

FILE NAME: ALCOA (ALC)

DATE: 1998 Feb 28

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DOCUMENT DESCRIPTION: Legal-Deposition of Thomas Bonney with BC
Notes

Thomas Bonney 2/25/98 depo

Worked for Alcoa 1948-1987

B.S. chemistry 1948

Lester Crabbly was his supervisor

18-19 Alcoa fully aware of TLVs in 1948

Third I.H. added in mid-1950's

30 Dudley Irwin was medical director

61 Knew about A'sis in 1948

62 Knew abt. Doll 1955 paper

**IN THE DISTRICT COURT OF MILAM COUNTY,
TEXAS
20TH JUDICIAL DISTRICT**

LARRY C. WHATLEY, Individually and)
as Personal Representative of the)
Heirs and Estate of GLENN WHATLEY,)
Deceased, et al.,)

)
Plaintiffs,)
) Cause
vs.) No. 25093
)

ALCOA POWER MARKETING, INC.,)
et al.,)
)
Defendants.)

Deposition of THOMAS B. BONNEY
Wednesday, February 25, 1998

The deposition of THOMAS B. BONNEY, called as a
witness by the Plaintiffs, pursuant to notice and the
Federal Rules of Civil Procedure pertaining to the
taking of depositions, taken before me, the
undersigned, Colleen O'Brien Adams, a Notary Public
in
and for the Commonwealth of Pennsylvania, at the
offices of LeBoeuf, Lamb, Greene & MacRae, 601 Grant
Street, Pittsburgh, Pennsylvania 15219, commencing at
10:00 o'clock a.m., the day and date above set forth.

APPEARANCES:

On behalf of the Plaintiffs:
Law Offices of Andrew Waters:
C. Andrew Waters, Esquire
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Dallas, Texas 75208
On behalf of the Defendant J.T. Thorpe:
Fairchild, Price, Thomas & Haley, L.L.P.:
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Center, Texas 75935-1719
On behalf of the Defendant AC&S:
Gollatz Griffen & Ewing:
Arthur H. Baker, Esquire
301 High Tech Drive
Oakdale, Pennsylvania 15071
On behalf of the Defendant Alcoa:
LeBoeuf, Lamb, Greene & Carroll, L.L.P.:
Patrick Kingsley, Esquire
601 Grant Street
Pittsburgh, Pennsylvania 15219

and
Walker, Keeling & Carroll, L.L.P.:
Ronald B. Walker, Esquire
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- 1 **THE VIDEOGRAPHER:** This begins the
- 2 deposition of Thomas Bonney. We are on the
- 3 record. The time is 10:18 a.m. The court
- 4 reporter may now swear the witness.
- 5 **THOMAS B. BONNEY**
- 6 called as a witness by the Plaintiff, having been
- 7 first duly sworn, as hereinafter certified, was
- 8 deposed and said as follows:
- 9 **EXAMINATION**
- 10 **BY MR. WATERS:**
- 11 **Q** Would you state your full name for the
- 12 jury, sir?
- 13 **A** Thomas B. Bonney.
- 14 **Q** Mr. Bonney, how old a man are you, sir?
- 15 **A** 76.
- 16 **Q** Are you presently employed?
- 17 **A** No.
- 18 **Q** When did you last work full time?
- 19 **A** In 1987.
- 20 **Q** Are you presently retired from your
- 21 employment with Alcoa?
- 22 **A** Yes, I am.
- 23 **Q** Are you receiving pension or retirement
- 24 benefits from Alcoa?
- 25 **A** Yes, I am receiving a pension from Alcoa.

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1 Q Do you own stock in Alcoa?
 2 A I have stock, yes.
 3 Q And did you earn that stock or the right to
 4 purchase that stock during the time frames you worked
 5 at Alcoa?
 6 A Yes. I got that stock while I was employed.
 7 Q When did you first come to be employed by
 8 Alcoa?
 9 A I was employed in 1948.
 10 Q And what was your date of birth, what is
 11 your date of birth?
 12 A January 17, 1922.
 13 Q All right, sir. Have you given a
 14 deposition previously, sir?
 15 A Yes, I have.
 16 Q So you understand generally the purpose of
 17 the procedure is for me to ask questions and you to
 18 provide answers to the extent that you can do so?
 19 A Yes, I do.
 20 Q Can we have an agreement that if, for any
 21 reason you do not understand my question, you will ask
 22 me to rephrase it or reword it in some fashion?
 23 A I will do that.
 24 Q Because from time to time, I will ask
 25 inexplicable questions so -- how many other times,

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1 A No, I do not.
 2 Q What was the substance of your testimony or
 3 what was the purpose of your testimony, to the best of
 4 your recollection?
 5 A It is difficult for me to say. Providing
 6 some information about environmental activities at the
 7 time.
 8 Q All right. Were these policies that were
 9 written many years ago?
 10 A I have no idea.
 11 MR. WALKER: Do you mean insurance
 12 policies?
 13 MR. WATERS: Yes.
 14 BY MR. WATERS:
 15 Q Do you have any knowledge or awareness that
 16 Alcoa has sought or is presently seeking insurance
 17 monies related to asbestos in its facilities?
 18 A I have no knowledge of any.
 19 Q What continued involvement, if any, do you
 20 have at the present time with Alcoa? Do you serve as
 21 a consultant to Alcoa?
 22 A No, other than my testimony here.
 23 Q And in this instance, am I correct that
 24 Alcoa has asked you to provide your testimony in this
 25 case?

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1 sir, have you given depositions?
 2 A Two times before.
 3 Q All right, sir. And did either of those --
 4 well, what did those two cases involve?
 5 A These involved Alcoa reclaiming insurance
 6 money for necessary cleanup for some environmental
 7 problems.
 8 Q All right, sir. Did that include
 9 environmental problems resulting from the use of
 10 asbestos materials?
 11 A No, it did not.
 12 Q When did you give those depositions? I
 13 will start by asking if that was subsequent to your
 14 retirement.
 15 A It was after my retirement.
 16 Q Was the purpose of that litigation -- was
 17 Alcoa seeking to recover insurance from its carrier to
 18 help assist in paying for environmental cleanup of
 19 some sort?
 20 A Yes, that's exactly what it was.
 21 Q But to the best of your recollection, that
 22 did not include any asbestos abatement or asbestos
 23 cleanup?
 24 A I don't recall any asbestos at all.
 25 Q Do you recall which carriers were involved?

