stated at the bench.

5 A. Somebody said this in an executive committee
6 meeting? Mr. Motley, I don't remember that. Of course
7 not, I wasn't there.

8 BY MR. MOTLEY (continued):

9 Q. Sir, let me ask you this: We'll move on to
10 another subject. Dr. Weill, would you agree, sir -- and
11 I've got five boxes full of transcripts -- would you come
12 down with me for a second, please. This is a map of the
13 world, so far as we know it today. You have been all over
14 the United States, and I've got the transcripts here,
15 testifying either on behalf of the Asbestos Information
16 Association, or various asbestos companies in cases like
17 this, haven't you?

18 A. I've testified over the years in a number of
19 cases. It's been 20 years. There are very few each year,
20 but that's right.

21 Q. And in fact, recently you, at Mr. Dogans
22 client's request, on two separate occasions you flew over
23 10,000 miles to go to Australia to help defend Colonial
24 Sugar Refinery in lung cancer cases, didn't you?

25 A. Again, let me say that I put it somewhat

1 differently. I was given evidence about our research
2 regarding asbestosis and lung cancer, and when asbestos
3 attributability can be ascribed to lung cancer. That was
4 the sum of my testimony, and it wasn't against anyone, it
5 wasn't for anybody, but it was at the request of CSR on a
6 couple of occasions.

7 Q. Yeah. They asked you to leave New Orleans and
8 fly --

9 A. To go all the way down there.

10 Q. -- to Australia?

11 A. Yes.

12 Q. On two separate occasions, they had men who
13 worked in that mine who developed lung cancer that was
14 trying to be compensated, and you testified that the lung
15 cancer wasn't caused by the asbestos that was mined by
16 Mr. Dogan's client, didn't you?

17 A. Maybe it wasn't caused by the asbestos,
18 Mr. Motley.

19 Q. Aren't you an advocate? Haven't you testified
20 that --

21 A. I'm not an advocate.

22 Q. Excuse me -- of this position, that the type
23 asbestos that Mr. Dogan's client mined is so bad it should
24 have been banned off the face of the earth? Haven't you
25 said that publicly?

1 A. Well, again, I wouldn't have used those words,
2 but I would agree that I have not been a fan of crocidolite
3 exposure for others reasons. But that had nothing to do
4 with the issue for which I was testifying -- on which I was
5 testifying in Australia. It didn't have to do with that.
6 It had to do with a very focused issue that we talked about
7 this morning having to do with lung cancer and asbestosis.

8 Q. Did you meet Mr. Mutton?

9 A. I know Mr. Mutton.

10 Q. Mr. Mutton over there. He's over here with us
11 in the back back there somewhere. You met him when you
12 were over there?

13 A. I met him over there.

14 Q. Now, Doctor, would you -- You can return. Thank
15 you. Not you, Mr. Bozeman. You've been on the witness
16 stand too many days. On different occasions you've
17 testified about insulation products, asbestos cloth
18 products, the sandwich. You know what the sandwich is from
19 the last time you and I met; right?

20 A. Yeah.

21 Q. Asbestos refractory products --

22 A. Yes.

23 Q. -- for Dresser Industries. Spray products?

24 A. Is this list you're making about this case,
25 Mr. Motley?

1 Q. No, no, not this case.

2 A. Anytime --

3 Q. Yes.

4 A. -- in my life?

5 Q. Yes.

6 A. Okay.

7 Q. And just this year, though, you testified in

8 Louisiana that Mr. Tyner's product, and Mr. Dreher's

9 product, namely Garlock gaskets, were dangerous and

10 contributed to the disease process of a human being in

11 Louisiana, didn't you?

12 A. I'd have to see the testimony.

13 Q. Quick. Do you remember the name of Mr. Quick?

14 A. I do remember the name.

15 BY MR. TYNER: Your Honor, I'll be glad to

16 hand him a copy of the transcript if Mr. Motley

17 wants the witness to refresh his recollection.

18 BY MR. MOTLEY: Thank you, Mr. Tyner. Mr.

19 tyner, I'm about to go into that. I'm glad

20 you've got an extra copy. If you'll just let me

21 finish my questions, I'll be through.

22 BY MR. MOTLEY (continued):

23 Q. Do you recall testifying in Louisiana in January

24 of this year at the request of a company that made

25 insulation products, who was trying to get compensation

1 from Garlock Corporation for making gaskets that
2 contributed to Mr. Quick who was a patient of yours --
3 disease process; do you recall that?

4 A. I do recall that; yes.

5 Q. All right. And I'm going to go into that after
6 lunch in some detail. Now, sir, let me ask you this, sir:
7 Do you have the dictionary? Can you come down and look at
8 this TV, sir, please. I'm going to show you a picture of
9 something. Do you know what that is?

10 A. Well, it says it's a guinea pig, and I guess
11 it's a guinea pig.

12 Q. Thank you, sir.

13 A. I had to walk all the way down here --

14 Q. Well, you said you couldn't see it real clear.

15 A. Well, I -- All right, sir. We've established
16 it's a guinea pig.

17 Q. Were you in the room in 1986 when Dr. Selikoff
18 told the OSHA people that he didn't want to have any part
19 of exposing men and women to asbestos fibers in a
20 concentration of 0.1 fibers per CC for 20 years, because he
21 didn't want to have any part in a human experiment using
22 working men and women as guinea pigs, to see whether or not
23 that level of asbestos fibers was safe. Do you remember
24 that?

25 A. I was not there.

1 Q. You weren't there.

2 A. I testified on a different day, and I was not
3 there for his testimony.

4 Q. Do you have that, please. Did you read the
5 regulations that came out of that meeting and the
6 discussion, sir, by the federal government, of your opinion
7 versus Dr. Selikoff?

8 A. Well, let me ask you to point me to where you
9 want me to --

10 Q. Yes, sir, I'll be glad to do that. That's a
11 fair request. Here you go, sir. Here you go. Dr. Weill,
12 I'll take that one back if you don't mind.

13 A. Okay.

14 Q. The federal government assessed your testimony
15 and Dr. Selikoff's. You said that asbestosis death would
16 be rare to nonexistent under a two fiber standard, and a
17 disease of the past at a revised standard of 0.5 fibers per
18 CC. Do you recall making that --

19 A. Yes.

20 Q. And you were wrong, weren't you?

21 A. No, I wasn't.

22 Q. You weren't?

23 A. Just read the thing carefully. Asbestosis
24 deaths. That is, asbestosis that progresses to in fact
25 cause death by advanced pulmonary fibrosis. It's a disease

1 of the past right now, and people have been exposed to more
2 than two fibers per CC. So that was correct then, it's
3 still correct.

4 Q. All right. Sir?

5 A. So I wasn't wrong.

6 Q. Sir?

7 A. I may have disagreed with Dr. Selikoff, but I
8 wasn't wrong.

9 Q. Now, did you tell the jury a little while ago,
10 though, that if a man had minimal asbestosis, not death
11 from asbestosis, they had an increased risk of lung cancer?

12 A. Yes, sir.

13 Q. And do you agree, sir, that at the current
14 standard of .2 fibers per CC, one tenth of two fibers,
15 there will be cases of asbestosis that will occur and
16 because of that and people smoking, there will be extra
17 lung cancers from asbestos in the future?

18 A. I'm not as sure about this as you appear to be.

19 Q. Well, would you like to see where you said that
20 recently?

21 A. That .2 fibers is going to produce asbestosis?

22 Q. Uh-huh.

23 A. I don't think I ever said it that way. I may
24 have very well been unable to completely preclude that
25 possibility. I don't think .2 fibers over a working

1 lifetime does produce asbestosis. If you have something
2 that I've said that you think is different, I'll be glad to
3 look at it.

4 Q. Okay. Were you there when Dr. Selikoff said
5 that he's still seeing cases of severe asbestosis more than
6 ten years since the two fiber per CC standard became
7 effective? And then they quote him. Mr. Nash was
8 cross-examining him. Are you continuing to see advanced
9 cases of asbestosis. Selikoff, we certainly do. We see
10 deaths. But I have not had the experience of seeing what
11 would happen at 0.1 fibers per CC, but I'm also not willing
12 to expose a large number of people to 0.1 as guinea pigs so
13 that I can come along 20 years later and give you the
14 answer. Do you recall him saying that?

15 A. Mr. Motley, you've just absolutely -- we're
16 talking about apples and oranges. Dr. Selikoff, at this
17 time, as I, was still seeing, you know, cases of advanced
18 asbestosis, due to the exposures of the '40s and the '50s.
19 He wasn't seeing asbestosis due to, you know, promulgated
20 standards of the 1970s. It takes decades for this to occur
21 and you know that. And we don't want to mislead anybody.
22 I know you wouldn't want to, and I certainly don't want to.
23 And I agree with him; he doesn't know whether .1 or .2 is
24 going to be free of any risk of asbestosis. My best
25 judgment is it will be.

1 Q. He said he didn't want to wait 20 years while
2 they -- is that right?

3 A. That's what he said; yes.

4 Q. So now we know at least that Dr. Selikoff is an
5 advocate that you shouldn't expose people to dust and wait
6 and find out what's going to happen to them; correct?
7 Correct? That's what he said.

8 A. He said what he said. I think it's quite clear
9 what he said.

10 Q. Do you think you ought to dose people with
11 asbestosis and wait ten years and see what happens to them?

12 A. Dose them with asbestosis? No, I don't want to
13 dose anybody with that.

14 Q. Excuse me. Dose them with asbestos and see what
15 happens ten years later?

16 A. No. I think we have enough information now, and
17 so does OSHA, since he wasn't, but I was, their medical
18 advisor on this promulgation that we're reading about right
19 now -- I think we have enough information, and OSHA agreed
20 in 1986 at the time you were, you know, just citing here,
21 that the current standard, .2 fibers per CC, is likely to
22 be free of risk of asbestosis. I agreed with that at that
23 time. I, in fact -- I, in fact, advised them, and I think
24 you know this as well, and testified about it, that I want
25 to see the standard lowered. I'd like to go down to .1.

1 But we all agreed that .2 fibers is likely not to carry
2 with it an asbestosis risk. And that's what all the
3 evidence says.

4 Q. Sir, have you said under oath that a person with
5 even minimal asbestosis should be completely removed from
6 exposure and no longer be exposed to asbestos?

7 A. Yes.

8 Q. You have said that?

9 A. I have.

10 Q. You believe that?

11 A. I do.

12 Q. Then why in 1979 did you recommend to the Bell
13 Telephone Company that in a man you diagnosed as having
14 asbestosis, it was okay to let him go back and work and be
15 exposed to asbestos?

16 A. Well, you would have to show me the individual
17 case. I don't recall that. But on the other hand, there
18 are situations where, in fact, somebody has a couple of
19 years left at a very, very low exposure, or no exposure at
20 all, and it makes a lot more sense for the economic health
21 of the family to let him complete the job. That may have
22 been the situation. There are always reasons why when you
23 take the worker and his family into account, that you have
24 to modify what is best public health policy. That may have
25 been the case. I don't know what the situation was at that

1 time.

2 Q. Do you remember the name Oscar Smith?

3 A. No.

4 Q. Do you remember diagnosing him with asbestosis
5 in 1979?

6 A. I don't, Mr. Motley. I've seen thousands and
7 thousands of people. I don't remember that name.

8 Q. Let me ask you this question before we break for
9 lunch, if the Court permits, because I'm getting mighty
10 hungry, Your Honor.

11 BY MR. STUTTS: I'll have to ask you from
12 now on to break.

13 BY THE COURT: About ten minutes, Mr.
14 Motley.

15 BY MR. MOTLEY: Okay. Well, my watch said
16 three minutes till. It must be fast.

17 BY THE COURT: Well, your watch is wrong.

18 BY MR. MOTLEY (continued):

19 Q. Were you receiving financial support -- Tulane
20 University -- in 1979 from Johns-Manville Corporation?

21 A. You know, fee for service kind of thing. If
22 they sent a case, I guess we got paid for it like everybody
23 else.

24 Q. Did you know that in 1979 the vice president of
25 Johns-Manville Corporation wrote the president and said

1 that it's a company practice into the early 1970s, not to
2 tell a person that he had asbestosis and let him continue
3 working?

4 A. No, I didn't know that.

5 BY MR. STUTTS: Objection, Your Honor.

6 Same objection. Mr. Motley is publishing
7 documents that Dr. Weill has not --

8 BY THE COURT: Approach the bench. Bring
9 your document, Mr. Motley.

10 (BENCH DISCUSSION. OFF THE RECORD.)

11 BY MR. MOTLEY (continued):

12 Q. Dr. Weill, do you think it would be morally
13 reprehensible, unethical, illegal, to have a man diagnosed
14 with asbestosis, and to allow him to continue to work where
15 he was exposed to levels of asbestos for five or six more
16 years to see what happened to him at the end of that time?

17 A. Mr. Motley, I wouldn't anymore use those
18 adjectives, those descriptors. Those are not my kinds of
19 descriptors. You've asked me do I think someone with
20 asbestos, should they be removed from further exposure. My
21 answer for decades has been, yes. You know that, the world
22 knows that. I believe that today as we sit here. I
23 wouldn't characterize it in any way, because as I say,
24 there are circumstances. If someone has worked all his
25 life very hard and needs a couple of years at a markedly

1 reduced exposure level to support his family, I might, you
2 know, have a different view of that. There are, you know,
3 all kinds of reasons why people have to make compromises.
4 You make compromises all the time and we have to, also.
5 But as a general rule, people with asbestosis should not be
6 further exposed.

7 Q. How many people at the National Gypsum and
8 Johns-Manville plants in New Orleans that you studied on a
9 grant from the Quebec Asbestos Mining association, were
10 diagnosed as having asbestosis from 1969 to 1972, that
11 those companies allowed to continue to breathe in asbestos
12 dust at those plants, sir, do you know?

13 A. I haven't the slightest idea. I don't know; no.

14 BY MR. MOTLEY: Would this be an
15 appropriate time now for a break?

16 BY THE COURT: I think so. All right.

17 Ladies and gentlemen, we'll take our lunch break
18 and start back at 1:30.

19 (WHEREUPON JURY EXITS COURTROOM. COURT
20 IN RECESS FOR LUNCH.)

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1 IN THE CIRCUIT COURT OF JACKSON COUNTY, MISSISSIPPI

2
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4
5 IN RE: ASBESTOS PERSONAL INJURY CASES - ABRAMS LEAD
6 GROUP I PLAINTIFFS

7 NOS.

8 88-5422(2), 89-5121(2), 90-5247(2), 88-5420(2),
9 89-5252(2), 90-5069(2), 89-5153(2), 90-5352(2),
10 89-5268(2), 90-5045(2), 90-5274(2), 88-5181(2),
11 91-5187(2), 91-5098(2), 91-5000(2), 90-5387(2),
12 91-5119(2), 90-5369(2), 91-5135(2), AND 90-5178(2)

13 *** VOLUME II ***
14
15
16
17

18 THE FOLLOWING IS AN UNCERTIFIED AND UNPROOFREAD DAILY COPY
19 TRANSCRIPT OF THE PROCEEDINGS HAD IN THE ABOVE REFERENCED
20 CAUSE ON MONDAY, JUNE 28, 1993, BEFORE HONORABLE KATHY KING
21 JACKSON, CIRCUIT JUDGE.
22
23

24 **DAILY COPY**
25

UNDERLINED TEXT IS PHONETIC
THIS TRANSCRIPT HAS NOT BEEN PROOFREAD

1 BY THE COURT: Mr. Bird, bring the jury
2 in, please.

3 (Jury enters the courtroom).

4 Be seated.

5 BY MR. MOTLEY:

6 Q. Good afternoon, ladies and gentleman, Your Honor,
7 Doctor.

8 Let me turn to the study that you did of the
9 cement plants that you were asked about by Mr. Stutts. I
10 believe that study started sometime in 1969; is that
11 correct?

12 A. Yes, sir, that's right.

13 Q. And you told us this on direct, that part of the
14 funding came from the Quebec Asbestos Mining Association and
15 that started in 1969, but that I didn't catch when it quit,
16 when did they stop helping fund this study?

17 A. Mr, motley I don't remember the exact year, but it
18 would have been right around '80, '81, something of that
19 sort, when they no longer made a contribution.

20 Q. I have a -- the reason -- to be fair with you, I
21 have a transcript where you discussed their funding in 1981
22 and I didn't know if there would have been any funding after
23 that?

24 A. That was about the time.

25 Q. Yes, sir. And you remember testifying in 1977 in

1 Louisville, Kentucky in the case of Mr. Sampson versus
2 Johns-Manville?

3 A. I think I only had one case that I ever testified
4 in Louisville so I don't remember the name but that sounds
5 correct.

6 Q. And as of 1977 eighty percent of the funding for
7 this study, I'm not talking about any other studies that you
8 were doing, because this wasn't all you were doing
9 obviously, right?

10 A. That's right.

11 Q. Eighty percent of the funds for the cement plant
12 study that you talked to the jury about this morning was
13 coming from the QAMA, correct?

14 A. If the transcript shows that I said that in '77 I
15 would have had a much closer, you know, knowledge of that.
16 In retrospect that sounds high. If you'd like to show me
17 that. See, the NIH funding started in '72 and I would have
18 expected that to account for more than thirty percent. But,
19 like I say, I was closer to it then.

20 Q. Counsel, on Page 431 -- 1431. The lawyer tried to
21 get you to say it was ninety percent -- lawyers tend to try
22 to do that every now and then, and you said it was --

23 A. It wouldn't have made any difference, Mr. Motley,
24 it was ninety percent or ten percent.

25 Q. It approximates eighty percent as of 1977. Does

1 that refresh your memory?

2 A. As I said, it wouldn't be my recollection now but
3 that's fine.

4 Q. Now, what you said was, the lawyer asked you was
5 it ninety percent and you said probably in the area of
6 eighty percent.

7 Now, the only reason I'm asking you this, this was
8 a long-term study and some years -- I have got the records I
9 will show you, but in some years the Quebec Asbestos Mining
10 Association would fund you as much as ninety-five thousand
11 dollars and other years as low as seventy thousand dollars,
12 is that approximately correct?

13 A. You seem to have these numbers --

14 Q. I do. I do.

15 A. -- more in your mind. Well, there's no reason why
16 I should.

17 Q. Well, that's okay I've got the documents. But
18 does that --

19 A. That's possible, yes.

20 Q. Okay. Now, I want to give you Exhibit 407,
21 please. Do you recall in April 1969 Dr. Wright wrote you --
22 excuse me, Dr. Wright wrote Mr. Zimmerman. Tell the jury
23 who Mr. Zimmerman is.

24 A. Mr. Zimmerman worked for National Gypsum Company,
25 one of the two plants that we studied, and it was my

1 impression then and I guess it continues to be, that he had
2 some sort of responsibility for health and safety in the
3 company.

4 Q. All right, sir. And George Wright, in addition to
5 being the director of medical research in Cleveland for that
6 hospital, was also a medical advisor to the Quebec Mining
7 Association, Correct?

8 A. Yeah, I guess that's correct. He actually held a
9 chairmanship of the scientific committee called Institute of
10 Occupational Environmental Health.

11 Q. Okay. Now, this is a letter dated April 8, 1969
12 and attached to it is what?

13 A. A proposal.

14 Q. The proposal of Tulane University, it's
15 principally done by you, I believe, you wrote the principal
16 investigator?

17 A. Right.

18 Q. To study the health effects of the asbestos
19 exposure in workers of the industry and other residents of
20 New Orleans, correct?

21 A. Yes.

22 Q. Now, initially you proposed that not only the
23 cement -- people that worked in the cement factory be
24 studied, but also the people in the community of New Orleans
25 because you had seen some cases of mesothelioma from

1 environmental exposure, correct?

2 A. Yes.

3 Q. So some folks down in New Orleans had gotten
4 mesothelioma just from living near some of these plants or
5 shipyards, correct?

6 A. Or family members.

7 Q. Okay. Of the workers?

8 A. Of the workers, yeah.

9 Q. Now, let me read this letter to you from Dr.
10 Wright. It's up here for the jury to see. It says, Dear
11 Mr. Zimmerman of National Gypsum. Enclosed is a copy of the
12 proposal that's been submitted to our scientific committee
13 by Dr. Weill and Ziskin of New Orleans. Dr. Ziskin is
14 deceased now, I believe, is he not?

15 A. He is, yes.

16 Q. Our committee has not looked at this officially as
17 yet and will not do so until time into May. It has been
18 circulated. As I indicated to you on the telephone today, I
19 hope that you will look at this especially from the point of
20 view of whether or not there's anything there that might be
21 troublesome for National Gypsum Company and which we could
22 avoid by making the necessary adjustments at the outset. I
23 can only repeat these are two very high caliber people,
24 talking about you and Dr. Ziskin, correct?

25 A. I hope so.

1 Q. And they are as anxious as I am to do the work
2 properly and without causing disturbance where it is at all
3 avoidable.

4 Then it goes on to say I will be in town and he
5 encloses a copy of the survey I mean of the proposal.

6 Now give me Exhibit 1743, please.

7 Now, two days later Mr. Zimmerman, who received
8 this letter and your proposal, writes Mr. Killean, you knew
9 Mr. Killean, didn't you?

10 A. I may have, Mr. Motley, I don't have a vivid
11 recollection of having had much contact with him. I don't
12 recall who he is.

13 Q. Let me see if this letter will refresh your
14 recollection here.

15 BY MR. STUTTS: Could I have a copy?

16 BY MR. MOTLEY:

17 Q. You have a copy. So you can see that the letter
18 is about your proposal, correct?

19 A. Yes.

20 Q. Now, and they indicate that not only is it going
21 to be with National Gypsum but also Johns-Manville. And
22 they say the basis for the study is that the two scientists
23 from Tulane Medical School, that's you and Dr. Ziskin,
24 correct?

25 A. Yes.

1 Q. Discovered five cases of lung cancer in asbestos
2 workers suffering from asbestosis. Do you recall that?

3 A. Well, I see that it's written here. I don't
4 recall that that in fact is correct. It may very well have
5 been. All I know is we were seeing cases of asbestosis,
6 some of those cases may also have been lung cancer, I don't
7 know. I don't know whether it matters to you or to this
8 proceeding. But that was his recollection. I'm not sure
9 it's correct.

10 Q. Then they say they contacted Dr. Wright. That's
11 you and Dr. Ziskin, correct?

12 A. Well, it didn't happen exactly like that. I think
13 previously either you or I have talked about this. Dr.
14 Wright was coming to New Orleans on a couple of our annual
15 courses in pulmonary function. I got to know him on a
16 couple of those occasions. We talked about occupational
17 lung diseases and I said that we were seeing some cases of
18 asbestos-related disease, et cetera, et cetera. He
19 indicated he had some role in funding research. I told him
20 I thought this needed to be studied. That led to the
21 proposal.

22 Q. All right. Well, this memo, in any event, says
23 you contacted Dr. Wright and he, meaning Dr. Wright,
24 immediately flew to New Orleans, studied their reports and
25 findings and concurred with them?

1 A. Mr. Motley, I'm giving you my recollection which I
2 think is more accurate than this man, whoever is he is,
3 narrative and his memo. I'm trying to help and be
4 responsive to your questions.

5 Q. Well, let me ask you this, sir. Ever who called
6 who first, Dr. Wright and you got together?

7 A. That's right.

8 Q. All right. Now, they say these doctors, meaning
9 you and Dr. Ziskin, are to be commended -- complimented in
10 the method they handled this in advising Dr. Wright instead
11 of seeking front page publicity as others have in the New
12 York area. Now, they're talking about Dr. Selikoff there,
13 aren't they?

14 BY MR. STUTTS: Your Honor, objection.

15 May I approach the bench.

16 (Off-the-record discussion held at bench).

17 BY MR. MOTLEY:

18 Q. Now, Dr. Weill, do you know anything about --
19 strike that.

20 How often would you see Mr. Zimmerman from
21 National Gypsum?

22 A. During those years that we were doing the study?

23 Q. (nods affirmatively).

24 A. Once or twice a year.

25 Q. How about the plant manager, what was his name?

1 A. Mr. Plaucheau, I think, was certainly plant
2 manager part of that time. I think there was another one.
3 I don't recall I can't recall his name.

4 Q. I have a whole stack of documents here and I'm
5 going to just ask you the bottomline. Do you know whether
6 or not from 1969 through 1973 Mr. Zimmerman and Mr. Faye and
7 others, were concerned about and refused to allow health
8 brochures and booklets, and in fact destroyed two hundred
9 and fifty booklets intended for their own employees to
10 advise them of the health hazards of working with asbestos
11 at that plant you were studying?

12 I'm not saying you had anything to do with it, I'm
13 just asking if you know about it.

14 A. I have absolutely no knowledge about it and it
15 would surprise me if that was true.

16 Q. Okay. Well, let me show you the document then.

17 BY MR. DREHER: Your Honor, we object as
18 to the relevancy of this document.

19 BY MR. MOTLEY: Your Honor, he said it
20 would surprise him if it's true. I've got a
21 document that proves exactly what I said.

22 BY MR. STUTTS: Your Honor, the same
23 objection as to the last --

24 BY THE COURT: I will let the witness
25 read the document and we won't put it up on

1 the board.

2 BY MR. MOTLEY: Thank you, Your Honor.

3 BY MR. MOTLEY:

4 Q. What I said was true, wasn't it?

5 A. Yes.

6 Q. Now, you were there trying to help the company and
7 the employees and scientists, correct?

8 A. I was there to help the workers and try to prevent
9 disease, yes.

10 Q. And they didn't tell you in 1973 what I just
11 showed you, correct? You said you'd be surprised and you
12 are surprised, aren't you?

13 A. I am surprised, yeah.

14 Q. You're shocked, aren't you?

15 A. Yes.

16 Q. Now, sir, let's go through Exhibit 407, which is
17 your request for study.

18 A. I'm sorry I didn't follow you. The one that's
19 attached to Dr. Write's letter?

20 Q. Yes, sir.

21 A. Okay.

22 Q. Now, that is a document you personally prepared or
23 participated in the preparation of, correct?

24 A. Yes.

25 Q. Will you look, please, sir at -- can I see 407 on

1 the screen, the proposal.

2 All right. And here's where you express your
3 concern about the role of long-term asbestos fiber
4 inhalation and the production of pulmonary and pleural
5 neoplasms, that's cancer, correct?

6 A. Yes. What page are you on?

7 Q. Introductory statement. This interest extends not
8 only to the workers in the manufacturing plants using
9 asbestos materials, but also to the community at large.
10 Particularly those individuals living in the areas adjacent
11 to the industrial installations where the fiber is used.
12 Okay?

13 A. All right.

14 Q. Carcinogenic or co-carcinogenic properties of
15 asbestos have become apparent. Since improved industrial
16 hygiene techniques have led to dust suppression with the
17 result that workers incur a smaller risk of early
18 development of diffuse pulmonary fibrosis and pulmonology.
19 In addition the better control of infectious disease, like
20 tuberculosis?

21 A. Yes, sir.

22 Q. Has also resulted in greater longevity for the
23 workers and larger numbers are surviving to develop
24 malignancies. Since pleural mesotheliomas have been
25 adequately associated with prolonged exposures to asbestos

1 dust, these tumors in addition to the pulmonary and
2 gastrointestinal carcinomas and peritoneal mesotheliomas
3 must be sought for in populations thought to be at increased
4 risk due to their occupational or geographic proximity to
5 the asbestos industry.

6 That was your way of explaining to the company
7 your interest and concern was to study exactly how that was
8 happening and how frequently; is that fair?

9 A. In relation to this industry which had not been
10 previously studied, right.

11 Q. Now, sir. And you told Mr. Stutts that one of the
12 things you wanted to do was take all the men that were
13 working there in 1970 and then follow them over time,
14 correct, see what happened to them; isn't that right?

15 A. Yes, I guess that's right.

16 Q. Now, Doctor, isn't it true that you found -- the
17 first time you looked at the x-rays and examined some of the
18 men who were working, you found some seventeen to twenty
19 percent had asbestosis, correct?

20 A. No, sir, we didn't make a diagnosis of
21 asbestosis. The statistical analysis ultimately showed that
22 a certain percentage, and the one you give sounds about
23 right, had small opacities at various levels in the ILO
24 classification. Those were studies results and those were
25 results that we were in fact reporting.

1 Q. Now, give me Stonewall transcript, please.

2 Dr. Weill, I'm going to try to speed this up by
3 asking you questions you've been asked before, and I have
4 the transcripts here and I will be glad to let Mr. Stutts
5 verify that what I'm asking you is what you said before.

6 But of the seventeen to twenty percent who had
7 these lung scars consistent with asbestosis, some of them
8 continue working in that plant, didn't they?

9 A. That's correct.

10 Q. Have you seen the study that the US Public Health
11 Service did after you started your examinations of the dust
12 counts at that National Gypsum plant in New Orleans about
13 how much dust those men who were being examined were being
14 exposed to from 1970 to 1974?

15 A. I'm sorry, that's such a convoluted -- you mean
16 have I --

17 Q. Let me start over. Did National Gypsum -- here
18 you are trying to help the men out, okay? You're examining
19 them, you're making reports to the company about what you're
20 finding, some of the --

21 A. The company and the world. That's what these
22 forty or so publications in the scientific literature is
23 about.

24 Q. When was your first publication?

25 A. 1973.

1 Q. Okay. 1969 to 1973 before you published them?

2 A. Yeah.

3 Q. I'm not saying you didn't publish your findings, I
4 give you credit for that, sir. You certainly did.

5 A. And all they found disease, didn't they?

6 Q. Yes, they did. That's unfortunate and that's not
7 your fault.

8 A. It isn't my fault.

9 Q. But from 1969 to 1973 my question is, did the
10 company give you copies of the dust studies that were going
11 on in that plant where the men you were examining, some of
12 whom had asbestosis, continued to work? Have you ever seen
13 those? Did you see them at the time? Let me ask you that.

14 A. Part of the study was to collect all of the dust
15 sampling that was done in the National Gypsum and the
16 Johns-Manville plants. Because what we were doing, as I
17 explained before, was reconstructing individual exposure
18 estimates on each of the individuals.

19 Now, at the National Gypsum plant my recollection
20 is that the dust information came primarily from outside
21 agencies; that is, they didn't have their own industrial
22 hygienist so it came from the state and the US Public Health
23 Service.

24 What I can't tell you here today in 1993 are the
25 dates of those studies. But I think they do go back, my

1 recollection is they go back as far as the 1960s.

2 Q. Okay.

3 A. Maybe even the '50s, I'm not sure.

4 Q. If I tell you that you have testified and show you
5 that you have testified in the past that with respect to
6 National Gypsum there were some dust counts taken before you
7 started your study, okay, and you looked at those?

8 A. Oh, I know there were counts before we started the
9 study.

10 Q. I have them here.

11 A. All right.

12 Q. My question to you, sir, is, after you started
13 your study National Gypsum never gave you the results from
14 the US Public Health Service studies of the dust conditions
15 in that plant after you started your study, did they?

16 Because if they did I've got another question for you.

17 A. Mr. Motley, I wish I could answer that question.
18 I would be happy to. I don't recall the dates and whether
19 any of the dates were beyond when we started. I think we
20 need to be fair to them too. I don't know whether those
21 dates were later than 1969, or whether they were all before
22 1969.

23 We did our own studies actually in that plant, our
24 own dust studies, Dr. Armand who worked with me, did
25 measurements in that plant. And so we have our own data for

1 during the time we did our study. I don't know which one
2 you're talking about and I don't know whether I saw it. So
3 it's possible you're right, it's also possible you're not.

4 Q. All right. You told us that sometime in 1973 or
5 '74 National Gypsum hired you of Tulane to start doing OSHA
6 required examinations, correct?

7 A. That's right.

8 Q. And at that time you started having hands-on
9 treatment with the workers and if you found asbestosis you
10 were telling them, weren't you?

11 A. I was.

12 Q. Now, from 1969 to 1973 though, you were passing
13 the information on to the company and relying on them to
14 tell the workers, weren't you?

15 A. No, that's not an accurate characterization.

16 Q. All right. Well, let me show you what you
17 testified to four previous occasions.

18 A. Okay.

19 Q. Give me Adams one Page 74.

20 A. Why not let me answer the question now?

21 Q. I want to show you what you said before, sir.

22 A. Okay.

23 Q. Did you testify that you were doing research and
24 that you would report your findings to the company and that
25 it was up to them to take whatever steps they thought

1 appropriate, but it was your position all along that if
2 people have even minimal evidence of asbestosis, asbestos
3 dust exposure is contraindicated. Now, what does that word
4 contraindicated mean?

5 A. That they shouldn't have it was what I testified
6 to before. May I read that?

7 Q. Yes, sir. And I've got three more just like them,
8 so you can read this one or look at the other ones.

9 A. I've got plenty of time.

10 Q. I'm sure you do, sir.

11 Q. Let me shorten this up, Doctor. I will show you
12 your testimony --

13 A. Mr. Motley, in fairness to me, may I correct
14 something that you --

15 Q. Go ahead.

16 A. I mean you're assuming that the time frame here
17 was -- you know, is not even included in all of these pages
18 that I'm looking at. We're talking here about asbestosis
19 that I was reporting presumably, from what I can see in this
20 transcript, at a time when I was doing these reviews.

21 Q. Which are "these reviews?"

22 A. The OSHA mandates.

23 Q. No, sir, I was giving you the benefit of the doubt
24 that these are the reviews that occurred before you --

25 A. Don't give me the benefit, let's just get the

1 truth.

2 Q. Okay, let's get the truth then.

3 A. And I'm trying to figure out from this
4 transcript -- nothing in these pages tell me what really,
5 you know, went on here. I'm not -- I don't think this has
6 anything to do with an individual case. I think what this
7 narrative, or this question and answer has to do with, was
8 that when they got our progress reports from the research
9 they were able to act on those, you know.

10 Q. Look at this sir, please.

11 A. (Witness complying).

12 Q. You testified here under oath, Dr. Hans Weill?

13 A. I really do know that when I testify I'm under
14 oath.

15 Q. All right. 27th day of June 1983. Herbert
16 Williams versus Goldbond Building Products. Page 20,
17 please.

18 A. Page what?

19 Q. It's a different transcript.

20 A. Oh.

21 Q. When the results of the pulmonary function studies
22 and the x-rays were taken -- well, if you will look on the
23 screen, sir, you will see what we're doing. I'm sorry, I
24 don't have two copies. Were those results recorded in a
25 written form. Your answer, they were. If an employee was

1 shown to have -- next page, please -- some sort of dust
2 related disease in the course of those studies, would you
3 have indicated that in his record. Answer, that depends.
4 It was not our purpose and everyone knew that to provide
5 counseling to workers. I'm talking about before 1973.

6 A. That's right, this is correct.

7 Q. All right. This was a research project and it
8 continued to be the responsibility of the plant medical
9 department or their contract physician to provide
10 information concerning possible dust effect. There were
11 instances where the x-ray appearance -- I'm interpreting.

12 A. Yeah.

13 Q. Was so striking that in the screening we did in
14 fact make a note of this and inform the individual that I've
15 just mentioned. But it was not in fact a part of the
16 purpose of this, nor was it part of what we said that we
17 were going to do.

18 Next page, please.

19 Well, question, in those cases where the chest
20 x-rays and/or pulmonary function studies indicated dust
21 disease, did you have an agreement with the companies not to
22 reveal that information to the individual employees. The
23 companies because they wanted the prerogative of informing
24 workers of these problems themselves it was their
25 responsibility. And they felt that they should discharge

1 that responsibility.

2 Up please.

3 I was -- this is your answer. I was once asked by
4 one of the companies, which is not the one that's involved
5 today, if in fact we had informed workers of those effects,
6 talking about scarring in the lungs, right?

7 A. Right. Or the shadows that may indicate scarring.

8 Q. And I reiterated in my correspondence what their
9 and our understanding was that it was their responsibility
10 and therefore we did not do that. Is that correct?

11 A. That's exactly right. That's what I explained to
12 the workers and the unions and everyone else.

13 Q. Okay.

14 A. However, it's very important to add that I knew
15 and was convinced that that monitoring, that surveillance
16 program, was in fact going on contempt.

17 Q. Well, would you like to see some cases where they
18 were never told, sir? Let me see if these names strike a
19 cord of recollection with you.

20 Do you remember Mr. Baio of Johns-Manville
21 Corporation?

22 A. No.

23 Q. Do you know whether Mr. Baio was diagnosed by you
24 in 1970 as having asbestosis, or at least you sent a report
25 to the company, do you know whether he was told he had

1 asbestosis?

2 A. I don't remember, no.

3 Q. You have no idea, do you? How about Mr. Joseph
4 Molaison, do you remember him?

5 A. The name sounds vaguely familiar.

6 Q. You have no idea whether the company told him he
7 had asbestosis, do you?

8 A. No, of course, I would not have any idea about
9 that.

10 Q. How about Mr. Eldridge Sanchez, do you remember
11 whether or not the company told him that you had found
12 asbestosis?

13 A. Same answer, I don't know.

14 Q. Now, sir, do you remember in these three cases
15 being given information by the Johns-Manville lawyers in the
16 form of reports that you rendered in those cases? Is this
17 your signature, sir?

18 BY MR. STUTTS: Do you have a copy?

19 BY MR. MOTLEY: Just a second.

20 BY MR. MOTLEY:

21 Q. Is that your signature, sir?

22 BY MR. STUTTS: Well, I'd like to have
23 a copy before you show them to the witness.

24 BY MR. MOTLEY: I promise I'll give you
25 a copy. I'm not going to show them to the

1 jury.

2 A. Yes.

3 BY MR. MOTLEY:

4 Q. And is that your signature, sir?

5 A. Yes.

6 Q. And is this your signature, sir?

7 A. Yes.

8 Q. And is this your signature, sir?

9 A. It is.

10 Q. Now, sir.

11 A. Are you going to start asking me questions about
12 them?

13 Q. Yes, of course, I am.

14 A. Well, I'm going to have to --

15 Q. I will. I will give them to you.

16 Do you recall, sir, -- what?

17 BY MR. MOTLEY: Do you want me to give
18 you a copy of them?

19 BY MR. STUTTS: Sure.

20 BY MR. MOTLEY: Do you want me to move
21 them into evidence?

22 BY MR. STUTTS: I'd like a copy. These
23 are not premarked exhibits, are they?

24 BY MR. MOTLEY: No, sir.

25 BY MR. MOTLEY:

1 Q. Do you recall, sir, being hired by lawyers for
2 Johns-Manville Corporation?

3 A. That makes it sound so awful but if that's what
4 you say.

5 Q. Well, there may be others in here that feel the
6 same way.

7 A. I've not been hired -- I worked for only one
8 institution and have for all these years and that's Tulane
9 University.