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1 A Asked for my assistance.
 2 Q They asked you to assist in defending the
 3 case?
 4 A In whatever capacity I might be useful.
 5 Q When were you first contacted with respect
 6 to providing your assistance or being useful in this
 7 case, as you put it?
 8 A I don't know exactly, but six months, a
 9 year.
 10 Q Were you told anything about the facts of
 11 the case?
 12 A Just in general terms.
 13 Q What were you told in general terms?
 14 A That an employee had developed cancer and
 15 was alleged to have been caused by exposure to
 16 asbestos in an Alcoa plant.
 17 Q Did you understand that it had to do with
 18 the Rockdale, Texas facility located in Milam County?
 19 A Yes, I am aware.
 20 Q Were you advised that this employee,
 21 Mr. Glenn Whatley, had suffered and died from
 22 mesothelioma?
 23 A Yes. I was told that.
 24 Q And are you aware from your own experience
 25 and training that mesothelioma is a disease, disease

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1 process that is caused almost exclusively from
2 asbestos exposure?
3 A Not exclusively, but it might be.
4 15 percent or so might be attributed to unknown
5 causes.
6 Q If a person has a significant amount of
7 occupational exposure to asbestos over his work life
8 and he develops mesothelioma, would you agree with
9 me
10 that more likely than not asbestos exposure is the
11 cause of the disease?
12 A I guess it would depend upon what one
13 considers a significant exposure, and if it was a
14 heavy exposure, there might a possibility of
15 mesothelioma developing.
16 Q Are you familiar, sir, from your review of
17 the literature, industrial hygiene literature over the
18 years, with cases of household exposure where persons
19 develop this disease from merely washing their
20 spouse's clothing at home?
21 A I have a vague recollection of that, but
22 whether or not it was real or alleged, imagined, I
23 don't know, I can't say that now.
24 Q But you do have a recollection of reports
25 of that nature in the literature?
26 A Yes.

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1 A Yes, they were.
2 Q And did you bring these with you or are
3 these duplicates that were brought today by the Alcoa
4 attorneys?
5 A I brought these with me.
6 Q Okay. And how long have they been at your
7 home, approximately?
8 A Maybe three weeks, a month.
9 Q Okay.
10 Now, just to be clear, these documents were
11 provided to you by the Alcoa attorneys?
12 A Yes, they were.
13 Q These documents were not the result of some
14 independent research or review that you accomplished?
15 A None of my own.
16 Q So these documents that you have reviewed
17 in preparation for your testimony today constitute
18 materials that the Alcoa attorneys determined they
19 wished for you to review?
20 A Yes, at least in part.
21 Q And there may well be, to the best of your
22 knowledge, other significant documents contained in
23 the Alcoa files that you have not had an opportunity
24 to review?
25 A I have no way of knowing one way or the

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1 Q And let me say that this is not a memory
2 test. There will be some things you can recall fairly
3 easily. There will be other things that you probably
4 don't recall one way or another, and if you do not
5 recall, feel free to tell us that.
6 Have you reviewed any documents pertaining
7 to asbestos or pertaining to this case since you were
8 first contacted somewhere between six and 12 months
9 prior?
10 A Yes, I have.
11 Q Have you brought those documents with you
12 today?
13 A Yes, they are here.
14 MR. WATERS: Where might they be?
15 MR. WALKER: They are right here.
16 MR. WATERS: That stack right there. Let
17 me just glance at them. Maybe the thing to do
18 would be to look at them during a break. I
19 probably have some of them with me, as well, but
20 maybe not all of them.
21 Why don't you put them right up here?
22 We'll take a quick look at them.
23 Q All right. So we got one large box and one
24 small box and, Mr. Bonney, were these documents sent
25 to you at your home?

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1 other.
2 Q Okay. It's certainly a possibility, isn't
3 it, Mr. Bonny, that there are other significant
4 documents that you have not had an opportunity to
5 review?
6 A Something like that, I am sure I couldn't
7 be a hundred percent sure of anything, but none to my
8 knowledge.
9 Q What was the stated or understood purpose
10 for your review of these documents and your
11 involvement in this case?
12 A Just to be familiar with the circumstances
13 around this case.
14 Q Do you feel that as a result of your review
15 of the documents you are familiar with those
16 circumstances?
17 A I am much more familiar. I refreshed my
18 memory on it, yes.
19 Q Well, what I suggest we do is at some point
20 in time, when we take a break, try to sift through
21 these. Some of them I am sure I already have; some of
22 them, I don't, and we can speed up the process that
23 way.
24 Where were you born, sir?
25 A In Brooklyn, New York.

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- 1 Q And how long did you live in Brooklyn,
 2 New York?
 3 A Oh, ten, 15 years, perhaps.
 4 Q And where did you move at that time?
 5 A That's why my hesitancy. I moved quite a
 6 bit.
 7 Q Okay. Let me see if we can make it
 8 easier. Where were you living when you were in the
 9 age range, 18, 19?
 10 A Back in New York on Long Island.
 11 Q Did you graduate from high school?
 12 A Yes.
 13 Q What year did you graduate from high
 14 school?
 15 A 1940.
 16 Q And what did you do subsequent to that?
 17 A I worked shortly in a research laboratory
 18 as a chemical assistant and went to a year of college,
 19 then entered the military, finished up my college at
 20 Bucknell University, '48.
 21 Q 1948 you graduated from Bucknell?
 22 A Yes.
 23 Q And what was your degree in?
 24 A Bachelor of science in chemistry.
 25 Q In your training, your educational

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- 1 background, did you receive or did you learn any
 2 information concerning asbestos?
 3 A I beg your pardon?
 4 Q Yes. During your time at the university,
 5 did you learn anything about asbestos?
 6 A No. Nothing.
 7 Q And in 1948, did you go to work for Alcoa?
 8 A Yes, I did.
 9 Q In Pittsburgh?
 10 A In New Kensington outside of Pittsburgh.
 11 Q Is there a plant located there?
 12 A There is a research laboratory.
 13 Q Research lab. And what was your title or
 14 position?
 15 A I was an industrial hygiene chemist.
 16 Q And if you will, state for me what you
 17 recall generally your duties and responsibilities to
 18 have been.
 19 A My responsibilities were primarily
 20 analyzing samples collected for the evaluation of
 21 exposures in Alcoa plants, and I did collect samples,
 22 as well.
 23 Q Did that include dust samples?
 24 A Yes.
 25 Q Did that include dust that contained

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- 1 asbestos?
 2 A I don't recall asbestos being involved at
 3 all.
 4 Q Okay. When is your first recollection of
 5 Alcoa analyzing or testing dust samples for the
 6 presence of asbestos?
 7 A I don't believe we did test for -- air
 8 samples for asbestos until probably in the late '60's
 9 or the '70's, but we did evaluate the environment
 10 wherever asbestos was used.
 11 Q All right. So the time frame in which you
 12 would have first begun to complete air sampling for
 13 the presence of asbestos to determine the levels of
 14 asbestos would have been roughly the time OSHA
 15 came
 16 out?
 17 A Prior to and after, yes. We had -- a
 18 method was developed by that time for specifically
 19 measuring asbestos fibers.
 20 Q For measuring asbestos fibers. Did you
 21 become familiar with the midget impinger back in
 22 1948,
 23 or thereabouts?
 24 A Oh, yes, very much so.
 25 Q And you were familiar with measuring the
 total dust, for example, in the work environment?
 A Yes, I was.