10 Q. Okay. Do you know whether or not you and Tulane
11 University were hired by lawyers representing Johns-Manville
12 to offer opinions in workers' compensation cases filed by
13 the three men whose names I just read you, where they claim
14 that while they were being further exposed to asbestos after
15 being diagnosed at those plants you were studying, whether
16 the exposures after 1970 contributed to their asbestosis and
17 cancer they developed later. Do you remember that?

18 A. I don't recall that those specific cases were the
19 ones where that question came up. It's certain a possible
20 question we were asked to respond to. I don't even remember
21 that those cases were in fact being seen by me for
22 Johns-Manville or their attorneys.

23 Q. Mr. Steven Bullock, do you remember him? He's the
24 lawyer for Johns-Manville?

25 A. What firm was that?

1 Q. Stone, Pigman, Walter --

2 A. I think I was seeing those cases for some other of
3 their clients. But anyway it doesn't perhaps make any
4 difference. I don't think that was Johns-Manville.

5 Q. Well, attached to all of these documents are
6 sheets from Johns-Manville and from Huey M. Jackson. You
7 knew Mr. Jackson was the safety director of Johns-Manville,
8 didn't you?

9 A. Yes. Well, does that identify the lawyers? I
10 don't think it does. But anyway.

11 Q. Well, do you want me to show you where Mr. Bullock
12 wrote you and said he was representing Johns-Manville?

13 A. No. This may not be relevant, I'd like to answer
14 your questions.

15 Q. Let's move on to something else, then.

16 Now, sir, I want to turn to the issue of
17 exposure. Have you reviewed the testimony of the plaintiffs
18 in this case about their exposure at Ingalls Shipyard?

19 A. I haven't reviewed their testimony, per se. I've
20 reviewed some summary material about timing of their contact
21 with the Westinghouse product.

22 Q. Okay. And who provided this summary material to
23 you?

24 A. The attorneys for Westinghouse.

25 Q. Did you ask to see the testimony of these men to

1 see if the summaries were accurate?

2 A. No, I didn't. Mainly because that wasn't -- I was
3 not told that I would be reporting on, or testifying on
4 their specific exposure circumstances. That wasn't
5 apparently why I'm being called.

6 Q. Before I get into that let me ask you a question.
7 Mr. Tyner showed you a quote from Dr. Selikoff, do you
8 remember that? Mr. Tyner --

9 A. Oh, yes.

10 Q. -- the gentleman representing Anchor Packing?

11 A. Yeah.

12 Q. Further on in that article Dr. Selikoff says there
13 are products that are bound in, but if you put a drill to
14 them or a saw to them they frequently release asbestos
15 fibers. You recall that, don't you, and isn't that true?

16 A. Well, I'll answer the last part because I
17 certainly don't recall, I wasn't there. Yes, it is true.
18 It's a matter of degree. Everything is quantitative. They
19 can release some fibers it just makes it less likely.

20 Q. Exhibit 6996, please, Westinghouse exhibit.

21

22

23

24

25

1 Q. Did you participate in the test that
2 Westinghouse did in 1991 of the one-sided sandwich? Do you
3 remember that?

4 A. I'm not sure exactly which test you are
5 referring to. Anyway, I didn't participate in any tests,
6 so I guess the answer is no.

7 Q. Well, Mr. Stutts was asking you about Micarta?

8 A. Yeah.

9 Q. And everything he asked you was about Micarta;
10 right?

11 A. Well, I don't know about everything, but a lot
12 of things; yes.

13 Q. He didn't ask you about the sandwich, which is a
14 piece of Micarta, a piece of Marinite, and a piece of
15 Micarta. He didn't ask you anything about that, did he?

16 A. I don't think he did.

17 Q. So your answers were only if Micarta was used
18 alone; correct?

19 A. Not exactly. My answers responded to just
20 Micarta, not necessarily used alone or not used alone, but
21 just to Micarta.

22 Q. The jury has heard in this case that Micarta was
23 the front piece of bread and the back piece of bread, with
24 Marinite being the bologna. No mayonnaise, no lettuce.
25 You know about the sandwich, don't you?

1 A. I've heard it referred to as that; yes, sir.

2 Q. Have you seen the test results that were done
3 when the sandwich was cut?

4 A. By whom?

5 Q. By Dr. James Millette, or by Dr. Robert Sawyer.

6 A. Well, as we I think discussed last time, I did
7 see some results from Dr. Sawyer; but I don't recall the
8 other study.

9 Q. If the testimony in this case is when the
10 sandwich, front and back with Marinite in the middle --

11 A. I think I got that part.

12 Q. Okay. We'll leave off the mayonnaise and
13 mustard part -- it gives off 85 fibers per CC; you agreed
14 with me the last time you came to Mississippi that that
15 makes that a mighty, mighty high fiber release product,
16 didn't you?

17 A. Yes, sir.

18 Q. Your answer was yes?

19 A. The answer was yes.

20 Q. How many times have you met with Mr. Stutts or
21 lawyers for Westinghouse?

22 A. On this case?

23 Q. This case or the one that brought you here two
24 years ago.

25 A. Oh, I guess maybe a half a dozen times,

1 something like that.

2 Q. In that half dozen times, have they ever given
3 you a copy of Plaintiffs' Exhibit 6996? I think the part
4 that I wanted to ask you about is highlighted. Have you
5 ever seen that document before I handed it to you?

6 A. I don't remember seeing it.

7 Q. Will you show it, please. It's in evidence.
8 This is the test that was done at Westinghouse on Micarta
9 air samples for airborne asbestos during machining
10 operations which involved Micarta containing asbestos.
11 Airborne sample from their operation using this equipment
12 to saw a one-inch slab, resulted in 17 fibers per CC of
13 asbestos, which exceeds the OSHA limitation of that time of
14 five fibers per cubic centimeter. Would you agree, sir --
15 Would you agree, sir, that 17 fibers per CC is a lot of
16 asbestos fibers to release into the air for men to breathe?

17 A. Yes. But I'm obviously not in a position to
18 evaluate this testing, or when it was done under what kind
19 of conditions; but certainly I do agree 17 fibers per CC is
20 too high.

21 Q. And that is a Westinghouse document. Do you see
22 the circled "W"?

23 A. It's hardly visible, but it looks like it might
24 be; yes.

25 Q. Well, they've produced it to us from their

1 business records; okay?

2 A. Okay.

3 Q. And they stipulated it is. And you've never
4 seen it before today; correct?

5 A. Not that I remember.

6 Q. Now, Doctor, to try to shorten this up as much
7 as I can. Again, I'm going to resort back to some
8 testimony you've given. Give me Burell.

9 A. Burell did you say?

10 Q. Burell. The Burell case was the first one I
11 asked you about, remember? You testified in 1971. And
12 that was a gentleman who had asbestosis and mesothelioma.

13 A. Well, he had mesothelioma.

14 Q. Okay.

15 A. I'm not sure he had asbestosis.

16 Q. Do you have the pages that you can -- over
17 there? No. Let me show you the front page the two pages I
18 want to ask you about, and ask you if you've changed your
19 mind in the 22 years since then. You were asked by the
20 lawyer from Johns-Manville. Do you recall Mr. Burell was
21 an insulation worker and he worked for about 33 years?

22 A. Yes.

23 Q. And you confirmed and told the jury there he had
24 mesothelioma. Do you remember that?

25 A. Yes.

1 Q. And the Johns-Manville lawyer asked you, is
2 there any way medically or scientifically speaking to
3 determine if a man had worked in this field for a period of
4 time -- we will say some 33 years -- as to what exposure or
5 when he would have caught the disease of asbestosis or
6 mesothelioma, assuming that he had either or both. And
7 your answer back in 1971: Well, if I understand the
8 question right, you are asking specifically which exposure
9 in regard to products or composition of products, could
10 reasonably be expected to be associated with one of the
11 health effects that you mentioned, specifically asbestosis
12 and mesothelioma. And then the lawyer said, that's
13 correct. Show the question and answer so the jury can see.
14 No, no, no, no. The side. There you go.

15 A lawyer -- A Johns-Manville lawyer said, that's
16 correct. And then your answer was, the answer to that
17 question is there is no way of knowing which type of fiber,
18 or which products specifically would cause one or both of
19 those diseases. You were asked, why is that, Doctor. Your
20 answer was, well, the information just isn't there. The
21 difficulty is, of course, that exposure with two minerals
22 of this sort is an accumulative thing over many, many
23 years. And the end result, if it is adverse, such as
24 asbestosis or mesothelioma, you have got an "X" number of
25 products in fibers and so forth on one side, and the health

1 effect or biological effect on the other side. In other
2 words, this isn't where we're hypothetically saying if
3 you're exposed to a gasket for two months what happens to
4 you. Here we're talking about somebody's already got the
5 disease, and we're looking back to see what caused it.
6 That's what the question was; correct?

7 A. I understand.

8 Q. There is no way anyone is aware of at the
9 present time, to know which of those did the damage or
10 caused the disease. You gave that testimony 22 years ago,
11 didn't you?

12 A. Correct.

13 Q. Now, just five months ago -- quick, please.
14 Excuse me, Your Honor. I have some debris here I must go
15 through. This is what Mr. Tyner was talking about. In
16 Mr. Quick's case, who you had seen and diagnosed with
17 asbestosis -- do you recall you testified --

18 A. Yes.

19 Q. -- over in --

20 A. St. Bernard Parish.

21 Q. Over in Louisiana?

22 A. St. Bernard Parish is in Louisiana.

23 Q. I don't think I have ever been there. In
24 Mr. Quick's case, like Mr. Burell, the question was, over
25 the course of a lifetime of a man exposed industrially,

1 who's exposed to insulation products and cement products
2 and gaskets and cloth, and he's got the disease, which
3 product caused it or did they all. And here's what you
4 told that jury. The disease into the asbestosis is dose
5 related; is that correct. Your answer, that's right. The
6 more asbestos fiber that has been inhaled, the greater the
7 risk of developing asbestosis, the more likely it is to
8 progress, the more likely it is to be severe. All those
9 aspects of asbestosis are related to how much exposure
10 there has been. And you were asked the question,
11 Dr. Weill, in your expert opinion with respect to
12 asbestosis, would it be fair to say that all occupational
13 exposure to asbestos fibers can contribute to the
14 development of the disease. Answer, in the sense that they
15 all -- all exposure makes up a part of the cumulative or
16 total exposure. One could consider that as a contribution
17 to the disease; yes. Next page, please. In that analysis,
18 you would not exclude any contribution or any exposure --
19 any occupational exposure, just because that particular
20 exposure in and of itself might be under or less than the
21 permissible exposure limits, and you said, I would not,
22 didn't you?

23 A. That's correct.

24 Q. And you believe that today, don't you?

25 A. That's right; but it's only half the story.

1 Q. Well, let's see what you said on Page 21, so we
2 get the full story.

3 A. Do we get to do my half -- other half of the
4 story, or yours?

5 Q. Well, who were you testifying for on this
6 occasion, sir?

7 A. Who was I -- I don't remember. You were talking
8 about the Quick case?

9 Q. You were testifying for an insulation
10 manufacturer who was suing Garlock. Do you remember that?

11 A. I think that's right; yes.

12 Q. And then you said -- The other half of the story
13 is, the lungs don't know whether the fibers in the lungs
14 are from Kaylo or from Garlock or from Johns-Manville. And
15 you said the lungs don't know that, that is right.

16 A. That is right.

17 Q. Now, the assumption in that question is, that if
18 fibers are released and the men breathe it -- a man's been
19 working for 40 years -- and assuming those fibers get down
20 in his lungs, it's the total burden in the lung that
21 contributes to the disease process, if he has it; correct?

22 A. But the contributions, Mr. Motley, are far from
23 equal. They are grossly unequal.

24 Q. I'll give you that. I'll give you that. I'll
25 give you that. I understand that. In other words, the

1 sandwich -- If a man was walking through a bulkhead when a
2 sandwich was being cut, and there was no vacuum system, and
3 85 fibers were getting in the air and floating all around
4 that compartment --

5 A. Yes.

6 Q. -- that's a lot of fibers getting in his lungs?

7 A. Yes.

8 Q. And if the next day he's cutting on the asbestos
9 cloth, that's considerable fibers, but not as much as the
10 sandwich; correct?

11 A. Well, it could be as much, it could less, it
12 could be more, depending on what was done.

13 Q. And you know what a buckeye grinder is?

14 A. I know what a grinder is. I'm not sure what
15 kind a buckeye is.

16 Q. If a man is removing a gasket that's been on a
17 ship for a long time and using a scraper or a grinder, you
18 helped the Asbestos Information Association put out a
19 brochure, didn't you, that said don't use abrasive tools in
20 removing used gaskets, because you'll get dangers levels of
21 fiber, didn't you?

22 A. Well, I may have reviewed the material. I don't
23 know whether I helped produce it, but yes.

24 Q. You agree with that, don't you?

25 A. I do.

1 Q. Dr. Weill, let's assume that in order to get
2 asbestosis -- assume this is asbestos fibers and this is a
3 man's lungs, and he's around -- and I've filled the cup up
4 about a third -- a sandwich. And he's around cloth, and I
5 put some more in there. And he's around pipe covering and
6 block, and I put some more in there. And then he's around
7 gasket materials using that equipment that the Asbestos
8 Information Association rightfully said, don't use those
9 things to remove gaskets because they remove fiber, which
10 drop caused the cup to run over? All of them, didn't they?

11 A. Well, that's very amusing. I'm not sure that
12 the analogy is the one I would use. You see the issue,
13 Mr. Motley, isn't that the cumulative exposure is
14 contributed to by all the exposures. That's correct. You
15 and I totally agree with that. But some of those exposures
16 were very substantial exposures and accounted for such an
17 overwhelming portion of the total cumulative exposure, that
18 they come very close to being able to assess causality.
19 And the small exposures, some of which perhaps are even at
20 nonoccupational levels, one would have to say they made an
21 insignificant or negligible or whatever the word --
22 descriptor one would like. So they're not all the same.
23 That's the point.

24 Q. I don't disagree they're not all the same, but
25 four months ago in Louisiana in that St. Bernard Parish,

1 you said an exposure, even if it's below the permissible
2 exposure level, still contributed, didn't you?

3 A. And I said it again today.

4 Q. All right. Last question, sir. The last
5 question, sir. Do you remember the case of Cynthia Archer?

6 A. Yes, sir.

7 Q. Tell the ladies and gentlemen of the jury what
8 you remember about Cynthia Archer.

9 A. My recollection -- My most immediate memory is
10 that you deposed me on that case.

11 Q. You remember she was a young woman and --

12 A. Unfortunately a lady who I think lived with a
13 husband who perhaps was an insulator, brought home asbestos
14 on his clothes, and she developed and died of mesothelioma.
15 Is that recollection correct?

16 Q. Yes, sir. You did very well with that. And you
17 remember, you and I happened to be in the Congress of the
18 United States one time testifying about asbestos
19 compensation, and I heard you say something that I told you
20 at the time was very courageous. And you told me the same
21 thing in the Archer deposition, 1988? And this is what you
22 said. You told Congress and you told me that if a human
23 being has mesothelioma, and you demonstrate occupational
24 exposure to it, that person, that human being --

25 A. To asbestos.

1 Q. -- to asbestos -- that person should be
2 compensated without regard to anything else. Do you
3 remember saying that?

4 A. Yes.

5 Q. Is that your opinion today?

6 A. Absolutely.

7 BY MR. MOTLEY: Thank you. No further
8 questions.

9 BY THE COURT: Redirect.

10 REDIRECT EXAMINATION BY MR. STUTTS:

11 Q. Dr. Weill, did you get the impression from
12 Mr. Motley that he has some kind of problem with doctors
13 and lawyers getting together?

14 A. Speaking the same language, you mean?

15 Q. Just meeting together. I'm talking about
16 meeting together.

17 A. Meeting together?

18 Q. Meeting together. That there is something about
19 doctors meeting with lawyers that just is not right?

20 A. Oh, you mean as somehow nefarious?

21 Q. Yes.

22 A. Well, he might have given that impression. I
23 don't know whether he believes that.

24 Q. Well, he asked you a number of questions about
25 meetings that you would go to where there were lawyers

1 people of all sides in these issues; plaintiffs' lawyers,
2 defense lawyers, government attorneys. And I happen to
3 know that a number of the larger companies, and I really
4 prefer not to go into specific details, pretty much avoided
5 using me as a consultant, because they thought I was too
6 objective, too liberal, whatever the phrase may be.

7 Q. Well, I had the impression that the positions
8 that you had come to, through your research, and your
9 opinions, were never in any way harmful to the asbestos
10 industry. Is that true?

11 A. They were not harmful? My positions were not --

12 Q. That's the impression that I had. That your
13 opinions must have been always helpful to the asbestos
14 industry.

15 A. Well, as I told Mr. Motley, every study that
16 we've ever done and published, has found, unfortunately, a
17 lot of disease caused by asbestos exposure. Our job was to
18 find out what was it that caused some people to get disease
19 and some people not to get disease, and what are the
20 determinants of that risk, and how great is the risk, and
21 mainly to be able to prevent. And to prevent disease, you
22 have to establish levels of exposure which in fact do not
23 cause it. That's what we tried to do all of our -- all of
24 these 20 some odd years.

25 Q. Has that always been welcome news to industry?

1 A. I think it was not always welcome news.

2 Q. Now --

3 A. But let me just be sure. Having said that, I
4 think responsible people in the industry accepted it and
5 have tried to do something about it. Some have been more
6 responsible than others, like lawyers and like doctors.

7 Q. Mr. Motley asked you some questions about cases
8 in which you testified, and your opinions were provided on
9 behalf of a company, for example, Owens-Corning Fiberglas.
10 You've done that before?

11 A. In this January case you mean?

12 Q. Well, in other cases.

13 A. I'm sorry. I --

14 Q. You have testified on behalf of companies who
15 are defendants in asbestos cases before, have you not?

16 A. Yes, I have.

17 Q. And you only testify for defendants in these
18 cases?

19 A. No, I don't.

20 Q. You've testified for plaintiffs?

21 A. Yes.

22 Q. For personal injury plaintiffs?

23 A. Personal injury cases, mesothelioma cases,
24 asbestosis cases.

25 Q. Well, mesothelioma. How recently?

1 A. Within the last two to three years, I guess. I
2 don't really testify very often for personal injury cases,
3 and haven't for some years. This case and the Quick case,
4 actually, are pretty rare. Two in one year.

5 Q. Mr. Motley asked you about your work with the
6 Asbestos Information Association, and the fact that if the
7 grant was from QAMA. Have you been asked these questions
8 before?

9 A. I just said I didn't testify much, but
10 frequently when I do, I have been asked that before.

11 Q. And you've responded to these questions going
12 back as, oh, 14 or 15 years ago?

13 A. Probably; yes.

14 Q. Now since that time -- Well, your testimony has
15 been in public forums where you give testimony?

16 A. Absolutely.

17 Q. And these questions come up. Since that time,
18 let's say in the 1980s, have you been involved with the
19 National Institute of Health?

20 A. Extensively.

21 Q. Have they sought your opinion?

22 A. Yes.

23 Q. Frequently?

24 A. Frequently.

25 Q. In matters relating to asbestos?

1 A. All matters dealing with lung disease.

2 Q. What about the EPA?

3 A. Yes.

4 Q. I think you mentioned about being called or
5 asked by a Court to testify on behalf of the Court?

6 A. Yes.

7 Q. And how recently was that?

8 A. Two or three years ago.

9 Q. Mr. Motley has this map over here with pins in
10 it, and he had you go all the way to Australia. Now, have
11 you ever --

12 BY MR. MOTLEY: I didn't go all the way to
13 Australia.

14 BY MR. STUTTS (continued):

15 Q. Dr. Weill went all the way to Australia with
16 your world map. Have you ever gone to Australia at the
17 invitation of the Australian government?

18 A. Not the Australian government, but academics who
19 were having meetings on occupational lung disease. That
20 was my first trip actually.

21 Q. Researchers such as yourself?

22 A. Yes, that's right. I have -- Come to think of
23 it, I have, in fact, testified on behalf of the, or at the
24 request of -- I like that better than on behalf of -- at
25 the request of the dust board in New South Wales, so I

1 guess that's part of the government. It's a compensation
2 body.

3 Q. Mr. Motley showed you -- showed you a memorandum
4 about sawing Micarta?

5 A. Yes, sir.

6 Q. Do you remember that; 17 fibers per CC?

7 A. Yes.

8 Q. That's 17 fibers per cubic centimeter?

9 A. Yes.

10 Q. The jury has heard from Mr. Baldwin from
11 Westinghouse -- retired from Westinghouse, about the
12 variety of types of Micarta products. You know that to be
13 the case, don't you?

14 A. I do.

15 Q. Would you look at that memorandum and see if you
16 can tell anything about the thickness of the Micarta that
17 was cut?

18 A. Yeah, I noticed that. It's an inch thick, which
19 I thought was pretty thick compared to what I had
20 understood.

21 Q. Did you know that decorative laminant Micarta is
22 .05 inches thick?

23 A. Well, I knew -- I knew this sounded far too
24 thick.

25 Q. Now let me ask you about one last area.

1 Mr. Motley was asking you about your testimony in the Quick
2 case and some other case, and he asked you about
3 contributions to cumulative dose. Did I ask you that?

4 A. I think you did.

5 Q. Now, did I miss something, or did you say
6 something different in the Quick transcript in the other
7 case, than you said to me earlier today?

8 A. I don't think so.

9 Q. You understood that I was asking you to help us
10 with the issue of what is a substantial dose?

11 A. Yes.

12 Q. And you understand that the ladies and gentlemen
13 of this jury have the awesome responsibility of deciding
14 that?

15 A. That's my understanding; yes.

16 Q. And you understand that their responsibility
17 that they carry, is not simply to decide whether a fiber
18 contributes to the cumulative dose which we all agree
19 about?

20 A. Sure.

21 Q. Doctor, you having gone to medical school, I
22 assume became familiar with latin terms?

23 A. As little as possible.

24 Q. Have you ever heard the phrase with respect to
25 criticizing, ad hominem attacks?

1 A. Yes.

2 Q. What does that mean?

3 A. Personal attacks.

4 Q. Does it mean when the message is bothersome, the
5 way to attack is personally?

6 A. That's what it means.

7 BY MR. STUTTS: Thank you, Doctor.

8 BY MR. MOTLEY: I'm going to object to
9 Mr. Tyner asking any questions now. May we
10 approach the bench?

11 BY THE COURT: Yes. Come on up.

12 (BENCH DISCUSSION. OFF THE RECORD.)

13 BY THE COURT: I'll let you take a break.
14 We'll take about 30 minutes or depending on how
15 long it takes.

16 (WHEREUPON JURY EXITS COURTROOM.)

17 BY THE COURT: All right. Let's take up
18 this problem we're having -- procedural problem.
19 All right. Let me tell y'all how the rule
20 started, as I recall. Nobody wanted to either
21 vouch or take credit for any particular witness,
22 if I recall correctly. Mr. Motley has
23 repeatedly stood up -- Say if Westinghouse
24 called him. The rest of the defendants didn't
25 want to have to stand up and say, well, I adopt

1 his testimony or he's also my witness or
2 whatever. Mr. Motley has repeatedly requested
3 from the Court that I require y'all to do that,
4 and I haven't. I intentionally have not
5 required that you vouch for any particular
6 witness that gets called, for the simple reason
7 that I thought it would be taken care of by
8 letting whoever wanted to ask a question, or
9 line of questions, could do so by way of what I
10 considered leading questions for
11 cross-examination. And I followed that policy
12 through the defense case, where that was the
13 real problem was the defense case.

14 Now we come along and Mr. Tyner says, no, I
15 want to cross -- redirect this witness. So now
16 I'm going -- I'm trying to make a decision as to
17 whether or not to change the policy that we've
18 had all along. Do I now require you to say --
19 Because if all of you are calling a witness,
20 then are we going to have 12 different directs
21 of every witness that gets called to the witness
22 stand; or do you still want the option if you
23 don't adopt his testimony or call him, you still
24 get to cross-examine him. I'm giving you the
25 option. But if I start direct and then redirect

1 of every particular defendant that wants to get
2 up there and ask a question, this is just going
3 to expand all this even further, and it's
4 contrary to what we've been doing all along. So
5 how do y'all feel about that?

6 BY MR. TYNER: Your Honor, on behalf of
7 Anchor Packing Company, what I had assumed was
8 since we were required to go ahead of Mr.
9 Motley --

10 BY THE COURT: You were.

11 BY MR. TYNER: Required to, not by option.
12 We were required to.

13 BY THE COURT: Correct.

14 BY MR. TYNER: That since we were required
15 to go ahead of Mr. Motley, that anything that he
16 developed in addition on his cross-examination
17 of a witness, that we would be entitled to come
18 back on redirect.

19 I considered my examination of Dr. Weill to
20 have been direct examination. The expansiveness
21 displayed by Mr. Motley in his cross-examination
22 of the witness on the very limited areas that I
23 covered, I think in justice should permit me to
24 come back and to, quote, redirect the witness on
25 those issues. And I don't know what we mean by

1 agreement or procedure or whatever. But the
2 fact remains that I took him before. If I had
3 taken him after Mr. Motley, are you telling me
4 that Mr. Motley wouldn't then be able to come up
5 and ask him any questions at all. Now, if that
6 was the way Your Honor wanted it, I certainly
7 would much rather have had the last word with
8 this witness, than Mr. Motley being able to come
9 back after me and examine him. And I thought
10 that the fair way and the proper way, and the
11 way that Your Honor had mandated, was that those
12 people who were proponents of a particular
13 witness, would take him. Then the proponent of
14 the witness would cross-examine the proponent on
15 redirect.

16 --

1 1 BY THE COURT: I'm not sure we're saying
2 something different.

3 BY MR. TYNER: No. I'm saying what I
4 understood. And I don't see anything different
5 than what I'm proposing to do. Even Mr. Motley
6 made the observation when he was talking to the
7 witness about Quick testimony that I would get my
8 chance again -- said it in front of the jury.
9 And then he said in front of the jury that he
10 objections to me getting my chance.

11 BY THE COURT: Well, I don't care what Mr.
12 Motley says. He's not deciding the facts that
13 are in this trial -- what Mr. Motley says.

14 BY MR. TYNER: Well, in any event, I have
15 expressed my position to Your Honor and --

16 BY THE COURT: And we've been through this
17 in this trial. I don't know if you were not here
18 or what, but we've been through this on two
19 occasions that I can remember, for you I know.

20 BY MR. DREHER: Yes, ma'am, my question is
21 this. This is not my witness. I didn't have any
22 questions to ask him. On cross-examination they
23 developed testimony about Garlock. Am I not
24 entitled to ask this man any questions at this
25 point? I did not do any direct examination of

1 1 this man.

2 BY THE COURT: I know.

3 BY MR. DREHER: And had you asked at the
4 beginning, I would not have advocated his
5 testimony. I don't care what he had to say, or
6 at least I didn't. So my question is, how do I
7 know when I'm supposed to --

8 BY THE COURT: Who else wants to
9 cross-examine this man or redirect this man? Do
10 you want cross-examination or do you want
11 redirect? See what we're getting into?

12 BY MR. DREHER: Well I believe if Mr. Tyner
13 asks his questions I won't have to ask any. But
14 if he doesn't, then I need to ask him questions
15 about the testimony.

16 BY MR. GRISSOM: That's going to be
17 Dresser's position, Judge, because Dresser was
18 not interjected on direct by Mr. Stutts through
19 the witness; but, yet, on Mr. Motley's cross he
20 specifically names Dresser on several occasions.
21 And now I am in the position of going forward
22 with cross-examination. I will agree to waive
23 that if Mr. Tyner is allowed to do his
24 examination because I don't see why we should
25 duplicate our efforts. But I certainly feel like

1 1 that I do not have to necessarily opt out of a
2 2 witness's testimony. I'm not aware of any rule
3 3 of law that requires that.

4 4 BY THE COURT: I'm not requiring anybody to
5 5 opt out. That's the reason I haven't done that.
6 6 I'm not requiring anybody to lay claim to a
7 7 witness either, other than the party who calls
8 8 them.

9 9 BY MR. MCCORMICK: Your Honor, the
10 10 defendants were put on notice when Dr. Weill
11 11 testified about various different types of
12 12 asbestos products in his direct examination. I
13 13 disagree with their characterization that that
14 14 wasn't put in front of the jury.

15 15 BY MR. MOTLEY: He talked about cement, he
16 16 talked about cloth. He talked about all these
17 17 other products.

18 18 BY THE COURT: That's true. More than just
19 19 as to Anchor. Dresser and Garlock documents were
20 20 offered against them on this man's
21 21 cross-examination.

22 22 BY MR. MOTLEY: But they already in
23 23 evidence.

24 24 BY THE COURT: Not all of them were.

25 25 BY MR. MOTLEY: Yes, Your Honor.

1 1 BY THE COURT: Well, why did you over them
2 2 again?

3 3 BY MR. MOTLEY: That specific document that
4 4 had Dresser's name on it was already in evidence.
5 5 If counsel had read it, he would have known it
6 6 because Dr. Weill's name is in there.

7 7 BY MR. GRISSOM: Whether it's in evidence or
8 8 not is not relevant. He elicited testimony that
9 9 was not brought out on direct examination.

10 10 BY MR. MCCORMICK: And I disagree with that.
11 11 It was -- the issues were brought out on direct
12 12 examination. Mr. Motley just recrafted them when
13 13 he cross-examined and they don't like the
14 14 response to it.

15 15 BY MR. GRISSOM: Mr. Motley stated, and this
16 16 is on the record. Mr. Motley stated, Now Mr.
17 17 Stutts has asked you a lot of questions about
18 18 different organizations, but one he forgot to
19 19 mention to you, Dr. Weill, is the Asbestos
20 20 Information Association. Boom, boom, boom. Then
21 21 we start putting in documents and we start
22 22 talking about different companies. Now that's
23 23 the testimony. And the court reporter can
24 24 certainly be able to show you that at the end of
25 25 the day, Your Honor.

1 1 BY MR. BENTON: I don't disagree with that.
2 2 You know, the fact of the matter is, on direct
3 3 examination Dr. Weill was asked about all these
4 4 various organizations and the government that he
5 5 consulted with. And he wasn't asked about the
6 6 asbestos company -- asbestos companies that he
7 7 consulted with. And we're going to have another
8 8 problem that arises concerning this procedure
9 9 now. How many of the lawyers that want to
10 10 recross-examine the witness at this point talked
11 11 to him after he got off the stand at lunch?

12 BY MR. TYNER: Not me.

13 BY MR. DREHER: Not me.

14 BY MR. GRISSOM: Not me.

15 BY MR. MOTLEY: We're going to put somebody
16 16 under oath.

17 BY MR. GRISSOM: Well, let's do it.

18 BY THE COURT: What's your next problem?

19 BY MR. TYNER: Your Honor, let me make this
20 20 final observation on behalf of Anchor. And I
21 21 think regardless of how you characterize what my
22 22 examination of this witness would be, at least
23 23 being consistent with Your Honor's previous
24 24 rulings since he brought up the Quick matter, I
25 25 out to at least, at a very minimum, be entitled

1 1 to go into the Quick transcript that was used
2 2 over in Guam. I didn't go into it. Mr. Motley
3 3 brought it up in his examination. So, whether
4 4 you characterize my examination of him as to the
5 5 testimony in the Quick case as recross, redirect,
6 6 however you characterize it, it's the same thing.
7 7 I should be entitled to ask this witness
8 8 questions concerning testimony that he gave in
9 9 the case.

10 BY MR. MOTLEY: You read that testimony
11 word-for-word in your question, sir. Would you
12 like for me to show you? You had it right in
13 your hand and I know the transcript verbatim. It
14 was read word for word. That was the Quick
15 transcript.

16 BY THE COURT: You were reading something.

17 BY MR. MOTLEY: I'll read it to you, Judge.
18 He read it word-for-word right out of -- give me
19 the Quick transcript.

20 BY MR. TYNER: Well, I didn't read it out
21 the transcript, I promise you that. If my memory
22 was close then my memory was just close, but I
23 sure didn't read it out of the transcript.

24 BY THE COURT: All right. What is your next
25 problem?

2 1 BY MR. MOTLEY: You memorized well well.

2 BY THE COURT: Mr. Motley?

3 BY MR. MOTLEY: Well, Your Honor, if they
4 are allowed now to go into matters that they
5 admit that Mr. Stutts didn't go into, then I
6 would like an opportunity to recross the witness
7 on what they bring up. If they want to get into
8 the Asbestos Information Association, I've got a
9 whole box of stuff in there to get. I'd love to
10 get back into the Asbestos Information
11 Association if you're going to allow them to do
12 that.

13 BY THE COURT: You said you had another
14 problem here at the bench.

15 BY MR. BENTON: I brought that item about
16 talking to the witness. That was the other
17 problem, Your Honor.

18 BY MR. McCORMICK: And we've now had counsel
19 say they have didn't, so we'll -- if they tell me
20 they didn't, then they didn't.

21 BY THE COURT: Mr. Bell, I believe you had
22 something to add?

23 BY MR. BELL: Nothing else. I'll remain
24 silent.

25 BY THE COURT: You were at the podium as if

2 1 you had something to say.

2 BY MR. STUTTS: I do, Your Honor, not on
3 this subject though.

4 BY THE COURT: Go ahead.

5 BY MR. STUTTS: Well, two things. One, to
6 make my record objection; but the second thing
7 and most important is I have a witness I'm about
8 to call and the plaintiffs have been champing at
9 the bit to ask this witness questions in the
10 areas that he testified about in deposition but
11 for which he is not being offered. And I think
12 I've made it clear to the plaintiffs through my
13 letters to Mrs. Ritter about the substance of his
14 testimony. And my concern is that he is not a
15 diagnosing physician and I want to make clear
16 before I put him on that they are not going into
17 questions about --

18 BY MR. McCORMICK: We have wide cross in
19 Mississippi.

20 BY MR. MOTLEY: Your Honor -- that's not
21 what he's talking about.

22 BY MR. BENTON: That's not what he's talking
23 about.

24 BY MR. MOTLEY: I think he's talking about
25 the so-called agreed upon order of Your Honor

2 1 that we can withdraw witnesses, expert witnesses
2 2 in areas of subject matter and that parties can't
3 3 allude to that. And we had our arguments on
4 4 Friday and Thursday about that.

5 BY THE COURT: Well, don't people only want
6 6 to honor it when it's to their advantage?

7 BY MR. MOTLEY: That was what my argument
8 8 was, Your Honor. I think you took under
9 9 advisement the Mount matter. I think you ruled
10 10 on the other matters on Friday but out of respect
11 11 for Mr. Tyner's wishes -- he was at another
12 12 deposition.

13 BY THE COURT: We're not going to do that
14 14 today, are we?

15 BY MR. MOTLEY: Well, no. But what he's
16 16 saying is Dr. Sawyer is coming. And if the rule
17 17 is going to be abrogated, then I --

18 BY THE COURT: You want to be able to
19 19 impeach him on prior testimony?

20 BY MR. MOTLEY: No --

21 BY THE COURT: Because it goes to some
22 22 other --

23 BY MR. MOTLEY: No. Your Honor, Dr. Sawyer
24 24 was originally disclosed as someone who would be
25 25 diagnosing some of the plaintiffs in this case.

2

1 BY THE COURT: What is he now?

2 BY MR. MOTLEY: Now he's not.

3 BY THE COURT: But what is he?

4 BY MR. MOTLEY: He's testifying about the
5 test and other data and withdrawing him as to
6 diagnosis.

7 BY THE COURT: All right. So are you
8 telling me y'all are not going to ask him
9 anything so there's no point in arguing this? In
10 other words, Mr. Motley, are you still honoring
11 the agreement?

12 BY MR. MOTLEY: I'm bound to honor the
13 agreement, but if Your Honor is inclined to let
14 Mr. Tyner abrogate the agreement, then I
15 respectfully suggest, if the agreement is
16 abrogated then I would like to go into the
17 diagnosis specific to my plaintiffs with Dr.
18 Sawyer. But if Your Honor is going to follow the
19 ruling --

20 BY THE COURT: That's easy enough.

21 BY MR. MOTLEY: I'm sorry?

22 BY THE COURT: I'm not ruling one way or the
23 other on Mr. Tyner. I don't know how I can
24 punish Westinghouse for what Mr. Tyner does or
25 does not do.

2 1 BY MR. MOTLEY: Well, Your Honor, my problem
2 is you took under advisement the issue of Mount.

3 BY THE COURT: I know. Do you want an
4 answer?

5 BY MR. MOTLEY: No. I'm not demanding an
6 answer. I think Mr. Stutts came up here with the
7 problem.

8 BY THE COURT: I think we need -- I need to
9 know more about who Mr. Mount was. Mr. Tyner
10 argued to me he was their witness that you
11 withdrew which is totally confusing to the Court
12 as to whose witness he was.

13 BY MR. MOTLEY: He was our witness, Your
14 Honor. Mr. Mount's name never appeared on any
15 witness list of Anchor Packing. They listed
16 someone calling McChrome Laboratories, Mack for
17 short. Mack Labs. And they never listed him.
18 And we got into this matter --

19 BY THE COURT: And you withdrew him?

20 BY MR. MOTLEY: We withdrew him --

21 BY THE COURT: After the deposition.

22 BY MR. MOTLEY: After the --

23 BY THE COURT: Before the trial or during
24 the trial?

25 BY MR. MOTLEY: I don't remember, we've

2 1 taken so many depositions. It was some time
 2 either before this -- yes, it was before the
 3 trial started because our good friend, Mr.
 4 Gerity, was still ignoring all of us.