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- 1 Q Did you become familiar at that time with
 2 the threshold limit values for a number of materials,
 3 dust, et cetera, that had been put together by the
 4 American Conference of Governmental and Industrial
 5 Hygienists, the ACGIH?
 6 A Yes, I was very familiar with them.
 7 Q Did you learn about that in school or did
 8 you learn about that when you first got to Alcoa?
 9 A I learned about that when I was employed by
 10 Alcoa.
 11 Q Just to be clear, am I correct that from
 12 1948 until, as you stated earlier, the late '60's or
 13 early '70's, you recall sampling being done for dust
 14 generally but not specifically with respect to
 15 asbestos; is that correct?
 16 A Unless there happened to be asbestos in
 17 some of the collected dust.
 18 Q Okay. Go ahead. I am sorry.
 19 A But we had, in that time frame, had not
 20 seen any areas of concern to us as being a health
 21 hazard with asbestos.
 22 Q Let me object to the non-responsive portion
 23 of your answer. From time to time, I will to have do
 24 that. Please don't take it personally. And from time
 25 to time, I am sure they will make objections to some

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1 of my questions.
 2 So for what period of time did you continue
 3 to work in the research laboratory?
 4 A Perhaps ten years.
 5 Q Till sometime in the late 1950's, can we
 6 say?
 7 A Yes. Mid, late.
 8 Q And during that time frame, did you
 9 continue to be designated as an industrial
 10 hygienist/chemist?
 11 A When I moved to Pittsburgh, I was an
 12 industrial hygienist, classified as industrial
 13 hygienist.
 14 Q But during the remainder of your time at
 15 the research laboratory in New Kensington, you were
 16 an
 17 industrial hygienist and a chemist, so to speak; is
 18 that correct?
 19 A Yes, yes.
 20 Q And let's talk a little bit about the
 21 laboratory. Can you help give me a sense of when that
 22 operation was first put into place by Alcoa?
 23 A Probably in 1946 or '47.
 24 Q Shortly before your arrival?
 25 A Yes.
 26 Q Were there other industrial hygienists

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1 A Yes.
 2 Q And that continued to be the case for many
 3 years; did it not?
 4 A Yes, it did.
 5 Q And I assume that you understood that the
 6 threshold limit values on not just asbestos, but on a
 7 variety of substances and dusts and fumes and gases,
 8 and things of that nature, were set up by the ACGIH
 9 because of a concern that exposures over a certain
 10 level to these items could be hazardous to the health
 11 of humans?
 12 A They might be a health hazard. They might
 13 be a nuisance, as well.
 14 Q Am I correct that the threshold limit
 15 values were established with the thought in mind of
 16 avoiding injury to employees by keeping levels of
 17 exposure below a certain number, a certain threshold,
 18 if you will?
 19 A That was the purpose of establishing those
 20 limits.
 21 Q And am I correct, sir, that as of your
 22 arrival in 1948, anyway, Alcoa was fully cognizant and
 23 aware of the threshold limit values established by the
 24 ACGIH not just for asbestos but for some other items,
 25 as well?

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1 employed at that facility?
 2 MR. WALKER: When he was there?
 3 MR. WATERS: Yes.
 4 MR. WALKER: Your entire time period there,
 5 during your entire time period there is what he
 6 was asking.
 7 A Yes, at the research lab, my supervisor was
 8 there, and he came in in 1945, and there was, I think,
 9 a chemist before myself, a few months.
 10 Q What was your supervisor's name?
 11 A Lester Cralley.
 12 Q Was Mr. Cralley also a medical doctor?
 13 A No, he was not. Hygiene toxicology.
 14 Q What was Mr. Cralley's background? Had he
 15 been an industrial hygienist for some time?
 16 A Yes, he had. He was with the public health
 17 service during the war.
 18 Q Sometime after you arrived in 1948,
 19 Mr. Bonney, did you become aware that the threshold
 20 limit values included a listing for asbestos,
 21 asbestos -- dust containing asbestos?
 22 A Yes, I was aware of that.
 23 Q And were you aware that the limit set for
 24 dust containing asbestos was five million particles
 25 per cubic foot?

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1 A Yes, we were aware. As a matter of fact,
 2 we use them as our limits.
 3 Q And did you understand, sir, that in fact,
 4 those limits and those values had the force of law in
 5 some states?
 6 A They may have, but I really don't recall.
 7 Q Well, let me ask you a couple of
 8 specifics. Were you aware, for example, sir, that the
 9 threshold limit values had been adopted as state law
 10 in the State of Pennsylvania?
 11 MR. WALKER: In '48?
 12 Q Before '48?
 13 A No, I don't recall that.
 14 Q No specific recall of that?
 15 A No.
 16 Q What about the State of Ohio?
 17 A No. I really have no recall of any
 18 specific state.
 19 Q All right. But you were generally aware
 20 that these values had been adopted by some states at
 21 some periods in time?
 22 A No, I just don't remember that they were.
 23 Q Now, at some point in time, sir, did you
 24 become certified as an industrial hygienist, a
 25 certified industrial hygienist?

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- 1 A Yes, I was certified.
 2 Q When did that take place, approximately?
 3 A I don't know, exactly, but I think it may
 4 have been around 1965, or something.
 5 Q As of 1948, besides yourself and
 6 Mr. Cralley, how many other persons were employed
 7 by
 8 Alcoa that had the job description or the designation
 9 of an industrial hygienist?
 10 A Well, for a number of years, we were the
 11 only ones, but when I moved to Pittsburgh, somebody
 12 filled my place in the lab, so there were three.
 13 Q By the mid '50's?
 14 A Mid '50's.
 15 Q And did Alcoa -- at what point in time --
 16 strike that.
 17 At some point in time, did Alcoa form an
 18 industrial hygiene department, per se?
 19 A Well, I guess we always considered
 20 ourselves a department or division, however small we
 21 might have been.
 22 Q And that would be true that there was --
 23 you considered yourself an industrial hygiene
 24 department as early as 1948?
 25 A Yes.
 26 Q Am I correct, sir, that at the time of your

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- 1 arrival in 1948 there was also a medical department?
 2 A Yes. The medical department was
 3 established before Dr. Cralley, before 1945, and we
 4 reported to medical.
 5 Q So the industrial hygiene department
 6 reported to the medical department?
 7 A Yes.
 8 Q And in particular -- well, can you tell me,
 9 as of 1948, approximately how many MD's or
 10 physicians
 11 were employed by Alcoa and the medical department?
 12 A It's hard for me to say. I think it was a
 13 gradual accumulation.
 14 Q Give me a range, if you can. Five, ten
 15 physicians in that time frame?
 16 A Well, no, they had at least part time
 17 physicians assisting the plants.
 18 Q Okay.
 19 A But to give you a good, solid number, I
 20 just couldn't at the time.
 21 Q For the moment, let's just put aside the
 22 physicians who may have worked at the plant level at
 23 various facilities around the country. I am
 24 interested particularly in the medical personnel that
 25 were employed either on a consulting or full time
 basis in the Pittsburgh area in the late 1940's.

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- 1 A The late '40's, in our group, are you
 2 saying in Alcoa headquarters?
 3 Q Yes, sir.
 4 A There was the one, the medical director.
 5 Q And what was his name?
 6 A I have a block.
 7 Q That's okay. We'll come back to it.
 8 A Dr. Irvin. Dudley Irwin.
 9 Q E-r-w-i-n?
 10 A I-r-w-i-n.
 11 Q And Dr. Irwin was the medical director in
 12 that time frame?
 13 A Yes.
 14 Q And is it your recollection or
 15 understanding that Dr. Irwin had responsibility for
 16 all medical aspects of Alcoa's operation including
 17 dealing with the local plant doctors at the various
 18 facilities?
 19 A Yes. He provided medical resource as we
 20 provided an industrial hygiene resource to the plants,
 21 but to be responsible for the plant activity, I am not
 22 sure you could say that.
 23 Q Am I correct that an important aspect of
 24 your work as an industrial hygienist in that time
 25 frame would have had to do with occupational injuries

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- 1 or occupational diseases, exposures, things of that
 2 nature?
 3 A It would not be with occupational injuries.
 4 Safety would take care of that, but occupational
 5 diseases was certainly our responsibility, and we
 6 would be aware of those.
 7 Q And did Dr. Irwin have some degree of
 8 specialization in occupational diseases?
 9 A In some, I think, restricted capacity, yes,
 10 he did.
 11 Q What is the field of industrial hygiene,
 12 sir? What did that mean to you when you began
 13 working
 14 in 1948?
 15 A Well, it would be recognition, the
 16 evaluation and control of potentially harmful
 17 exposures, environmental exposures.
 18 Q Did you and Mr. Cralley and the industrial
 19 hygiene department make efforts to review and keep up
 20 with medical and scientific literature concerning
 21 occupational hazards?
 22 A Yes, we did. That was one of our
 23 responsibilities that we felt was our responsibility.
 24 Q And do you feel, looking back on it, that
 25 you were generally able to keep abreast with the
 evolving literature on occupational diseases,

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1 occupational hazards?
 2 A Yes. I think we did a fairly reasonable
 3 job.
 4 Q And did you, in fact, either independently
 5 or through the medical department, subscribe to a
 6 significant number of scientific and medical journals
 7 in order to attempt to keep up with that literature?
 8 A Yes, we did.
 9 Q Were you in the habit of circulating
 10 articles, one to the other, for example, would
 11 Dr. Irwin perhaps, see a significant article or a
 12 journal that had several significant articles and
 13 forward it on to you for review just to make sure that
 14 you were aware of it, something of that nature?
 15 A Yes. There was good communication in both
 16 directions between Dr. Irwin and ourselves.
 17 Q All right, sir.
 18 Would you say, sir, that it was in the late
 19 1940's that as a result of your work at Alcoa, you
 20 became aware that asbestos was one of the substances
 21 on the threshold limit value list?
 22 A Yes. We knew it was on the TLV list, yes.
 23 Q Did you come to understand, at least in
 24 part, as a result of that, that asbestos exposures
 25 could potentially be hazardous to the health of

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1 previously, during the early 1940's, about the hazards
 2 of asbestos, potential hazards of asbestos, excuse
 3 me?
 4 MR. WALKER: I object. It calls for
 5 speculation what is in Mr. Cralley's mind, unless
 6 you know how he came to learn these things.
 7 MR. WATERS: Well, I am not asking how Mr.
 8 Cralley may have come to learn these things, I am
 9 more interested in your recollection as to what
 10 he did know, would have known.
 11 A I am really speculating that he knew it was
 12 on the special limitation list, but there is no way of
 13 knowing if he knew every one, every item there.
 14 Q As you sit here today, do you recall having
 15 any specific conversation with anyone, in the time
 16 frame from 1948 until when you went to Pittsburgh in
 17 the middle or late '50's, concerning the hazards of
 18 asbestos?
 19 A I don't recall any specific instance, no.
 20 Q Would you agree with me that in that time
 21 frame, asbestos was, from your vantage point, a low
 22 priority item?
 23 A At that particular time, yes.
 24 Q How did your duties and responsibilities
 25 change when you became an industrial hygienist
 working

Page 25

1 individuals?
 2 A We were aware of that, but it appeared it
 3 was not a very potent contaminant especially as it was
 4 used in our Alcoa plants. We didn't think it was a
 5 high priority item at that particular time.
 6 Q Let me object to the nonresponsive portion.
 7 Just to clarify, in the time frame 1948 to
 8 1950, as a result of your employment with Alcoa, you
 9 became aware that asbestos was a potentially
 10 hazardous
 11 substance or could be under certain circumstances; is
 12 that a fair statement?
 13 A Under certain circumstances, yes.
 14 Q Now, did it become apparent to you that
 15 Alcoa and, in particular, Mr. Cralley would have been
 16 aware of that fact before your arrival in 1948, by
 17 virtue of asbestos being one of the substances
 18 regulated by the threshold limit values?
 19 A Were you asking if Dr. Cralley was aware --
 20 Q Yes.
 21 A -- before I came?
 22 Q Yes, sir.
 23 A Yes. He would have been.
 24 Q And you know that because Dr. Cralley's
 25 involvement with the public health service during
 World War II, he would have learned, if not

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1 in Pittsburgh in the mid to late 1950's?
 2 A It changed in that the emphasis went from
 3 analyzing to the collection of samples and general
 4 administration over the total program.
 5 Q Okay. And for how long a period were you
 6 in that position as an industrial hygienist starting
 7 in the mid to late '50's?
 8 A It might have been another ten years,
 9 eight, ten years.
 10 Q Sometime in the mid to late 1960's?
 11 Give or take?
 12 A Mid '60's, perhaps.
 13 Q Did you actually travel to the work sites
 14 or to the various plants to perform sampling
 15 operations in that capacity?
 16 A Yes, that was part of my job.
 17 Q And in doing so, did you utilize the midget
 18 impinger technology for sampling dust?
 19 A Yes. I had used that on numerous
 20 occasions.
 21 Q Am I correct from your earlier testimony
 22 that at no time, from the mid to late '50's up until
 23 the mid '60's, were you actually sampling because of a
 24 concern about asbestos dust, or dust containing
 25 asbestos?

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1 A I do not recall any specific instance
 2 because of the low priority asbestos had.
 3 Q Now, at some point in time, sir, am I
 4 correct that Alcoa generally and yourself
 5 individually, came to recognize asbestos as being an
 6 extremely hazardous or toxic substance?
 7 A As time went on, we did realize that the
 8 hazard was different than we had first thought
 9 originally, but that took some time before we got the
 10 full realization.
 11 Q Let me object to the non-responsive
 12 portion.
 13 Let's talk about 1986, the year that you
 14 retired. As of that date, Mr. Bonney, were you aware
 15 that asbestos could cause significant disease
 16 processes, including cancer?
 17 A Yes, I was aware of that.
 18 Q You were aware that asbestos diseases could
 19 cause death?
 20 A Yes, they could.
 21 Q You would agree with me that you became
 22 aware that asbestos was a toxic substance?
 23 A We may be getting semantics here, but we
 24 always regarded almost any material as toxic, just
 25 different materials have different degrees of