 5 BY THE COURT: Then he became your witness
 6 after the deposition, is that right, Mr. Tyner?

 7 BY MR. TYNER: Yes, ma'am. He was here
 8 during trial and y'all sent him home.

 9 BY MR. MOTLEY: No. No. We reached a
 10 stipulation that obviated the necessity of him
 11 testifying and he was withdrawn as to those other
 12 matters that you now wish to put him on the stand
 13 about. And as I told Your Honor, if you do rule
 14 that he can use him, he's available. We talked
 15 to him this weekend and he will be glad to come
 16 down and testify for Mr. Tyner. And I'll get a
 17 chance to cross-examine.

 18 BY THE COURT: Well, if he was your witness
 19 that they deposed after this trial started and
 20 Mr. Tyner liked his testimony and now wants him
 21 as an expert --

 22 BY MR. MOTLEY: The same thing we did in
 23 Hopeman.

 24 BY THE COURT: That is exactly the way I
 25 understand y'all's understanding was, that you

2 1 would not do that. You could not do that.

2 BY MR. MCCORMICK: That's exactly the
3 agreement.

4 BY THE COURT: I don't know how I can set
5 aside that agreement now when we've gone two and
6 a half months in the trial following that ruling.
3 7 It would be totally unfair to everybody for me to
8 do that and I'm not going to do it. I ruled that
9 way Friday and I'm ruling that way now. I didn't
10 make the agreement. I haven't had anything to do
11 with the agreement other than trying to enforce
12 it, which has been the hardest thing about this
13 case so far, is forcing y'all to live up to your
14 own agreement.

15 BY MR. TYNER: Your Honor, you are making me
16 sound like the bad guy and I refuse to accept it.

17 BY THE COURT: No, I don't mean to.

18 BY MR. TYNER: I refuse to accept it.

19 BY THE COURT: It's not you. I've had it
20 come up five or six, seven or eight times during
21 the trial.

22 BY MR. TYNER: Well, let me tell you how bad
23 it's been on me in this case. They stipulate to
24 all the exhibits as being authentic. Under Rule
25 402 they all ought to go in, all these --

3 1 BY THE COURT: Mr. Tyner, you go calm down
2 before you get in trouble.

3 BY MR. TYNER: Well --

1 4 (AFTER A SHORT RECESS, THE FOLLOWING
5 PROCEEDINGS WERE HAD IN THE ABSENCE OF THE JURY.)

6 BY THE COURT: All right. I want to say
7 this before we get started back with the jury.
8 The next attorney who raises his voice or argues
9 with this after I've made a ruling will be held
10 in contempt and dealt with appropriately. This
11 has been a long trial and this is the last thing
12 we need at the end of two and a half months to
13 have the attorneys start arguing with me. I
14 understand you may not like my rulings but they
15 are my rulings. Now, as far as the other
16 question. Mr. Tyner, you will be allowed to
17 redirect this witness. Mr. Grissom, you will.
18 And Mr. Dreher, you will. Bring the jury in.

19 BY MR. MOTLEY: Judge, how about me?

20 BY THE COURT: We'll see.

21 (WHEREUPON THE JURY RETURNED TO THE
22 COURTROOM AND THE FOLLOWING PROCEEDINGS WERE HAD
23 IN THEIR PRESENCE.)

24 BY THE COURT: Go ahead, Mr. Tyner.

25 REDIRECT EXAMINATION MR. TYNER:

1 Q. May it please the Court, ladies and gentlemen of
2 the jury. Dr. Weill, you had talked to Mr. Motley earlier
3 about threshold limit values. I'm going to try my first
4 time on the board. Threshold limit values were promulgated,
5 as I understand it, and advanced by OSHA in 1972. Am I
6 correct?

7 A. That's right.

8 Q. All right, sir. Now, prior to OSHA promulgating
9 threshold limit values had there been any other organization
10 that had set forth or had promulgated threshold limit
11 values?

12 A. Yes. TLVs were set out by the American
13 Conference of Governmental Industrial Hygienists before
14 then. And then I think there was also a short federal
15 standard, the Hatch Act or something of that sort where a
16 fiber limit was set for those individuals who work with
17 government contracts, something of that sort.

18 Q. If I suggested to you that the threshold limit
19 value for the years 1969 to 1972 was two million particles
20 per cubic foot would that be your recollection?

21 A. I think that's about right, yes.

22 Q. All right, sir. In 1972 OSHA came along and for
23 a period of four years, from '72 to '76 the value was five
24 fibers per cc?

25 A. Yes.

1 Q. Did you play any role in those recommendations to
2 OSHA and in any of the organizations that reduced the
3 threshold limit value from two million particles per cubic
4 foot to five fibers per cc?

5 A. Well, the two million particles is something
6 outside OSHA's activities. OSHA accepted and considered a
7 fiber standard in fibers per cc. So let me just start the
8 answer to the question by saying that. At the time, in
9 1972, my recollection is that we provided our then
10 preliminary cross sectional study data which showed at what
11 level of exposure in working individuals did not produce
12 x-ray evidence or lung function evidence of asbestosis. We
13 made that available in a -- I didn't testify, but in a
14 submission of some sort.

15 Q. All right. Now, I'm not really sure that there
16 are any products in this case that are in controversy at the
17 shipyard following 1976, but let's look at these numbers.
18 In 1976, the standard at OSHA was reduced -- from 1976 to
19 1986, to two fibers per cc?

20 A. That's right.

21 Q. Tell me what medical science knew in 1976 that it
22 didn't know in 1969 that led to the change two million
23 particles per cubic foot to five and then down to two. Why
24 the progression?

25 A. All right. Well, first of all, both the five

1 1 fiber '72 standard or PEL and the two fiber '76 PEL were set
2 2 at the same time. They were set in '72. The '72 rule said
3 3 until 1976 it will be five fibers and after that it will be
4 4 two fibers.

5 Q. Was this to give an opportunity for employers,
6 6 industry such as Ingalls as well as the asbestos industry,
7 7 to attempt to diminish the fibers from their products and
8 8 also to clean up the work place?

9 A. Well that's, I suppose, a reasonable assumption.
10 10 It was also, I think, at that time recognized that people
11 11 pay more attention to the cancer risk, not just the
12 12 asbestosis risk. And it was recognized that the PEL needed
13 13 to come down lower.

14 Q. Now then, then we had the final standard that
15 15 went into effect in 1986, a 0.2 fibers per cc. Was it
16 16 believed by you and others in medical science that at the
17 17 level 0.2 fibers per cc that that exposure of a workman on a
18 18 time-weighted average basis would not expose him to an
19 19 unreasonable risk of a health related condition?

20 A. That has to be teased out. I think it was -- it
21 21 was my opinion and I I think opinion of a number of others
22 22 and I think including the agency, that that level of
23 23 exposure would protect from asbestosis over a working
24 24 lifetime. We've already heard several times that my opinion
25 25 is that if you can present asbestosis you've presented the

2 1 excess lung cancer risk. What we don't know as much about
 2 is the mesothelioma question. And I think there are some,
 3 and I would include myself in that group, that would have
 4 liked even to go -- to go down a bit further than .2,
 5 perhaps to .1. I've indicated that. That, plus other
 6 issues that don't have to do with exposure level but to do
 7 with fiber type.

 8 Q. As far as OSHA was concerned, you had mentioned
 9 making studies for National Gypsum, I believe in Mr.
 10 Motley's question. Were there certain things than an
 11 employer was required to do when they found levels exceeding
 12 those numbers that I have on the board, the threshold limit
 13 values?

 14 A. Well, they'd be out of compliance. If they
 15 exceeded the permissible exposure limit, they would be out
 16 the compliance and subject to whatever punitive measures,
 17 fines or whatever.

 18 Q. Was the employer also required to limit and to
 19 segregate working areas and working spaces where the fiber
 20 count exceeded threshold limit values --, keep other workmen
 21 out of the area, require those in the area to use
 22 respirators? Do you recall --

 23 A. I think there may have been something of that
 24 sort, respirator use, in that rule. I'm not sure.

 25 Q. And in order to comply with OSHA mandate, was it

2 1 necessary that employers determine which employees were
2 2 exposed to these numbers in excess of threshold limit values
3 3 in order that they might be x-rayed and examined at least
4 4 once a year? Was that what you were doing at National
5 5 Gypsum?

6 A. My understanding is that if there was asbestos
7 7 exposure that exceeded a so-called action level, which is
8 8 lower than the PEL, that required medical examinations.

9 Q. All right, sir. You had talked about the types
10 10 of products being different in quantity of fibers being
11 11 released which make their way into the work area and had the
12 12 propensity of perhaps making their way into the lungs of the
13 13 workmen in the area. Do you know -- and I will ask you to
14 14 accept this as true -- it's in the records here. That forty
15 15 tons of pure asbestos was delivered to Ingalls on June the
16 16 1st of 1965; that seventy tons of pure asbestos was
17 17 delivered to Ingalls on February the 3rd, 1965; that fifty
18 18 tons of pure asbestos was delivered to Ingalls on February
19 19 11th of 1965; and five tons delivered to Ingalls on March
20 20 17th of 1965. Would those be the kind of high number
21 21 products that you would say would more likely cause a person
22 22 exposed to those products to have an asbestos-related
23 23 disease?

24 A. Well, any time a worker is manipulating and using
25 25 bags of pure asbestos such as mixing it with cement for

2 1 insulation or whatever purpose, pure asbestos, and some
 2 people were doing that in the industry we studied as well,
 3 those would be very high exposures because they were
 4 exposures of only asbestos product.

5 Q. Now, just so we clarify your testimony in the
6 Arthur Quick case that you were asked about earlier, you
7 were retained in that case, were you not, Dr. Weill, to
8 testify for and on behalf of an insulating company against
9 Garlock, one of the defendants in that case? You were
10 retained to examine the matter and to give testimony, not
11 that you were for or against either party. I didn't mean --

12 A. I had seen Mr. Quick and I was asked to testify.
13 And I think it was at the request of an insulation
14 manufacturer, yes.

15 Q. All right, sir.

16 A. Looks like the shortest testimony ever, doesn't
17 it?

18 Q It doesn't look very thick, does it? You were
19 asked about reviewing studies on a fiber releasability of
20 asbestos gaskets and packing and then you were asked this
21 question. Based on your review of those studies is it your
22 opinion that exposure, the asbestos exposure to someone
23 working with asbestos gaskets or valve packing is very low.
24 Answer: Very low. Based upon a review of those materials,
25 is it your opinion, Doctor, that someone working with

2 1 asbestos gaskets or valve packing would not likely develop
2 2 asbestosis? And you said: If that's the only source of
3 3 exposure, that would be correct. Did I read that correctly?

4 A Yes, you did.

5 Q. All right. Now, the question that we really have
6 6 in this case is where you have a shipboard environment,
7 7 where you have numerous products from A to Z contributing to
8 8 the airborne fiber level. Do you have an opinion, Dr.

9 Weill, that a person exposed to high fiber levels in a
10 10 shipboard environment where the ship is under construction,
11 11 that contracts asbestosis, as to whether or not the disease
12 12 asbestosis would have occurred more likely than not whether
13 13 or not he was exposed to any fiber from gaskets and packing?

14 A. Well, I think I've already indicated that my
15 15 judgment has to be on a relative contribution basis. And I
16 16 think under the conditions of the varying products in the
17 17 shipyard, I said that those exposures that might come from
18 18 products that have very little, very low releasability
19 19 probably are not making a meaningful contribution to the
20 20 exposure and therefore to the risk.

21 Q. The jury has heard from another witness earlier
22 22 in this trial who reviewed a number of gasket and packing
23 23 studies. Let me just count them and see if I've got the
24 24 number right. Reviewed seven gasket and packing studies.
25 25 And in those studies seven hundred and eighty-seven samples

3 1 were taken.

2 BY MR. GRISSOM: I want to object to the
3 form, in that it was twelve studies.

4 BY MR. TYNER: Twelve? Excuse me. I don't
5 know how to change a seven into a twelve. Plus
6 five.

7 BY MR. TYNER (continuing):

8 Q. Okay. Seven hundred and eighty-seven samples,
9 only five of which exceeded excursion levels. Is that the
10 type of information and data that you as a scientist base
11 your opinions on?

12 A. I'm sorry -- five of which exceeded what levels.

13 Q. Only five exceeded excursion levels?

14 A. What does that mean?

15 BY MR. GRISSOM: I object again to the form
16 and the mischaracterization of what the testimony
17 was.

18 BY THE COURT: Excuse me?

19 BY MR. MOTLEY: He just absolutely misstated
20 and mischaracterized -- and Mr. Grissom and I
21 both agree that he has -- what the testimony --

22 BY MR. TYNER: Okay. If you will state it
23 for me, I'll ask him. I'll include that in my
24 hypothetical.

25 BY MR. MOTLEY: The Judge won't let me do

3 1 that.

2 BY MR. TYNER: Whisper it in my ear:

3 BY MR. MOTLEY: Sit down.

4 BY MR. TYNER: I'm about to.

5 BY MR. MOTLEY: You'll have a hearing loss
6 claim now, Mr. Tyner.

7 BY MR. TYNER: I'll hire Mr. Scruggs. Mr.
8 Scruggs is the only one that handles hearing
9 loss.

10 BY MR. TYNER (continuing):

11 Q. Regardless of how many samples were taken and
12 regardless of how many studies were done, that's the type of
13 information that persons in the field that you are in, a
14 scientist attempting to determine whether or not fibers at a
15 certain level can cause a disease and fibers from certain
16 products cause a disease, would that be correct?

17 A Well, what would be correct is that if one had
18 extensive -- an extensive number of samples taken during or
19 near the use of a product and you put that information
20 together with information on the dose response relationship
21 to various asbestos-related conditions, which we've been
22 talking about all day, then, yes, that information would be
23 useful.

24 Q. All right, sir. Let's talk about this Dr.
25 Selikoff article.

3 1 BY MR. TYNER: Shirley, if you would turn it
2 2 up to page 22, left hand column. I understand
3 3 you can't see from that angle, Doctor, so let me
4 4 come over here. Come on up just a little bit.
5 5 Higher. Can you turn it up a little higher?
6 6 Okay. That's it.

7 BY MR. TYNER (continuing):

8 Q. The part that I've underlined, and this is
9 quoting from Dr. Selikoff's article. Can you see that?

10 A. Yeah, I think I can.

11 Q. Okay. Talking about, Who do you blame? Do you
12 blame industry? Do you blame labor? Do you blame the
13 employers? Do you blame manufacturers? Dr. Selikoff
14 characterized it thusly --

15 BY MR. MOTLEY: Excuse me, Your Honor. What
16 is this in redirect? This is not even the same
17 article. I don't know what he's doing. What is
18 this in redirect?

19 BY MR. TYNER: You asked him about the
20 article for Selikoff.

21 BY MR. MOTLEY: I didn't ask him about this
22 article. I'm glad to ask him about a bunch of
23 Selikoff articles, if that's what you want to do.

24 BY MR. TYNER: You asked him about this
25 particular article.

3 1 BY THE COURT: Is that an objection?

2 BY MR. MOTLEY: I object. This is not
3 proper redirect. You told him he could go into a
4 few things and now he's gone on twenty minutes on
5 stuff that nobody went into.

6 BY MR. TYNER: I'll finish it off real easy,
7 Mr. Motley.

8 BY MR. MOTLEY: Well, I think you said at
9 the bench you were only going to ask him three
10 questions.

11 BY THE COURT: Go ahead, Mr. Tyner.
12 Overruled.

13 BY MR. TYNER: Turn over to the next page,
14 please, page 23, left hand column.

15 BY MR. TYNER (continuing):

16 Q. Towards the bottom of that page, Dr. Weill, Dr.
17 Selikoff made this observation. It is fortunate that the
18 greatest part of this has been in products in which the
19 asbestos was "locked in." That is, it is bound with cement
20 or plastics or other binders so that there is no release,
21 certainly no significant release of asbestos fiber in either
22 working areas or general air. Such products as floor tile,
23 roofing tiles, asbestos cement products, siding material and
24 the like contain the locked-in fibers. Do you agree with
25 that observation from Dr. Selikoff?

3

1

A. Yes, I agree with it in general.

2

BY MR. TYNER: Thank you. I have nothing further, Your Honor.

3

4

BY MR. DREHER: No questions.

5

BY MR. GRISSOM: No questions.

6

7

BY MR. MOTLEY: Your Honor, I would ask permission to recross the witness based on Mr. Tyner's questions.

8

9

BY THE COURT: Come up here.

10

(DISCUSSION AT THE BENCH WAS OFF-THE-RECORD.)

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1 BY MR. MOTLEY:

2 Q. Sir, Mr. Tyner asked you some questions about
3 gasketing materials. Do you know -- have you read the book
4 that Mr. -- God bless him in his absence, Demyanek, Mark, my
5 friend Mark, we called him Mark in here because no one could
6 pronounce his name, Mr. Demyanek wrote about level one,
7 level two and level three gasket exposures and which ones
8 are dangerous and which ones aren't?

9 A. No, sir.

10 BY MR. GRISSOM: I object, that's a
11 mischaracterization. He did not write that
12 book.

13 BY THE COURT: Overruled.

14 BY MR. MOTLEY:

15 Q. Excuse me. Was on the committee that wrote the
16 book. You don't know about the distinction EPA made between
17 level one, level two level three gasket operations, correct?

18 A. That's correct.

19 Q. All right. And in the Quick case the bottomline
20 was you testified that in that case based on your review of
21 the medical records and your having interviewed Mr. Quick,
22 the bottomline was all the products he was exposed to,
23 you've testified and I have shown it to you twice,
24 contributed to his asbestosis, correct?

25 A. Contributed to his exposure, his cumulative

1 exposure.

2 Q. Which causes asbestosis, correct?

3 A. Yes, which causes asbestosis.

4 Q. All right. Now, Mr. Tyner asked you about OSHA.
5 What do you think of a company peeling off warning labels
6 before they sold them to the public that were required by
7 OSHA? Do you think that was a good practice?

8 A. Mr. Motley, I mean the --

9 Q. That's kind of obvious, isn't it?

10 A. The obvious answer is it's not a good practice.

11 Q. Finally, sir, you were asked about the tons of
12 asbestos fiber that were delivered to Ingalls. Do you
13 recall that?

14 A. Yes.

15 Q. Do you know how many millions of square feet of
16 the sandwich was cut on just two ships at Ingalls?

17 A. I don't.

18 Q. Do you know how many acres per boat of gaskets
19 were placed into the boats out here at Ingalls?

20 A. No, sir.

21 Q. And with respect to Dr. Selikoff, you know that at
22 the EPA hearings in 1989 he testified in favor of banning
23 gasket materials, don't you?

24 A. I'll take your word for. I didn't know that.

25 Q. Thank you, Doctor.

1 BY MR. TYNER: Your Honor, I move the
2 answer be stricken and he not take his word
3 for it.

4 BY MR. MOTLEY: Well, I'll be glad to
5 show it to him. Do you want to see?

6 BY MR. TYNER: You can't show it to him
7 on anything that's not been --

8 BY THE COURT: He what? He what, Mr.
9 Tyner?

10 BY MR. TYNER: I said the document he is
11 referring to has no veracity. It was set
12 aside by the United States Court of Appeals
13 for the Fifth Circuit.

14 BY MR. MOTLEY: Not that part, sir.

15 BY THE COURT: Doctor, you may step
16 down.

17 BY THE WITNESS: Thank you. Thank you.

18 BY THE COURT: Who is your next
19 witness.

20 BY MR. STUTTS: Dr. Robert Sawyer.

21 BY THE COURT: Doctor, raise your right
22 hand and face the clerk and she'll administer
23 the oath.

24

- - -

25

ROBERT SAWYER,

1 upon being called as a witness for and on behalf of the
2 defendant and having been first duly sworn, testified as
3 follows:

4

- - -

5

BY MR. STUTTS: May I proceed?

6

BY THE COURT: You may.

7

- - -

8

DIRECT EXAMINATION

9

BY MR. STUTTS:

10

Q. Dr. Sawyer, would you tell the Ladies and
11 Gentlemen of the jury your full name and where you live?

12

A. My name is Robert N. Sawyer. And I live in
13 Guilford, Connecticut.

14

Q. All right. You may have to speak up just a bit so
15 the jury can hear. You're a medical doctor?

16

A. Yes.

17

Q. We've heard a lot about board certifications. Are
18 you board certified in any particular field?

19

A. Yes, I am.

20

Q. What is that field?

21

A. Preventive medicine.

22

Q. What is the field of preventive medicine all
23 about?

24

A. It's the study of the behavior of diseases in
25 populations and their effects on individuals. Commonly

1 referred to as risk assessment or epidemiology. And then
2 trying to use that understanding to prevent disease or
3 reduce its impact.

4 Q. To prevent disease in normally large populations
5 of people?

6 A. Made up of individuals, yes.

7 Q. All right. Let me ask you a little bit about your
8 background, Doctor. You went to MIT for your undergraduate
9 degree?

10 A. That's right.

11 Q. So I assume you had some science major at MIT?

12 A. Yes, I did. Physical sciences and engineering.

13 Q. And then to a medical school at Case Western
14 Reserve University in Cleveland?

15 A. Yes. Well, I'm afraid that I'm old enough so that
16 back then it was only Western Reserve University. It was
17 previous to the amalgamation of the two universities.

18 Q. All right. After you finished medical school what
19 did you do next? An internship?

20 A. Yes.

21 Q. Where?

22 A. At the Oakland United States Naval Hospital in
23 Oakland, California.

24 Q. Now, after you completed your internship did you
25 have some obligation to the United States Navy?

1 A. Yes. I entered military service in the undersea
2 warfare section. I was a medical officer on a nuclear
3 submarine.

4 Q. Okay. And you remained in the Navy for how long?

5 A. About nine years.

6 Q. What generally were your responsibilities
7 medically speaking during your time with the Navy?

8 A. I was an operational medical officer. As I
9 mentioned, I was a medical officer on a nuclear submarine.
10 I made missions on that. Then I went to a billet as a
11 submarine squadron medical officer. From there I went into
12 special project work in the Navy. I worked with the Marine
13 Corp. Generally stayed in military operations. I was never
14 hospital based.

15 Q. There was a point when you got additional
16 education at Yale University.

17 A. Yes.

18 Q. What was that?

19 A. I attended the Yale School of Medicine, department
20 of epidemiology and public health and received a masters of
21 public health degree as my post-doctoral.

22 Q. After you did your post-doctoral work at Yale then
23 you became affiliated with Yale University?

24 A. Yes.

25 Q. In what capacity?

1 A. I was a physician on the staff and worked in the
2 Yale University health services which provided diagnostic
3 and therapeutic care for the entire Yale community.

4 Q. And how long did you remain in that job?

5 A. I believe that was about eight years.

6 Q. Okay. During the time that you were in this role
7 with Yale University did you develop an interest in
8 exposures to asbestos and health effects from exposures to
9 asbestos?

10 A. Yes. Part of my duties included being the head of
11 preventive and occupational medicine services for the Yale
12 Health Service. And in that capacity became interested in
13 the Yale School of Art and Architecture.

14 Q. Now, what does the Yale School of Art and
15 Architecture have to do with asbestos and potential exposure
16 to asbestos?

17 A. The building was a ten-level building on the Yale
18 campus and had a great deal of asbestos bearing insulation
19 material within the building. The building itself had a
20 number of different problems. One of which was the fact
21 that the asbestos was very loose and was contaminating the
22 building.

23 And I began study of the building to see if it
24 meant, number one, if it was contaminated and, number two,
25 tried to ascertain if this comprised a health hazard to the

1 people who worked in or worked on the building.

2 Q. And you completed that study. Was there work done
3 on the Yale building to remove the asbestos?

4 A. Yes.

5 Q. And what did you have to do with that?

6 A. After over a year of studying my recommendation
7 was that the asbestos bearing insulation should be removed
8 from the building.

9 Q. Why did you come to that conclusion?

10 A. Because there was significant contamination of the
11 building and we had documented the fact that through over
12 two thousand air samples monitoring what was going on in the
13 building. That my concern mainly for the custodial
14 maintenance workers in the building caused me concern for
15 their well-being. And because of the configuration of the
16 building and the condition of the material and other
17 characteristics of the building attempts to manage the
18 material were failing. And I felt the only way to resolve
19 the problem was removal of the asbestos insulation.

20 Q. Doctor, you have a number of articles that you
21 have published or submitted to various publications. I see
22 the first one related to asbestos, is the one that I see,
23 and has to do with the Yale building. And then after that
24 there are several more having to do with asbestos. Was the
25 Yale building project something that got you interested in

1 this area?

2 A. Yes. In engineering school and in the Navy I had
3 seen asbestos, knew its uses. In medical school I had
4 studied asbestos-related diseases. But this was the first
5 time that I had personally run into asbestos in a building.

6 The research that we did at Yale, which by the way
7 the Yale building still in my mind ranks as the worse
8 building I've seen of anywhere as far as --

9 Q. As far as asbestos?

10 A. As far as asbestos is concerned. I think that was
11 my first major interest in asbestos. And that was in 19- --
12 began in 1971 actually.

13 Q. Okay. Your work with Yale, you finished at Yale
14 after that 8 or 9 year period, then what did you do?

15 A. I had started a -- with a colleague started a
16 consulting firm. I was doing more and more consulting
17 during my years at Yale in toxic materials, industrial
18 medicine, asbestos-related problems, worker protection, and
19 had some opportunities to continue this consulting career
20 versus a clinical career and seeing patients on a daily
21 basis.

22 Q. Doctor, aside from treating physicians, I think we
23 all know what the treating physicians are, we hear from time
24 to time about the term consultants. I think the word
25 consulting has comes to mean a lot of things to a lot of

1 people. What did it mean in terms of the work you were
2 doing? Who were you consulting with, what were you doing?
3 What were the services that you offered?

4 A. We provided a mixture of medical risk assessment,
5 engineering, common sense answers to problems that were
6 being encountered in industry to architects, to a number of
7 government entities, trying to combine risk assessment with
8 science and combine that with engineering to solve the
9 problems.

10 Q. All right. The group that you were with or that
11 you formed and provided consulting work for, did it have a
12 technical arm to it?

13 A. Well, when we started I wouldn't call it an arm.
14 We did most of our own analytical work or farmed it out to
15 contractors. It was one other individual and myself that
16 started a consulting company.

17 Q. All right. And your services you made available
18 to public institutions, to companies, to whoever was
19 concerned about contamination in the work place?

20 A. Yes. Our initial work we were heavily involved
21 with the Environmental Protection Agency with various state
22 governments, with some corporations. We were also looking
23 at new technologies and trying to provide advice for worker
24 protection to these technologies. This included companies
25 such as Perk and Elmer Corporation, IBM, Bechtel.

1 Q. During the course of this work were you ever
2 called upon to try to reenact a situation in which a worker
3 may be doing something to try to measure an exposure level?

4 A. Yes.

5 Q. Okay. In other words, to create an experiment
6 that was similar to what a worker would be doing on the job?

7 A. Yes. We -- in the Yale building, as I mentioned,
8 it was a very large building, it was ten levels of
9 reinforced concrete. And essentially all of our surfaces
10 had been sprayed with an asbestos-containing insulating
11 material.

12 At that time in the early 1970s no one knew too
13 much about the potential for exposure of workers within
14 buildings. Those people that were maintenance people or
15 performing custodial tasks. It took us only a few months to
16 document that the building was heavily contaminated.

17 The next step was attempting to assess whether the
18 people in the building, the users of the building, the
19 student, the faculty, or the people who worked in the
20 buildings, such as the maintenance people and custodians,
21 were experiencing exposures to that contamination that could
22 possibly be risky.

23 Q. You say the building was contaminated. How do you
24 measure the contamination?

25 A. Well, at that time it was a difficult task. No

1 one had attempted to actually measure contamination. We
2 developed some dust sampling techniques. As I mentioned, we
3 took a number of air samples trying to find out what was
4 going on. Using visual observation and common sense one
5 could see that the building was severely contaminated.

6 As I mentioned, the next step was to try to find
7 out if anyone had been at risk in the building. This
8 involved really two projects.

9 One is to try to find out if the work that had
10 been done in the building had caused exposure that should be
11 of concern. And the second one was a prospective study to
12 see if work was going on in the building and continuing
13 posed a risk to anyone.

14 One of the things that we did and did frequently
15 was what we call reenactments. As an example after the
16 asbestos insulation had been applied by spraying to the
17 ceilings, partitions had been cut into the asbestos bearing
18 material by carpenters to build walls within the building,
19 to build separation walls, non-load bearing walls within the
20 structure.

21 Electricians had come in to put in^x tract
22 lighting. To do this they would have to remove a strip of
23 the asbestos insulation, which was very loose and not in
24 very good condition.

25 What we did was have reenactment experiments to

1 find out what exposure had been in the building over a
2 approximately the ten years of its existence. This was not
3 my first experience with reenactments, but my first
4 experience with asbestos reenactment.

5 Q. The Ladies and Gentlemen of the jury have seen a
6 film put together by Dr. Millette and I showed you that
7 film, of cutting of Micarta and Marinite. Is that an
8 example reenactment?

9 A. Yes.

10 Q. Now, Dr. Millette did this experiment he then
11 measured airborne concentrations of asbestos. That's a
12 fairly standard procedure?

13 A. Yes.

14 Q. Okay. And airborne concentrations are measured in
15 terms of fibers -- we hear it one more time -- fibers per
16 cubic centimeter, right?

17 A. Yes.

18 Q. That's a measure of the concentration?

19 A. And more specifically it's -- if I could just --

20 Q. Yes.

21 A. -- explain this a bit more. A cubic centimeter of
22 air is about the size of a sugar cube, a little small sugar
23 cube. That's roughly a cubic centimeter. The number of
24 fibers or particles within that cubic centimeter can be
25 measured by a number of different techniques.

1 The standard technique used that has a number
2 attached to it and it's a specific technique written up in a
3 book that you can read, has to do with measuring it by an
4 optical microscope. And that measures particles that are
5 shaped like fibers that are longer than five microns in
6 length that you can see with an optical microscope. Which
7 means they're probably about a quarter of micron in
8 diameter.

9 Q. So the standard way is to conduct test, the
10 standard way is to measure, so everybody's measuring using
11 the same standards contract?

12 A. No, there's no -- there really aren't any standard
13 ways to make the tests. But there's standard ways of
14 sampling and then counting the particles, yes.

15 Q. And you know from Dr. Millette's tests that the
16 way he sampled the particles, that was a fairly standard way
17 to do that?

18 A. Yes.

19 Q. Okay. And as far as the set up of Dr. Millette's
20 tests, you have looked at the film, what did you think of
21 that?

22 A. I thought it was a very good test. I thought that
23 the containment system was good. And I think that he
24 reenacted some of the work practices and the air sampling
25 finding the concentrations of fibers in air and the terms of

1 fibers per cc was done by the standard optical methodology.

2 Q. Now, a couple of years ago I came to you with a
3 similar sort of request, didn't I, concerning Micarta?

4 A. Yes.

5 Q. And do you recall what the nature of my request
6 was when I came to you as a consultant in this field?

7 A. Yes. If I can recall it was that you wanted air
8 sampling done of the disruption of some materials.

9 Q. Okay. And that was Micarta and Marinite?

10 A. Yes.

11 Q. Okay. Now, did you consider the requests and
12 based on what I was asking what advice did you give me?

13 A. Well, I don't remember the specific words I used.
14 They may have been stronger than what I'm about to say. But
15 I tried to discourage you from doing it.

16 Q. Why?

17 A. Well, if I could go back to the Yale building for
18 a moment because we talked about reenactment experiments
19 back then. And back then we had the same building and the
20 same material that we're trying to figure out. We did not
21 have a time machine to go back in time and look at what had
22 happened. But I did find the same people that put up the
23 partitions, they still worked at Yale. And I found the same
24 electricians and I found the same plumbers and I found the
25 identical people.

1 I had the -- thanks to the University's generosity
2 I had the actual work spaces to work in. The material was
3 still there. We had standard sampling techniques even back
4 then. And we were setting up an experiment to do the same
5 thing all over again with the same people and the same
6 equipment that had been done years before with one
7 addition. And that was that we tried to protect the
8 building from any contamination and we of course protected
9 the people doing the work. That was a big change. They
10 were now wearing respirators and protective clothing.

11 So all things were equal in that situation. We
12 were also looking fore peak episodes of fiber release and
13 then comparing those to existing regulations just to give an
14 idea, a ballpark idea at what these people were doing could
15 possibly constitute a risk.

16 Back in those days nobody knew anything about
17 asbestos in building, essentially speaking. So we were
18 trying to do some experimental work with reenactment
19 experiments. I also did reenactment experiments ever since.
20 And I was quick to learn that they are very tricky.

21 Q. Very what?

22 A. Tricky. It's very easy to alter things so you
23 were misled one way or the other and this is not
24 intentional. But unless you have a situation like we had
25 back at Yale, the further you get away from that ideal

1 situation, the more difficult it becomes to get meaningful
2 information out of a reenactment experiment. It's very
3 difficult.

4 Q. Now, when you say ideal situation, you mean a
5 situation as it actually would have been in the work place
6 or in the building or where ever this activity was going on?

7 A. Yes.

8 Q. It's difficult to repeat that exactly in a
9 laboratory?

10 A. Extremely.

11 Q. Now, was that the reason you suggested -- well,
12 tell us the reason why a fiber count, which I seem to want,
13 would not have worked or was not a good idea?

14 A. Well, the first thing I asked you for was do you
15 have a ship somewhere that has this material on it and that
16 could not be located. It was my idea that we could find a
17 ship that had the material on it and we could reinstall some
18 material.

19 The next little problem was that you couldn't give
20 me any material. There was nothing available to us in the
21 sheet form of material that could be tested. I think that
22 the Micarta sample was only ten by ten inches and I knew
23 where to get Marinite, but it was not really useful if I
24 didn't enough Micarta to work on a regular sheet.

25 Q. Well, did you recommend that any testing be done

1 at all?

2 A. Yes.

3 Q. What was your idea?

4 A. I thought that the real question was if you had
5 such an assembly of the two products, the Marinite and the
6 Micarta, that it would be of interest to find out what the
7 proportional contribution would be, in other words, what
8 percentage if an aerosol were generated. If sawing or
9 drilling or routing material I would certainly expect a lot
10 of dust to be produced by machine equipment and it would
11 could be normally anticipated.

12 Q. Did you or were you able to obtain what you
13 learned was a piece of Marinite?

14 A. Yes.

15 Q. Where did you get that?

16 A. Well, I had done a lot of consulting for the USS
17 Cruise Lines headquartered in Seattle, Washington. One of
18 the vessels we'd been working on for many years was the SS
19 UNITED STATES. The SS UNITED STATES, that was not only
20 probably the fastest ship ever built in the US but it was
21 also the most fireproof. Everything on that ship was fire
22 resistance, fire retardant or fireproof in the living
23 spaces, in the crews quarters, in the common spaces.

24 I knew the SS UNITED STATES quite well because I
25 had been brought on as a consultant to try to develop safe

1 systems to remove all of the asbestos from the ship during
2 it's renovation and conversion into a newer more streamline
3 cruise crews ship. So we came up with a lot of ideas to
4 provide cost effective and very safe production methods of
5 how to demolish the inside of the ship.

6 Q. And you were able to get the Marinite from the
7 ship?

8 A. Almost -- there was a vast amount of Marinite on
9 that ship used as wall panels or, as we call them on, ships
10 bulkheads.

11 Q. All right.

12 A. Bulkheads panels had been used extensively.

13 Q. Then through my office through Westinghouse you
14 got a piece of Micarta?

15 A. Yes.

16 Q. Fire resistant Micarta. Did take these two pieces
17 and actually do a sample of what you thought was the
18 Marinite and a sample of what you thought was the Micarta?

19 A. Yes.

20 Q. And did you find in the Marinite Amosite asbestos
21 fibers?

22 A. Yes.

23 Q. And you found in the Micarta chrysotile asbestos
24 fibers?

25 A. Yes.

1 Q. Now, did you do an experiment of some kind?

2 A. Yes.

3 Q. Tell us about that.

4 A. Well, we thought it would be of interest to figure
5 out if such material, or such an assembly, a bulkhead panel
6 were drilled or sawed or routed or machine disrupted in
7 anyway and dust was created, what would be the contribution
8 or the donation of the two materials, the Micarta and the
9 Marinite, to that dust cloud.

10 What made the experiment possible was the fact
11 that one of the materials contained one fiber type and the
12 other material contained another fiber type.

13 Q. One contained Amosite and one contained
14 chrysotile?

15 A. Exactly. Now you can't tell the difference under
16 normal air sampling using an optical microscope between the
17 two fibers. But using electron microscopes you can identify
18 the materials in a dust cloud.

19 So the idea was to generate a dust cloud, trying
20 to reenact by using the same tools that were used, machine
21 tools, creat a dust cloud and then examine it and then look
22 at the aerosol with special microscopes to identify and
23 characterize the two fiber types and count them.

24 Q. And that work was done and Micarta was glued to
25 the Marinite?

1 A. Yes. We attempted to creat the assembly that had
2 been used many many years ago, installation on ships, by
3 fabricating a small panel using the Micarta that we received
4 through your first from Westinghouse and the Marinite that
5 we obtained from the SS UNITED STATES.

6 Q. So you did the drilling or cutting and I think you
7 used a router also?

8 A. Yes.

9 Q. And did you sample the air?

10 A. Does everyone know what a router is?

11 Q. Well, you go ahead.

12 A. Well, I think everyone knows what a drill is and
13 you use a drill just to put holes through the material. And
14 the saw is used to make a linear cut. A router is a tool
15 that can be used to trim the edges to put a rounded edge on
16 it, or to actually cut a trench in material. And a plunger
17 router has a plunger in the middle of it and let's you
18 actually depress the cutting edges, which are circular, down
19 into material not starting at the edge. So you can drill a
20 nice little pit in the material if you want or put a trench
21 in it. So a router is a very good tool for trimming and
22 joining materials.