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1 toxicity.
 2 Q Okay. Well, and in that vein, with respect
 3 to asbestos being a toxic substance, would your
 4 knowledge that asbestos was toxic or potentially toxic
 5 have gone back to the 1940's and 1950's time frame?
 6 A In the 1940's, '50's, we would have rated
 7 it as a relatively low toxicity and also on the basis
 8 of the manner in which we used it as a low risk.
 9 Q Objection to the non-responsive portion.
 10 Regardless of the level of toxicity, sir,
 11 would you agree with me that Alcoa recognized in the
 12 late '40's, early '50's, anyway, that asbestos could
 13 be a toxic substance?
 14 MR. WALKER: Regardless of the level?
 15 MR. WATERS: Correct.
 16 A No, I wouldn't agree regardless of the
 17 level. One needs an exposure and dose before it
 18 becomes toxic.
 19 Q Let me object as non-responsive.
 20 My question is, sir, if you recognized,
 21 late '40's or 1950's -- Alcoa recognized that asbestos
 22 could be a toxic substance, not that it was in every
 23 instance, but that it could be, that was one of the
 24 reasons it was included on the TLV list?
 25 A It could be, but we felt not in a manner in

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1 which we used it.
 2 Q Objection, non-responsive.
 3 One more time. Am I correct that in the
 4 early 1940's -- strike that. I am getting myself
 5 confused.
 6 In the late 1940's early 1950's, Alcoa
 7 recognized that asbestos could be a toxic substance;
 8 fair enough?
 9 MR. WALKER: I object. Asked and answered,
 10 but you can go ahead and answer it.
 11 A Yes, we knew that, but our concerns were
 12 strictly with fibrosis.
 13 Q I will object to the non-responsive
 14 portion, but I think you have answered my question.
 15 Certainly you would agree with me that as
 16 of the time of your departure from Alcoa, you
 17 understood and recognized that asbestos could be an
 18 extremely hazardous substance?
 19 A Yes. It could be.
 20 Q And, again, going back to the time frame,
 21 late 1940's, early 1950's, you recognized that
 22 asbestos could be a hazardous substance, not that it
 23 was in every instance, but that it could be?
 24 A It could be.
 25 Q And you mentioned that in the time frame,

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1 late 1940's, early 1950's, you were aware that
 2 asbestos could cause fibrosis, and by that, you mean
 3 scarring of the inside of the lungs; is that correct?
 4 A That's right.
 5 Q And am I correct, sir, that you also knew,
 6 at that time, that fibrosis or scarring, that's the
 7 same thing as asbestosis, isn't it, if it's caused by
 8 asbestos?
 9 A If it's caused by asbestos, yes, it would
 10 be.
 11 Q You also recognized, did you not, sir, from
 12 the literature that was available, that asbestosis,
 13 this scarring of the lungs, was a progressive disease,
 14 that is to say, it worsened over time?
 15 A I am not sure I heard that last comment.
 16 Q I am going to get her to read the question
 17 back. I won't be able to repeat it exactly the same.
 18 (Record read.)
 19 MR. WALKER: Andy, that was the late '40's
 20 early '50's time frame?
 21 MR. WATERS: Yes, same time frame.
 22 A I am not sure I still have it. It wasn't
 23 over time? My hearing has a little bit to be desired.
 24 Q I appreciate you telling me that, and by
 25 all means, if for some reason you don't properly hear

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1 my question, let me repeat it.
 2 Same time frame, late 1940's, early 1950's,
 3 you indicated earlier that Alcoa recognized that
 4 asbestos could cause scarring or fibrosis, which we
 5 know is the same as asbestosis; correct?
 6 A Yes.
 7 Q In that same time frame, were you aware
 8 that this asbestosis, this scarring of the lungs, was
 9 a progressive disease, that is to say, it worsened
 10 over time?
 11 A I don't think I was aware that it was a
 12 progressive disease, no.
 13 Q You would have been aware, I presume, that
 14 asbestosis, this scarring of the lungs, could be
 15 significant enough in some cases to lead to death?
 16 A I can't recall a specific recognition of
 17 that.
 18 Q Okay. Do you recall considering that
 19 asbestosis was a significant industrial disease caused
 20 by exposure to asbestos?
 21 A It was a significant disease caused by
 22 asbestos. It seemed confined to the mining, milling
 23 and the textile area.
 24 Q Let me object to the non-responsive latter
 25 portion of your answer.

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1 You were aware -- you are aware today, I
 2 presume, that asbestos exposure can cause various
 3 carcinomas or cancers, malignancies?
 4 A Lung cancer and mesothelioma I am aware of,
 5 yes, sir.
 6 Q Are you also aware that various
 7 gastrointestinal cancers can be caused by exposure to
 8 asbestos?
 9 A I don't remember that.
 10 Q Now, in all the documents that were
 11 provided to you, by Alcoa, did they include any of the
 12 medical journals or scientific industrial hygiene
 13 journals that you would have reviewed in the late
 14 1940's on into the 1950's?
 15 A I don't recall seeing anything on that.
 16 Q Did Alcoa provide you any documentation
 17 that pertained to Alcoa's understanding, in the
 18 1950's, of the diseases that asbestos can cause?
 19 A Did Alcoa -- are you referring to through
 20 the attorneys, or what?
 21 Q Yes, through the attorneys.
 22 A No, I don't recall any documents of that
 23 nature.
 24 Q Without an opportunity to review any
 25 documents, as you sit here today, Mr. Bonney, do you

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1 recall that in the early 1950's, there were case
 2 reports and studies linking asbestos to lung cancer?
 3 A No, I can't remember any.
 4 Q Now, you are not stating to this jury that
 5 those types of articles and case reports didn't
 6 exist; you are just stating that, as you sit here, you
 7 cannot recall them based on hindsight; is that a fair
 8 statement?
 9 A I know that they existed, but they were not
 10 conclusively shown to be associated with asbestos.
 11 Q Okay. To try to clarify that, again, we
 12 are talking about the late 1940's, early 1950's, what
 13 you are telling us is that you recall that there were
 14 some articles in the literature, but that the link
 15 between asbestos and lung cancer at that time was
 16 inconclusive; is that a fair statement?
 17 A I am aware of them today, of existing
 18 today, but I am not sure I was aware of those isolated
 19 studies existing back in the '40's, '50's.
 20 Q How is it that you are aware today of the
 21 studies that existed back in the '40's and '50's, but
 22 you don't -- how is it that you are aware of those
 23 today?
 24 A As we perceived asbestos being a -- of more
 25 concern than it was in the past in reviewing

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1 literature, we saw more of those isolated studies.
 2 Q Okay. In the context of your continuous
 3 education about the hazards of asbestos, do you recall
 4 in the 1960's that articles began to be published,
 5 case reports began to be published concerning the fact
 6 that very small or remote exposures to asbestos could
 7 cause cancer?
 8 A I don't remember the small exposures being
 9 a cause of disease, no.
 10 Q But you have stated earlier, you advised
 11 the jury that you recall there were some articles
 12 concerning housewives who developed mesothelioma or
 13 asbestos cancer whose only known exposure was
 14 washing
 15 their husband's clothes coming home from the
 16 workplace, do you recall that?
 17 A Well, I only really recall what you have
 18 said here. I don't know that I ever remember that
 19 there was a direct correlation between exposure and
 20 the disease, at that particular time.
 21 Q Okay. You recall that there were articles
 22 that discussed the development of asbestos cancer in
 23 individuals of that nature, but you do not recall that
 24 there was a specific link made between the exposure --
 25 the asbestos exposure and the disease; is that what
 you are telling us?