23 Q. And producing dust?

24 A. Yes, it's very very for producing dust.

25 Q. Now, when you did this work and you produced the

1 dust with the router, with the saw, you collected samples of
2 the air?

3 A. Yes.

4 Q. And those samples were located where? Where was
5 the work done?

6 A. It was done at Entec Environmental Services, which
7 is a building. It's the headquarters of our consulting
8 firm, which is located in Troy, New York. And within our --
9 we have a -- in a separate building is a laboratory space
10 where we do a lot of analytical work. We read air samples
11 there, do analysis of materials, prepares samples for
12 shipping and so forth. That's where we keep all of our
13 hundreds of air sampling pumps and microscopes and our lab
14 technicians, we keep them all down there.

15 Within that laboratory space we have what I call
16 cleanable room. A lot of people call it a clean room, but
17 it's just the opposite, it's a dirty room, but it's
18 cleanable. And it's isolated from the rest of the
19 building. It is waterproofed, it contains work benches, and
20 you can disrupt materials in there and create very high
21 levels of dust.

22 And then when you're finished the whole room can
23 be flooded, the water is filtered before it goes into the
24 public system. It can be evacuated using high efficiency
25 particular with absolute or helter filtered vacuums. So you

1 can go in there and perform experiments and clean up
2 afterwards.

3 It protects the building and it also protects the
4 people who are working within the room. Considering the
5 nature of the test, and the basic problem I had with your
6 request was from all of my experience with reenactments,
7 that to try to generate a cloud of dust and get air samples
8 of it for fiber concentrations.

9 Q. You mean fibers per cc?

10 A. Fibers per cc really wouldn't be worth it.
11 Because you can get very low counts if you want or you can
12 get very high counts if you want. And we really didn't know
13 the work conditions of the work place. And to get
14 meaningful information from such an experiment would have
15 been very difficult. So all we were interested in doing was
16 creating a lot of dust and trying to figure out which
17 product contributed to the dust cloud.

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1 Q. So you were trying to figure you had one piece
2 of Micarta, a piece of Marinite --

3 A. Yes.

4 Q. -- and you were trying to figure the relative
5 contributions of each one?

6 A. Yep. Yes, that is true.

7 Q. So you did this work inside an enclosed space,
8 as I understand it?

9 A. We did it within the laboratory, within the
10 cleanable room, so we were protecting our people in the
11 rest of the building. And then within that space in one of
12 the work benches, we constructed a test chamber, because we
13 weren't trying to reenact and pretend that this was a ship
14 space. We constructed a small chamber so we could easily
15 control the contamination and more easily clean up
16 afterwards. All we had to do was clean that small chamber
17 instead of the whole room.

18 Q. All right. Once you collected the air samples,
19 what did you do with them?

20 A. We sampled the dust that came off -- First of
21 all, we -- the chamber contained was really a glove bag.
22 In other words, it had arms that went into it -- gloved
23 arms, so the operator could manipulate things within the
24 small chamber with his hands and still be isolated from the
25 chamber. So the power tools were in there, the material

1 was in there, and there was a vice in there to hold the
2 material so the operator could safely work on it without
3 damaging himself with a drill or a saw or the router.

4 The dust was collected by sampling the air, and
5 also the dust generated was picked up with a microvacuum
6 and also settled in a petri dish. So we had three air
7 samples and two dust samples for each one of the
8 experiments. Following that, these were all sealed over
9 and put into a pouch on the side of the glove bag, and that
10 was sealed and then removed from the glove bag -- separated
11 from the glove bag.

12 Q. And what happened with these cassettes?

13 A. They were sent to an analytical facility with
14 electron microscopes. We did not have electron microscopy
15 available at Entec.

16 Q. All right. They were sent to Dr. Eric
17 Chatfield?

18 A. They were sent to Dr. Eric Chatfield who has a
19 analytical laboratory outside of Toronto, Ontario. He was
20 selected because, in my opinion, he is the finest expert in
21 the world on electron microscopy and on developing
22 techniques for the examination of micro particulates. And
23 I have worked with him before, and I was familiar with his
24 work, and that's why I selected him.

25 Q. I've asked you about Dr. Millette's study, and I

1 think you've commented favorably on the study in terms of
2 the way it was set up --

3 A. Absolutely.

4 Q. -- or the way it was done?

5 A. Yes. Dr. Millette is a competent technician. I
6 think that the data that he produced are certainly
7 believable, and I think that they represent what one would
8 expect from sawing this assembly.

9 Q. I understand the purpose of a reenactment to be
10 to recreate the situation where a worker was working and
11 doing something with say asbestos?

12 A. Yes.

13 Q. What other factors do you take into account?
14 How do you set up a recreation or reenactment?

15 A. Well, you attempt to make it as much alike of
16 the previous situation as possible. After looking at the
17 material available for testing, the amount of Micarta, the
18 amount of the Micarta and Marinite combination, the lack of
19 accessibility to ship facilities, I felt that it was futile
20 to get and impossible to get anything meaningful, as far as
21 risk information went, on this material.

22 Q. What do you mean by "risk information"?

23 A. Well, the risk from a given product, or from all
24 products put together, depends upon two major factors.
25 It's dependent upon what's call accumulated dose. The

1 accumulated dose is a product of intensity of exposures
2 over a duration of exposure.

3 In other words, it's like cigarette smoking is a
4 very good example. If a patient comes in to a physician,
5 and you try to figure out if their cigarette habit is one
6 that constitutes a risk to them, it isn't good enough to
7 ask the patient how many packs a day they smoke.

8 Q. Why?

9 A. Because that's only part of the question.
10 Because you don't know when they smoked how many packs a
11 day, or how long they had that habit. The second part of
12 the equation is to try to figure out how many years they've
13 had that intensity of a habit. The only number that means
14 anything, as far as risk goes in cigarette smoking, is the
15 number of what we call pack years. That's the intensity of
16 the habit, the intensity of smoking in packs per day, over
17 the number of years the person has been smoking. And you
18 can multiply two packs a day as an example, times 30 years
19 of smoking two packs a day, to come up with 60 pack years.

20 Q. Okay. Taking the example of asbestos or any
21 dust, then the cigarettes per day are comparable to the
22 concentration of the number of fibers that you would be
23 exposed to?

24 A. Exactly. And you have to multiply that times
25 the duration of that exposure. So it's -- With the lack of

1 information that we faced on the duration and the intensity
2 of such exposures, it would have been impossible to
3 meaningfully and truthfully and honestly, jump from
4 creating a lot of dust in an artificial environment, to try
5 to say this is a risk to anybody. You have to understand
6 the work procedures. You have to look at the average
7 exposure over many, many days, adding up to many, many
8 years of exposure, to see if such exposures contribute to
9 the risk of an asbestos-related disease.

10 Q. If in Dr. Millette's test he was collecting
11 air --

12 A. Yes.

13 Q. He described that. If the person who was doing
14 the cutting had a device that was collecting air right here
15 --

16 A. Yes.

17 Q. -- now wouldn't that be a fair measure of the
18 concentration of what's in the air for the person who's
19 doing that work?

20 A. Yes. That's why I say that Dr. Millette's work
21 was competent. He was measuring what was occurring during
22 those instants which the machining was taking place --
23 during those few minutes, and getting, I think, very good
24 data.

25 Q. So if you were to measure -- Well, is that

1 measure the same that the fiber concentration for that
2 person has a certain risk associated with it?

3 A. No. It depends upon how long they're exposed to
4 that. How frequently.

5 Q. All right. Now, would it be the same -- that is
6 the risk be the same, as it is for the person cutting on
7 everybody -- for everybody else who works on the ship?

8 A. Absolutely not.

9 Q. Why?

10 A. Because the fiber concentrations would be
11 different. Only a few feet away from the cutting
12 operations, the concentration of fibers would be much
13 lower. So the intensity of exposure would be quite
14 different. Probably a few yards away, the fibers -- the
15 concentration would be extremely low from that operation.
16 So that data that was obtained from someone who was
17 actually cutting and trimming the material, really can't be
18 applied to people who aren't cutting and trimming the
19 material. They're too far away.

20 Q. So in assessing whether or not that operation
21 was of risk to someone, or whether it contributed to
22 anything, you need to know how frequently or how often the
23 person worked in that area?

24 A. Yes.

25 Q. You need to know how frequently the actual

1 sawing took place?

2 A. Yes. And how much material was cut, and who
3 else was standing around, and what the velocity of the air
4 currents in the place were, what the dilution of the
5 material was once it was released as a dust. There are
6 literally dozens of things that can affect the
7 concentration. And once we look at the time factor about
8 how much of a person's work life one spends around such an
9 operation, or how much of the construction of a ship is
10 devoted to such an operation, it's only then you can begin
11 to pile up fibers years and get an idea if it comprises any
12 risk whatsoever.

13 Q. And get an idea of the various risk levels
14 associated with different operations or different products?

15 A. Yes.

16 Q. Doctor, let me ask you if you could help us with
17 something, and maybe I'm the only one who needs help.
18 Threshold limit values are stated in terms of fibers per
19 CC; is that right?

20 A. Yes; obtained by an optical microscope. It's
21 not only the level, but a number of other things are
22 defined. One of the ways, as I mentioned in that little
23 sugar cube trying to find out how many fibers are in it,
24 you only measured certain size of fibers. That's done by
25 an optical microscope.

1 Q. And OSHA has set certain limits for fibers per
2 CC --

3 A. Yes.

4 Q. -- for asbestos?

5 A. Yes.

6 Q. OSHA has also in its regulations, said something
7 about time-weighted average?

8 A. Yes.

9 Q. Would you explain what that is.

10 A. That very simply is averaging exposures over an
11 eight-hour day.

12 Q. Well, are the OSHA levels stated in terms of
13 average exposures over an eight-hour day?

14 A. Yes, they are so stated.

15 Q. All right. How do you take into account that
16 time weighting in coming up with that?

17 A. That's to accommodate intermittent or
18 interrupted or partial shift work. In other words, the
19 original OSHA regulations were written, which was a problem
20 trying to apply them to such activities, for the production
21 line where asbestos-bearing materials were produced during
22 an eight-hour shift by the same person in the same way in a
23 continuous basis. That's pretty easy to figure out. If
24 you put on air sampler on someone and run it for that eight
25 hours, you can figure out what the concentration was during

1 eight hours for that individual working on that machine.

2 The averaging takes into account the fact that
3 the individual may only be doing that work for one or two
4 hours during an entire shift. So the calculation is to
5 average that exposure over an eight-hour period.

6 Q. Okay.

7 A. The other reason for this is that most of the
8 risk information we know. The epidemiology, is in terms of
9 generally rather lengthy exposures over an eight-hour
10 period, because most of the information that we know about
11 the danger of asbestos, comes from work populations who are
12 doing the same thing on a continuous basis over relatively
13 long periods of time.

14 Q. So if a fiber concentration is stated or found
15 based on air sampling, then in order for it to be
16 comparable to say an OSHA standard, you would have to take
17 into account how much time or how frequently this operation
18 was done?

19 A. Yes. That would be very, very important. If an
20 individual engages in dealing with asbestos a few times
21 during a day, and isn't doing that over a -- continuously
22 over an eight-hour period, the dose delivered is much
23 lower. It's just like the person who smokes three
24 cigarettes a day versus a person who smokes continuously
25 and puts away 30 cigarettes a day. Their dose is much

1 lower, although every cigarette has the same intensity of
2 exposure. So you have to look at each episode over a
3 period of time to calculate the dose. The dose is what
4 hurts you. It isn't the individual exposure. It's how
5 much dose is accumulated.

6 Another way of looking at this is the intensity
7 of exposure is like the speedometer in your car. It gives
8 you an instantaneous reading of how fast you're going. If
9 you want to go from here to New Orleans, what you're really
10 interested is how many miles you pile up. That's dose. So
11 the intensity, you have to look at how long you're at that
12 intensity.

13 Q. And the intensity --

14 A. How long do you drive at 50 miles an hour; how
15 many years do you smoke two packs a day; how many years you
16 were exposed to two fibers per CC or 50 fibers per CC. And
17 this in the case of fabricating and installing construction
18 materials, is very, very difficult to reenact, to come up
19 with anything straightforward, honest, truthful and
20 meaningful.

21 BY MR. STUTTS: Thank you, Doctor. Pass
22 the witness.

23 BY THE COURT: Is that all, Mr. Stutts?

24 BY MR. STUTTS: Yes, Your Honor.

25 BY THE COURT: Does any other defendant

1 have questions?

2 BY THE COURT: Cross-examination. .

3 CROSS-EXAMINATION BY MR. MOTLEY:

4 Q. Hello, Dr. Sawyer.

5 A. Hello.

6 Q. You and I met 15 years ago, I believe?

7 A. I don't recall 15 years ago.

8 Q. Well, I feel badly that you don't recall. What
9 is the Safe Building Alliance?

10 A. The Safe Building Alliance? I'm not sure what
11 it is. I'm not a member of it.

12 Q. Are you a consultant?

13 A. I believe it's a group of manufacturers who
14 organized themselves to obtain consultation and provide
15 information to legislators to provide lobbying activities.

16 Q. Have you ever served as a consultant or been
17 listed as a consultant to the Safe Building Alliance?

18 A. Yes.

19 Q. Is that what I was looking for right there.
20 Doctor, will you help me with Motley's delicatessen for a
21 moment. Could you come down, please?

22 A. Oh, yes.

23 Q. During this trial we've been talking about a
24 sandwich. And don't take any offense to my use of the word
25 bologna. Now, when Westinghouse asked you to help them --

1 Help me here, Mr. Benton. Mr. Benton, among other things,
2 Your Honor, is an eminent expert on bologna.

3 BY MR. STUTTS: Your Honor, this really
4 looks delicious, but may we approach the bench.

5 BY MR. MOTLEY (continued):

6 Q. Now, Doctor, I just was doing this to illustrate
7 something to you. By the way, you haven't been to
8 Australia at the request of Mr. Dogan's client, Colonial
9 Sugar Refinery by any chance, have you?

10 A. I've been to Australia, but not for that reason.

11 Q. The testimony in this case is that most of the
12 products composite panel as we call them, had a -- was a
13 sandwich that had a piece of Micarta there, Marinite here
14 and Micarta here. A real full sandwich. Show the jury how
15 you constructed your sandwich that you tested.

16 A. Well, first of all I'm having a little bit of
17 trouble with the dimensions.

18 Q. Well, I can't give you any bread thinner than
19 that.

20 A. Well, let's use your bologna, okay, because you
21 seem to have more of it than I do.

22 Q. That remains to be seen.

23 A. You did the shopping, Mr. Motley, I didn't.

24 Q. Go right ahead. Mr. Motley has shown you what
25 he's purporting to be a sandwich that we -- in relationship

1 to what we're discussing today. Now this is all very funny
2 and amusing, except that it's backwards, as far as the
3 dimensions go. It doesn't look like this. The rough
4 dimensions -- this would be the Marinite. And actually,
5 this is a pretty good example.

6 Q. Why don't we use the bologna for the Micarta.

7 A. Can I continue?

8 Q. You can if I can ask you to do this if you want
9 to get the dimensions right.

10 A. I'm not finished with this yet.

11 Q. Okay. Go right ahead.

12 A. Mr. Motley, perhaps inadvertently, has brought
13 you a very good example of what the Marinite is; the center
14 core. It's soft. You can break it up pretty easily. This
15 is what Marinite is in relationship to this bologna. It
16 isn't like this. This isn't the Micarta. The Micarta was
17 the thin, hard, very durable material. So if we're going
18 to make this sandwich look like the bulkhead panel, it
19 really ought to look like this with the soft inner core
20 here, and the hard sheet material -- Can I present to the
21 jury without --

22 Q. What's that?

23 A. I'd just like to be able to finish.

24 Q. Go right ahead. I'm getting ready for the next
25 question. When you get done lecturing, I'll ask you

1 another question.

2 A. So the dimensions of outer sheet, are like this
3 a heck of a lot better than the bread does. The reason the
4 sheet was made like this is that it has a bulkhead material
5 on the ship, the Marinite containing the amosite asbestos
6 provided a lot of fireproofing. Very good material, but it
7 was soft like this piece of bread was. The Micarta was
8 very hard and durable. And all the bulkheads weren't made
9 with a sandwich like this. A number of them only had the
10 Micarta on one side. And the Micarta was put there to be
11 on the inside of the living spaces. It was a very hard,
12 very durable, had a nice wood finish with pigments and you
13 could scrub it continually. It's like the formica on your
14 counters.

15 Q. Are you done?

16 A. Yes, sir.

17 Q. Now, when you did your sandwich --

18 A. Did you bring a towel, too?

19 Q. Yes, we'll get you one. When you did your
20 sandwich when you used the bread and the bologna, you only
21 did one side; right?

22 A. An open sandwich.

23 Q. An open sandwich?

24 A. Right.

25 Q. Very good. Now, you didn't do one that had two

1 pieces of Micarta with Marinite between it; correct?

2 A. That's correct. You couldn't find any.

3 Q. I want you to look real carefully what I wrote
4 up here, Dr. Sawyer, and ask you if you've ever said this.
5 Cutting into a hard asbestos material one time, can
6 decrease your life expectancy 20 years. Did you ever say
7 that?

8 A. I don't think so. If I did, I don't believe it
9 now.

10 Q. Have you ever said this: Asbestos causes
11 asbestosis, lung cancer and mesothelioma at low exposure
12 levels. Did you ever say that?

13 A. I believe that mesothelioma can be caused by
14 exposure at low levels.

15 Q. How about these two?

16 A. No.

17 Q. Okay. Were you ever a consultant to a New York
18 City School Department?

19 A. Yes.

20 Q. Do you know who Gabe Caplin is?

21 A. Yes.

22 Q. Did you do a film with Gabe Caplin of Welcome
23 Back Kotter, to show school children and contractors to
24 show the dangerous from asbestos?

25 A. No.

1 Q. You didn't? Let me show you something.

2 A. We made the film to show to workers only, not to
3 school children.

4 Q. Okay. Let's show the film, please. You can
5 return to your seat.

6 A. Okay.

7 BY MR. STUTTS: Your Honor, can we approach
8 the bench.

9 (BENCH DISCUSSION. OFF THE RECORD.)

10 BY THE COURT: Y'all go out for just a
11 minute.

12 (WHEREUPON JURY EXITS COURTROOM.)

13 BY THE COURT: Bring the jury in. Wait a
14 minute.

15 BY MR. MOTLEY: I agree he can make his
16 record after the jury goes home and not waive
17 anything.

18 BY MR. STUTTS: Okay. But still the
19 question is whether or not this tape is
20 admissible. You're using it for impeachment.

21 BY MR. MOTLEY: I'm using it for all kind
22 of reasons, James.

23 BY MR. STUTTS: Well, I know, but if you're
24 going to use it, there are a bunch of documents
25 that have come to our attention today for the

1 first time, this film for the first time, and I
2 think we're entitled to see it before the jury
3 sees it. To see it at the same time and then
4 find out if I've got an objection as I'm looking
5 at it while the jury is looking at it, doesn't
6 do me much good.