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1 A I guess, yes.
 2 Q Fair enough.
 3 Will you agree with me, sir, that Alcoa is
 4 both -- was both legally and morally required to
 5 follow the threshold limit values that were set forth
 6 by the ACGIH?
 7 MR. WALKER: Excuse me. I am going to
 8 object. It calls for a legal conclusion,
 9 speculation, does not fall within the province of
 10 the jury in this particular case, and you can go
 11 ahead and answer but what time period?
 12 MR. WATERS: Just generally.
 13 MR. WALKER: Just in general.
 14 A I don't know that I can agree to that. We
 15 certainly were morally responsible for our employees
 16 but not for specifically accepting the TLV list in
 17 toto, but we did use it.
 18 Q Let's break that down and try to make it a
 19 little bit simpler. What you are saying is that as an
 20 employer, Alcoa has always had a moral responsibility
 21 to safeguard the workplace so that its employees don't
 22 become ill or die as a result of workplace hazards; is
 23 that a fair statement?
 24 A Yes.
 25 Q With respect to Alcoa's legal obligations,

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1 do you believe that Alcoa had a legal obligation, at
 2 any point in time, to enforce the threshold limit
 3 values that were promulgated by the ACGIH?
 4 A I think you're out of my field.
 5 MR. WALKER: If you can't answer it, just
 6 say you can't answer it.
 7 A No.
 8 Q You can't answer the question?
 9 A No.
 10 Q Who at Alcoa in the 1950's would have been
 11 responsible for understanding state laws or
 12 regulations that concerned hazards in the workplace in
 13 the various states where Alcoa had its operations?
 14 A Generally, it would be the plant people
 15 who have the local responsibility.
 16 Q So, for example, in Texas or at the
 17 Rockdale facility, it would have been the
 18 responsibility of senior personnel at the plant to
 19 both understand and follow Texas law and regulations
 20 concerning workplace safety and health?
 21 A Yes.
 22 Q And, for example, at the Point Comfort
 23 plant, in Texas, it would have been the responsibility
 24 in the 1950's of the senior plant personnel to both
 25 know and understand and implement whatever state

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1 regulations or legal requirements there were
 2 concerning workplace hazards?
 3 A Yes.
 4 Q And I take it from your response that there
 5 was not anyone that you are aware of at corporate
 6 headquarters who had some kind of overwhelming
 7 responsibility to insure that Alcoa was following the
 8 law in whatever states it may have been operating?
 9 A Well, it was overall responsibility for us
 10 to see that all of the plants were following our
 11 guideline or TLV's, if you will, but if there was some
 12 special provisions of the state, we would not know
 13 that, and it would be up to the plant to know that and
 14 enforce.
 15 Q Certainly you will agree with me that
 16 Alcoa, whether on the national level or on the local
 17 level, has an absolute obligation to both know and
 18 follow whatever legal requirements there are in that
 19 particular state?
 20 MR. WALKER: I object, calls for a legal
 21 conclusion.
 22 A I don't know that.
 23 Q Can you think of any circumstances under
 24 which Alcoa personnel should not follow state laws or
 25 regulations concerning the health and safety of its

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1 workers?
 2 A We would have to conform with whatever
 3 regulations exist locally.
 4 Q Didn't Alcoa have a policy that its local
 5 plant managers, senior personnel should understand
 6 and
 7 adhere to state laws and regulations concerning safety
 8 and health?
 9 A I think that developed in relatively recent
 10 times, but whether it existed in early times, I don't
 11 know.
 12 Q All right. And when you say, "recent
 13 times," are you referring to the 1970's to the
 14 present?
 15 A Probably mid '70's to the present.
 16 Q Prior to the recent times, as you use the
 17 phrase, am I correct that you do not recall that Alcoa
 18 had a policy requiring its local plants and facilities
 19 to understand and follow state and local requirements;
 20 you do not have a recollection that there was such a
 21 policy in existence?
 22 A I don't recall there was a specific policy,
 23 but we advised our hygienists to become acquainted
 24 and
 25 observe the local laws.
 26 Q When did you first have industrial
 27 hygienists actually stationed on site at Point Comfort

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1 or at Rockdale, approximately?
 2 A Well, they were not professional,
 3 industrial hygienists, as such. They were
 4 technologists, technicians, and they came in shortly
 5 after the plant was opened.
 6 Q In the early to mid 1950's?
 7 A Yes, early '50's, I would say.
 8 Q And are you telling the ladies and
 9 gentlemen of this jury that those individuals on the
 10 local level would have known and understood that they
 11 were to follow whatever state laws or regulations
 12 pertained to health and safety in the workplace?
 13 A Certainly their supervisors were, yes.
 14 Q Will you agree with me, sir, that since
 15 your -- strike that.
 16 Will you agree with me that since 1948,
 17 Alcoa's corporate policy generally has been to follow
 18 whatever regulations or laws might apply to workplace
 19 safety in its operations?
 20 A Yes, would I say that.
 21 Q And Alcoa has recognized since 1948 that
 22 its performance should, at a minimum, adhere to the
 23 legal requirements whether they be Texas
 requirements
 24 or Pennsylvania requirements or federal requirements?
 25 MR. WALKER: Same concerning occupational

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1 safety, concerning occupational safety?
 2 A Yes, they had to follow the local
 3 regulations.
 4 Q And you, as a fairly senior professional in
 5 the field of industrial health, you would have been
 6 critical of Alcoa employees in the event that they
 7 ignored state or federal regulations, did not adhere
 8 to those?
 9 A If we were aware of them, I suspect we
 10 would, yes.
 11 Q And that's a very important point, because
 12 with you being up in Pittsburgh -- well, let's see,
 13 how many trips would you have made to Texas to those
 14 two plants in the time frame from the late 1950's to
 15 the mid 1960's, for example?
 16 A That's tough to say. We like to visit
 17 every plant once a year, but sometimes it would be a
 18 matter of a couple years before we would get there.
 19 Q And the point I am trying to make is you
 20 could only be critical of operations on a local level
 21 if you were actually aware that they were violating
 22 state or local regulations concerning hazards;
 23 correct?
 24 A Yes. And, in general, we were aware of
 25 what they were doing in regular reports.

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1 Q But what you were not aware of was the
 2 requirements found in particular state laws or
 3 regulations? You were not aware of that at Pittsburgh
 4 because you relied on the folks at the local level,
 5 the senior supervisory people locally to be
 6 responsible for that; is that correct?
 7 A Yes, we might be aware of a few state regs,
 8 but in general, we relied on plant people.
 9 MR. WALKER: And just you are talking
 10 about the industrial hygiene department that he
 11 was in when you talk about we and -- okay.
 12 BY MR. WATERS:
 13 Q Is there any other department -- was there
 14 any other department within Alcoa that would have
 had
 15 any responsibility, whatsoever, for the Alcoa
 16 personnel following state and local regulations
 17 concerns hazards in the workplace?
 18 For example, did the safety department have
 19 some responsibility with respect to that?
 20 A With following local regs?
 21 Q Yes, sir.
 22 a I can't answer that.
 23 Q Is there any excuse you can think of that
 24 would justify local plant personnel not following
 25 regulations or laws that pertained to safety and

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1 health?
 2 A First they have to be aware of them.
 3 Q In your view, sir, is it an excuse for not
 4 following the law to say that we were not aware of it?
 5 A That's difficult. An excuse?
 6 MR. WALKER: I am going to go ahead and
 7 object. It calls for a legal conclusion,
 8 obviously.
 9 Q You can answer, sir.
 10 MR. WALKER: Well, I am going to ask for
 11 more clarification. A legal excuse? What type
 12 of excuse are you talking about?
 13 MR. WATERS: Any type of excuse. I am
 14 curious just to see what type of excuse he might
 15 come up with, if any.
 16 A A concern would be mainly that they
 17 followed the guidelines that we set and --
 18 Q Okay. But you have told us and you have
 19 told this jury already that you would be critical of
 20 the local plant operation if they were not adhering to
 21 or not following the requirements set forth in that
 22 state; do you recall that?
 23 A If they were aware of it.
 24 Q Okay. And is there any reason you can
 25 think of that Alcoa personnel should not be aware or

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1 would not be aware of laws or regulations on the books
 2 of a particular state?
 3 A Sometimes you have to dig hard to find
 4 them. It's not publicized.
 5 Q And you would agree with me, I am sure,
 6 that Alcoa certainly has had and does have the
 7 resources to be familiar with whatever state laws may
 8 exist in whatever state they perform operations?
 9 A I don't know that they do.
 10 Q In the 1950's, any reason you can think of
 11 that Alcoa personnel in Texas or any other state
 12 shouldn't have been aware of what laws were on the
 13 books?
 14 A Again, in the industrial hygiene area, I am
 15 not sure that you could always find those
 16 regulations. They were not, as I say, publicized.
 17 Q Well, will you agree with me, sir, that an
 18 employer has a duty and an obligation both legally and
 19 morally to be fully aware of whatever laws or
 20 regulations applied to its operations?
 21 MR. WALKER: I object, calls for a legal
 22 conclusion.
 23 A From my area, I don't think I can answer
 24 that.
 25 Q Well, in your operation, sir, didn't you

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1 attempt to have Alcoa follow the law, understand and
 2 follow the law?
 3 A Our primary thrust was to protect our
 4 employees, and normally, doing that you are following
 5 the law.
 6 Q Okay. So as long as Alcoa felt it was
 7 protecting the employees, it didn't matter whether or
 8 not they were following the law?
 9 MR. WALKER: I am going to object as being
 10 argumentative.
 11 MR. WATERS: You can answer.
 12 MR. WALKER: And calls for a legal
 13 conclusion.
 14 A I think I would have to be wearing a legal
 15 hat before I could answer that question.
 16 Q Well, you follow the law in your daily
 17 life, don't you, sir?
 18 A Most of them.
 19 Q We attempt to do so, yes, and in driving --
 20 or, did you drive to come to this deposition this
 21 morning?
 22 A Yes, I did.
 23 Q Did you follow the law in terms of speed
 24 limit, posted speed limit? Or did you come close to
 25 it, let's put it that way?

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1 A Close to it.
 2 Q Would you agree with me, sir, that the
 3 person driving a car has an obligation to know what
 4 the speed limit is and to follow that, and by so doing
 5 result -- reduce the chances of an injury or accident?
 6 A We would have a legal responsibility.
 7 Q Anything different about a corporation's
 8 responsibilities under the law, to know the law and
 9 make sure that they adhere to it? Anything special
 10 about Alcoa that they don't have to follow the law?
 11 MR. WALKER: Again, calls for a legal
 12 conclusion.
 13 A The legal area is not my forte, and I just
 14 don't know that I can answer questions like that.
 15 Q Sir, my question is, if you can think of
 16 any reason why Alcoa was not and is not responsible to
 17 both know and follow the law, and if you can't think
 18 of any such reason then you need to tell this jury,
 19 because I sure can't think of one.
 20 MR. WALKER: Object as argumentative.
 21 A I just don't know any legal ramifications.
 22 All I know is that we do have a moral responsibility
 23 to protect our employees and certainly obey the law
 24 and be aware of it, if we can, but we are not always
 25 aware of some of the regulations that have been

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1 applied to us.
 2 Q Okay. Are you telling this jury that --
 3 let's wait and see what we go here. Just to be clear,
 4 sir, are you telling the jury that Alcoa did not have
 5 an obligation to do whatever was necessary to
 6 determine what the laws were that applied to its
 7 operations?
 8 MR. WALKER: I object to the form of the
 9 question. The premise is not correct, and I
 10 don't think he said that.
 11 Q Do you need the question read back?
 12 A Yes, please do that.
 13 (Record read.)
 14 MR. WALKER: Again, calls for a legal
 15 conclusion.
 16 A The only thing I can speculate is that they
 17 should do what is reasonable to become acquainted
 18 with
 19 the local regulations and to follow them.
 20 Q Then would you agree with me, sir, that an
 21 employer like Alcoa, which is a large and
 22 sophisticated company, is in a much better position to
 23 know and understand and follow the law than would be
 24 an individual employee such as Mr. Glenn Whatley or
 25 Mr. Jacinto Ramirez?
 A I can speak in our particular area that the

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1 health and safety regulations, we would probably be in
2 a better position.
3 Q And you would agree with me that it is
4 appropriate, is it not, sir, for the responsibility to
5 rest with Alcoa as opposed to the individual workers
6 to both know, understand and follow the law?
7 You would consider that appropriate,
8 wouldn't you?
9 A Yes, I would.
10 Q I mean, you would hardly expect for
11 Mr. Whatley to, in the 1950's or 1960's, to drive to
12 Austin, Texas and complete research at the state
13 capital to determine if there were any regulations
14 that might affect his work; you wouldn't expect that,
15 would you?
16 A I would not expect it, no.
17 Q But you would expect that Alcoa senior
18 personnel, with industrial hygiene backgrounds, with
19 safety backgrounds, with legal backgrounds, would be
20 in a position to ascertain in Austin, or wherever
21 else, what laws and regulations apply to their work at
22 Rockdale and at Point Comfort?
23 A They would do that only if they thought
24 such laws, regulations existed.
25 Q Have you ever heard the phrase "Ignorance

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1 non-responsive.
2 A They have to -- they should know the local
3 and adhere to the local regulations, certainly.
4 Q Are you aware of or do you recall any
5 efforts made by Alcoa personnel to determine what
6 safety rules or regulations applied to the workplace
7 at either the Rockdale or Point Comfort plants?
8 A Are you talking about local, state, or
9 what?
10 Q Yes.
11 A No, I was not aware of any.
12 Q Will you agree with me, sir, that one of
13 the considerations that you, as a corporate industrial
14 hygienist had to take into consideration was the cost
15 of some of the safety measures that might be suggested
16 or called for?
17 A Cost was something that we as hygienists
18 did not look closely at. The main thing was to
19 protect the health of the employer, and if it required
20 a costly control, then so be it.
21 Q Objection, non-responsive.
22 My question particularly, sir, was if cost
23 was one of the considerations that you as a corporate
24 industrial hygienist had to take into account?
25 MR. WALKER: Never mind, you can answer it.