7 BY MR. MOTLEY: I promise you, after the
8 first two minutes you'll understand why. The
9 first two minutes. Judge, I'm entitled to --
10 The gentleman said things on direct and
11 reaffirmed them on cross. I'm entitled to use
12 what I've got without disclosing my hand. I
13 mean, if it hadn't been for the juror having to
14 go to the rest room, we would have be done with
15 this.

16 BY THE COURT: Bring the jury in.

17 (WHEREUPON JURY PRESENT IN COURTROOM.)

18 BY THE COURT: Be seated..

19 (WHEREUPON THE VIDEOTAPE OF "DOIN' IT
20 RIGHT" WAS PRESENTED TO THE JURY.)

21 "BY MR. KOTTER: In case you're wondering
22 why I've asked you here -- As a matter of fact,
23 I'm starting to wonder what I'm doing here. As
24 a matter of fact, I don't know how much longer
25 I'm going to be here. When I got to school

1 today, I got some welcome. Mr. Woodman calls me
2 into his office and he says, Kotter, I want you
3 to make sure that this worker who's fixing the
4 ceiling doesn't get asbestos all over the place
5 before the kids come back from lunch. Well, I
6 said, stupid -- I didn't really say stupid, I
7 thought, stupid. But I said, sir, do me a
8 favor, why don't we call an expert, a real
9 expert. I mean, there might be a few things you
10 and I don't know about asbestos.

11 BY THE WORKER: What are you worrying
12 about, Kotter? I've done this lots of times and
13 I'm still walking around. Listen, you can
14 relax. I'm not breaking this ceiling until
15 after lunch. I thought you were a tough guy,
16 Kotter. You're a worrywart.

17 BY MR. KOTTER: I thought you're too tough
18 to worry about lung cancer.

19 BY THE WORKER: Sure. If I was breathing
20 it in week in and week out, I'd worry, but I
21 only work on this a few days a week. And
22 besides, my contractor ain't going to lie to me.
23 He told me as long as I don't breathe it all the
24 time, it ain't going to harm me.

25 BY MR. KOTTER: Do you think he knows all

1 there is to know about asbestos?

2 BY THE WORKER: Yeah, he knows.

3 BY MR. KOTTER: Look, will you do me a
4 favor? Will you wait until these guys get here?

5 BY THE WORKER: What guys?

6 BY MR. KOTTER: These guys are four experts
7 on asbestos. They're just going to check out
8 what you're doing.

9 BY THE WORKER: Oh, no. Thanks Kotter.
10 Thanks a lot. I've got to get this job done
11 before they stop me.

12 BY MR. KOTTER: I'm going to wait in the
13 corridor.

14 BY DR. SAWYER: Hi. I'm Bob Sawyer.

15 BY MR. KOTTER: Dr. Robert Sawyer, M.D.
16 Thank god you're here. Look what this guy is
17 about to do.

18 BY DR. SAWYER: Excuse me. Are you about
19 to break into that ceiling without a respirator
20 on your face?

21 BY THE WORKER: Look, Doc, I like to smoke,
22 I like to drink coffee. How am I going to do
23 that with my mask on?

24 BY DR. SAWYER: Well, at least let's talk a
25 little bit before you go back to work.

1 BY THE WORKER: Come on, Doc. I got a
2 bowling date tonight.

3 BY DR. SAWYER: Is that why you're wearing
4 jeans and a T-shirt?

5 BY THE WORKER: What's wrong with blue
6 jeans?

7 BY DR. SAWYER: Well, if you're working
8 with asbestos and smoking and drinking coffee
9 and wearing your street clothes, it really isn't
10 too smart. And if you're chipping away at an
11 asbestos ceiling without a respirator over your
12 face, you could be chiseling 20 years off of
13 your life.

14 BY THE WORKER: Doc, look. With all due
15 respect, my boss wouldn't lie to me, and he's in
16 the asbestos business.

17 BY MR. KOTTER: Look, what are we arguing
18 about? Why don't we just wait until the other
19 three experts get here.

20 BY DR. SAWYER: Who are they?

21 BY MR. KOTTER: Well, Mr. Woodman wrote
22 them down for me. We have an expert from Yale
23 University who does research on asbestos.

24 BY DR. SAWYER: That's me. I'm from Yale.

25 BY MR. KOTTER: Oh, that's you. Oh, well,

1 we have a former atmosphere control officer on
2 nuclear submarines.

3 BY DR. SAWYER: That's me, too. I used to
4 do that.

5 BY MR. KOTTER: That's you, too, huh.
6 Well, we have the Environmental Protection
7 Agency's expert on asbestos.

8 BY DR. SAWYER: (Indicating pointing to
9 himself.)

10 BY THE WORKER: That's the end of my
11 program.

12 BY MR. KOTTER: I used to play Mr. Kotter.
13 And that's the way we would have handled the
14 problem on TV. But the asbestos problem is no
15 situation comedy. What we're talking about is
16 cancer, and this guy is for real. He's no
17 actor. What I said about him is true. So let's
18 listen to him, because this is the straight
19 word.

20 BY DR. SAWYER: In recent years we've been
21 learning more and more about just how dangerous
22 asbestos really is. It can cause asbestosis, a
23 scarring disease of the lung, and also cancer of
24 the lung, in the stomach and other organs. It
25 can cause these diseases at very low

1 concentrations.

2 Asbestos is a tricky material to work with.
3 It's extremely durable, practically
4 indestructible. It can remain in the
5 environment forever. And once you breathe it,
6 it will remain in your body forever and continue
7 to act. The asbestos fibers are extremely small
8 and extremely light; therefore, they are
9 extremely aerodynamic. They can float in the
10 air for days within a building.

11 We've also learned more about the
12 populations endangered from asbestos exposure.
13 Asbestos not only affects those that mine it and
14 produce it, but also those that work with it,
15 and those that are near those that work with it,
16 and even people that live with the people that
17 work with it. A little bit of asbestos goes a
18 long way.

19 We're especially concerned about
20 construction workers. There's a lot of asbestos
21 in construction material, and the activities of
22 construction workers frequently release fibers
23 where they can be breathed. That's what this
24 story is about. And the story seems to be
25 getting around.

1 A hazardous asbestos situation can be
2 solved in three different ways. Encapsulation
3 with the sealant, containment with an enclosure,
4 or total removal. No matter what the procedure
5 used, we want you protected. You will be
6 protected by following certain developed
7 techniques. We developed these techniques not
8 in a laboratory, but on the job site right along
9 with you.

10 BY A SPEAKER: Dr. Sawyer, he was the one
11 that first informed us from Yale University. So
12 we have a few days, you know, like we go down
13 for taking tests and stuff to see what you had
14 and health -- if we had any kind of disease or
15 anything. So that we had to go to the doctor at
16 Yale, you know. So we had to go quite a few
17 times. And then they carried us through the
18 basic things, what we should be doing or what we
19 should not be doing, all this and that.

20 BY A SPEAKER: Actually, there is nothing
21 harmful about the job as long as you protect it
22 and you make sure you wear your gear, all of
23 your gear. That's the main thing. So at the
24 end of the day the product is left on the floor,
25 we wet it again and we start bagging after all

1 of the removal. Because then if there's a spot
2 that can be washed and brushed, instead of
3 working dry, we wet it again so all the excess
4 water will fall down, and then bag it, make sure
5 it's got labels on it and store it in one area
6 that is easy for us to remove it. All my water,
7 all my asbestos, goes to the dump. And then
8 from there, he's dressed in his boots and his
9 suit and his headpiece and he goes nude to the
10 shower area with the mask on.

11 BY A SPEAKER: To wear the respirators,
12 they're irritating, you know, And it just takes
13 time to get used to them. And even when you get
14 used to them, they're still irritating. And
15 see, if you're a smoking man, oh, man, you're in
16 trouble. See, it doesn't matter to me too much,
17 because I'm not a smoking man.

18 BY A SPEAKER: He wets his face, he wets
19 his mask, removes the mask and then continues to
20 shower.

21 BY A SPEAKER: Well, the best thing is
22 taking the showers, you know. The uniforms you
23 wear, they stick to your body, whether it's cold
24 weather or hot weather. And then you sweat.
25 They make you sweat. So when you take them off,

1 man -- see, they're paper uniforms and they
2 stick right to you. So when you take them off,
3 you're ready to do. And that's the thing about
4 that.

5 BY A SPEAKER: I think it's important
6 because it all falls back in the same category,
7 why are we here and why are we, you know --
8 we're in these blasted hot suits all the time.

9 BY A SPEAKER: We are number one. We are
10 the best and we have to make sure that everybody
11 does the same thing we do.

12 BY A SPEAKER: My boss doesn't like nobody
13 don't know what he's doing. he says when we
14 leave town, I want all my men, my professional
15 men. We're number one. And everybody on the
16 job knows what they're supposed to do . They
17 know how to hang, how to scrape, how to take
18 down. We know our thing. We do our thing real
19 nice, man. I'm proud.

20 BY A SPEAKER: The best thing is, I think,
21 getting the job done, that you're overcoming
22 something that's bad for the environment, for
23 humans, and they're doing it properly."

24 (WHEREUPON VIDEOTAPE CONCLUDES.)

25 BY MR. MOTLEY: Turn on the lights, please.

1 I'd like to mark that for identification, Your Honor.
2 Honor.

3 BY THE COURT: All right.

4 BY MR. MOTLEY (continued):

5 Now let me move, Dr. Sawyer, to another area, if
6 I might. Were you told that Mr. David Baldwin who invented
7 the sandwich we're talking about, testified here in court
8 on behalf of Westinghouse?

9 I'm sorry, would you repeat that.

10 Mr. David Baldwin, who invented the sandwich
11 we've been talking about, testified here before the jury.
12 Were you told about his testimony?

13 BY MR. STUTTS: Objection, Your Honor, to
14 the characterization of the testimony.

15 BY THE COURT: I'm sorry. What?

16 BY MR. STUTTS: Objection to the
17 characterization of the testimony. It's not
18 true that Mr. Baldwin and Westinghouse --

19 BY MR. MOTLEY (continued):

20 Q. Let me rephrase it. Let me rephrase it. Have
21 you seen the patent application for the sandwich and
22 Micarta?

23 A. I have not.

24 Q. If Mr. Baldwin said fire resistant Micarta could
25 not be used alone as a structural material, it had to be

1 bonded to a more rigid material, and he said, yes, in the
2 thickness we made and sold it, that is correct. In other
3 words, the Micarta could not be used as bulkhead material
4 by itself, it had to be bonded with something else. Is
5 that your understanding of that product, sir?

6 A. I assume it's so; yes.

7 Q. Dr. Sawyer, have you ever testified that with
8 respect to asbestos cancer -- cancer caused by asbestos, in
9 answer to a question, can one fiber -- asbestos fiber cause
10 cancer, have you ever testified under oath, I don't think
11 anyone knows for sure; however, it makes a lot of sense --
12 to makes a lot of sense from all that we know of malignant
13 changes from all we know about affecting the reproduction
14 of cells, it's thought that it starts with one cell. If it
15 starts with one cell then injury to that one cell, and
16 certainly an asbestos fiber has the size and molecular
17 structure to do that, then I firmly believe it does make
18 sense. Have you held that view at one time and testified
19 under oath?

20 A. I don't recall specifically. I'd have to look
21 at the document.

22 Q. Do you remember testifying in the case of
23 Cinnaminson Township Board of Education vs. United States
24 Gypsum Corporation in New Jersey on October 21st -- which
25 happens to be my birthday -- 1988?

1 A. Do I recall that?

2 Q. Yes, sir.

3 A. Yes, I do recall that.

4 Q. Sir, do you agree that -- Do you recall
5 testifying before OSHA, and describing pipe insulation,
6 thermal lagging, acoustical plasters, highly friable
7 fireproofing or asbestos concrete, if you're machining it,
8 puts fibers out enough from all the data we've had that
9 these are hazardous conditions -- potentially hazardous?
10 Do you recall that?

11 A. Yes, depending on how they're handled, asbestos
12 in any material, you can release it.

13 Q. Do you recall testifying, sir, that when you put
14 saws and drills to Marinite in marine veneer, when they're
15 machined, drilled, sawed, cut, ground and so forth, the
16 local contamination is, your words, severe definite risk.
17 Do you recall that testimony at OSHA?

18 A. Yes. I believe that.

19 Q. Do you recall testifying, sir, that a shipyard
20 worker who has worked in this trade for 40 years, has had
21 tremendous -- your words -- exposure to asbestos, if there
22 was no respiratory protection involved. These individuals
23 -- the ones that worked for 40 years in the shipyards -- do
24 not all get crippling disease, they do not all die from
25 asbestosis, but a great number do. Do you recall that?

1 A. I do not recall saying that.

2 Q. Is that true?

3 A. I would think that that is a true statement, but
4 I do not recall saying it.

5 Q. Here's your transcript, sir, in Cinnamonship, if
6 I'm pronouncing that correctly.

7 A. Cinnaminson.

8 Q. Cinnaminson. And then turn to the page that's
9 highlighted.

10 A. Yes.

11 Q. Did you say that?

12 A. Yes.

13 Q. Now, sir, are you aware, sir, that a commission
14 in the State of New York, appointed by the governor of the
15 State of New York -- do you have it up there -- has accused
16 the Safe Building Alliance of intentionally misleading the
17 public about the health hazards from asbestos in public
18 buildings. Are you aware of that?

19 A. No.

20 Q. You are a consultant to the Safe Building
21 Alliance, and you do not know that they have been accused
22 of intentionally --

23 A. Well, I think you're misrepresenting something
24 that's pretty serious here that's very disturbing to me.

25 Q. What that, sir?

1 A. About me.

2 Q. Are you a consultant to the Safe Building
3 Alliance?

4 A. No. I am not presently a consultant with the
5 Safe Building Alliance.

6 Q. Were you?

7 A. I have done contractual work for them on a
8 fee-for-service basis. I have never been a retained
9 consultant with Safe Building Alliance. I have done work
10 for them on occasion. And I consider the work I did to be
11 honest and straight forward. If they were accused by some
12 commission in New York State, I could make comments on
13 certain commissions in New York State accusing people of a
14 lot of things.

15 Q. Is that right. What?

16 A. But I'm not here to defend the Safe Building
17 Alliance either.

18 Q. Well, are you familiar with the highly
19 misleading disinformation campaign by these asbestos --

20 BY MR. STUTTS: Objection, Your Honor.

21 BY MR. MOTLEY: I'll withdraw it. It's
22 late in the day, Dr. Sawyer. I know you want to
23 get home. I appreciate your patience with me.
24 I pass the witness.

25 BY THE COURT: Redirect.

1 REDIRECT EXAMINATION BY MR. STUTTS:

2 Q. Dr. Sawyer, when was the film made that we saw,
3 do you know?

4 A. It's called "Doin' it Right."

5 Q. No, when was the film made?

6 A. When was it made?

7 Q. Yes.

8 A. Sometime in the -- I believe in the late '70s,
9 and it was made -- again, there was somewhat of a
10 misrepresentation, I feel, about the film. It was
11 certainly not made to show to school children. Absolutely
12 untrue.

13 Q. It was made for those who were doing asbestos
14 removal work in schools?

15 A. It was made as a motivational film for
16 construction workers who were about to engage in,
17 unfortunately, some mass removals of asbestos in schools.
18 My concern was nothing to do with the school children. My
19 concern was that there was a vast -- there would be a vast
20 number of New York City construction workers who were going
21 to be going in and handling asbestos-bearing materials
22 without knowing what they were dealing with, and getting
23 exposed to asbestos. And we were desperately trying to do
24 something to prevent that. That film was a motivational
25 film to try to get the construction workers to wear

1 respirators, to wear protective clothing, to use wet
2 techniques and to shower down completely. In other words,
3 to use the techniques that we had developed mostly at Yale
4 University with construction workers.

5 And there's a lot we didn't know at the time
6 that that film was being made, but the purpose was not to
7 teach epidemiology. The purpose was not to create a
8 scientific work. The purpose was to get these guys to try
9 to stop smoking, to wear their respirators, and clean
10 things up and protect themselves from massive asbestos
11 exposures. That's why the film was made. And also I
12 notice that's a cut version of the film. There's a lot of
13 it that's been edited.

14 BY MR. MOTLEY: Would you like to see the
15 whole one? I've got the whole one here, sir.

16 BY THE WITNESS: I've seen it. Thank you.
17 If someone else would --

18 BY MR. MOTLEY: We'll mark that for
19 identification, too, Your Honor.

20 BY THE WITNESS:

21 A. I just want to point out that the film has been
22 edited. I noticed there's some things missing. But the
23 purpose of the film, again, was not to be even technically
24 correct. It was a motivational film for construction
25 workers. And Mr. Anthony Smith who was the director of

1 school buildings at the time, made that a requirement that
2 every single contractor and every single worker had to view
3 that thing -- I'm not sure if that was meant to be
4 punishment or not -- before going to work in the New York
5 City schools.

6 BY MR. STUTTS: Can I ask one question,
7 Your Honor?

8 BY MR. STUTTS: Objection.

9 BY THE COURT: No.

10 BY MR. MOTLEY: No questions?

11 BY THE COURT: No more. Thank you, Doctor.

12 BY MR. MOTLEY: Can I ask him if he wants
13 to take his sandwich with him.

14 BY THE WITNESS: I'm sorry. Am I excused?

15 BY THE COURT: You're excused. Thank you
16 very much, Doctor.

17 BY THE WITNESS: Thank you, sir.

18 BY THE COURT: Well, I guess it's time to
19 quit. We'll see you in the morning at 8:00.

20 (WHEREUPON JURY EXCUSED.)

21 BY THE COURT: Everybody be quiet.

22 BY MR. STUTTS: Your Honor, during the
23 course of Dr. Weill's cross-examination,
24 Westinghouse objected to Mr. Motley
25 cross-examining Dr. Weill about documents that

1 he had not authored or seen before they were
2 offered by members of industry or associations.
3 He said they were comments about Dr. Weill, or
4 comments about things that he knew nothing
5 about. I was unable to cross-examine the
6 authors of these documents, and the documents
7 are hearsay. And under Rule 602, in addition,
8 because the witness knew nothing about them,
9 cross-examination should not have been permitted
10 to continue on those issues.

11 BY THE COURT: Is that all?

12 BY MR. STUTTS: Yes, ma'am.

13 BY THE COURT: Mr. Motley, do you have
14 anything?

15 BY MR. MOTLEY: Well, Your Honor, I think
16 each document will rest on its own merit. Your
17 Honor sustained some of the objections at the
18 bench and overruled some, and the record will
19 reflect which documents I was permitted to go
20 into. And the reasons therefore are that he was
21 a medical consultant, and he was at some of the
22 meetings. There were discussions about the
23 scope of his consultantship. There were
24 documents concerning what he was supposed to do,
25 and what he in fact did and who he met with.

1 And I think the record will be -- will clearly
2 reflect the reason for Your Honor's rulings, and
3 you did sustain the objection to some of the
4 documents being shown to the witness.

5 BY THE COURT: Anything else?

6 BY MR. MOTLEY: And we will mark the edited
7 and unedited tape, and we'll be delighted for
8 Mr. Stutts to take the unedited one home with
9 him tonight. I don't think they have them for
10 rent at Blockbusters yet.

11 BY THE COURT: See you in the morning.

12 (WHEREUPON COURT IN RECESS.)

13 --