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1 of the law is no excuse"?
2 A Yes.
3 Q Okay. Do you agree with that phrase, sir?
4 A No, I am not sure I would agree, with all
5 the laws we have to look at today.
6 Q Okay. Is that Alcoa's policy, sir, do they
7 agree that ignorance of the law is no excuse?
8 A I can't speak for Alcoa collectively.
9 Q But what you are telling this jury is that
10 Alcoa didn't have an obligation to understand the
11 rules and regulations that applied to the safety of
12 Texas citizens when Alcoa decided to open plants in
13 the State of Texas? Is that what you are telling this
14 jury, or did I misunderstand you?
15 A No, I am not telling you that. Alcoa has
16 an obligation to protect the health of its employees.
17 Q That was not my question, sir.
18 Unresponsive.
19 Can you read that back, please?
20 (Record read.)
21 MR. WALKER: Are you asking that question
22 again?
23 MR. WATERS: Yes, I have asked him.
24 MR. WALKER: I am sorry.
25 MR. WATERS: The answer was

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1 A It's something that we did not have to take
2 into account.
3 Q So it's your testimony, under oath, sir,
4 that cost was not a consideration, whatsoever, in
5 terms of the work that you did for Alcoa; is that your
6 testimony under oath?
7 MR. WALKER: I am going to object. The
8 proper predicate hadn't been laid. He answered
9 the last question whether cost was a factor in
10 making his determination as an industrial
11 hygienist, he said, "no." You are asking a
12 different question. If you want to ask that
13 question, please ask that question.
14 Q I have asked, he can answer it.
15 MR. WALKER: Not frame it in the form of
16 some implication that he said that earlier.
17 MR. WATERS: You can read back the
18 question, if you don't mind.
19 (Record read.)
20 Q Was it a consideration or was it not?
21 A With my activity, I would say no, cost was
22 not a consideration.
23 Q So from 1948 until you retired, you do not
24 recall cost ever being an issue that you had to be
25 concerned about; is that your testimony?

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1 And I will be frank with you, there are
 2 documents that I am going to show you in a little
 3 while that are very much to the contrary, and that's
 4 why I want to be sure you are sure when you state that
 5 opinion.
 6 **MR. WALKER:** Object. The question --
 7 proper predicate hasn't been laid, assumes facts
 8 not in evidence.
 9 **A** In my activity, in the best of my
 10 knowledge, cost was not factor.
 11 **Q** Okay.
 12 **MR. WALKER:** Does anybody need to take a
 13 break?
 14 **MR. WATERS:** What is it? 11:35. We can
 15 take a break.
 16 **THE VIDEOGRAPHER:** We are off the record.
 17 The time is 11:35 am.
 18 (Recess taken.)
 19 **THE VIDEOGRAPHER:** We are back on the
 20 record. The time is 11:44.
 21 **BY MR. WATERS:**
 22 **Q** All right, Mr. Bonney, we have just taken a
 23 brief break, have we not, sir?
 24 **A** Yes, we have.
 25 **Q** By the by, am I correct, sir, that you are

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1 not personally represented in this matter by counsel?
 2 **A** Yes, best of my knowledge. Maybe I ought
 3 to let my attorneys answer that question.
 4 **Q** You understand there are several gentlemen
 5 here that are representing Alcoa's interests in this
 6 matter?
 7 **MR. WALKER:** Two.
 8 **A** Yes.
 9 **Q** Am I correct that is there is no one here
 10 representing your personal interest to the extent you
 11 may have any in this matter?
 12 **A** That's right.
 13 **Q** I would like to ask you, sir, on how many
 14 occasions have you physically met with attorneys for
 15 Alcoa with respect to your testimony today?
 16 **A** Maybe four or five times.
 17 **Q** And that would be over the course of the
 18 last six months?
 19 **A** Yes.
 20 **Q** And am I correct, sir, that you have done
 21 that, you have given freely of your own time, that is
 22 to say, you are not charging Alcoa for the time you
 23 are spending helping them on this case?
 24 **A** No, I am charging Alcoa on my request.
 25 **Q** All right. And how much, sir, are you

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1 charging Alcoa for the time spent helping them on this
 2 case?
 3 **A** \$125 an hour.
 4 **Q** Okay. And prior to this deposition, have
 5 you sent them statements for the hours that you have
 6 already put into this case?
 7 **A** I have sent them a statement, yes.
 8 **Q** And that statement, did that cover all the
 9 time spent up until today or some previous period?
 10 **A** Yes. It covered December to the middle of
 11 this month.
 12 **Q** December through the middle -- December
 13 1997 through the middle of February 1998?
 14 **A** Yes.
 15 **Q** And how many hours did that indicate that
 16 you had worked on this project for Alcoa to that
 17 point?
 18 **A** Maybe 12 hours.
 19 **Q** 12 hours or so.
 20 **A** I am just guessing on that.
 21 **Q** So your total bill to Alcoa would have been
 22 what about, at least through mid February, \$1,500
 23 something in that range?
 24 **A** Yes.
 25 **Q** Do you maintain at your home, sir, any

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1 training manuals that were used during your time at
 2 Alcoa?
 3 **A** No.
 4 **Q** Do you maintain any textbooks or reference
 5 guides at your home that you used or that you had
 6 while you were at Alcoa?
 7 **A** I might have a handful, not too many.
 8 **Q** For example, old textbooks pertaining to
 9 industrial hygiene that you may have had in your
 10 possession for many years?
 11 **A** Yes, a few of them.
 12 **Q** Do you remember, for example, an industrial
 13 hygiene textbook by Drinker & Hatch that was in use
 14 in
 15 the early 1950's?
 16 **A** Yes.
 17 **Q** Do you still have that in your possession?
 18 **A** No, I don't have that.
 19 **Q** Am I correct, sir, that the Drinker & Hatch
 20 textbook that you recall from the early 1950's was
 21 considered at the time to be sort of the state of the
 22 art of industrial hygiene knowledge?
 23 **A** It was probably the only one.
 24 **Q** Objection to non-responsive.
 25 Can you read the question back?
 (Record read.)

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1 A Well, I suspect it was as good as was
2 available at the time.
3 Q And it was certainly among materials that
4 you had at your disposal to rely upon?
5 A Yes.
6 Q And by the way, it's Drinker, D-r-i-n-k-e-r
7 and Hatch.
8 Do you recall, sir, that the Drinker &
9 Hatch textbook contained a either -- it wasn't a
10 chapter but a subchapter concerning asbestos exposure
11 and carcinoma of the lung?
12 Do you happen to recall that?
13 A I don't remember that at all.
14 Q Certainly you would agree with that if that
15 information was contained in the 1950's Drinker &
16 Hatch textbook, that information was at least
17 available for you to review at that time?
18 A If it was, yes. If it was available, yes.
19 Q You have indicated that you may have some
20 old textbooks or other materials concerning industrial
21 hygiene at your home. Do you maintain those in the
22 form of a library?
23 Do you have them in boxes? How are they
24 maintained at the present time?
25 A I can answer that yes, a little bit of

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1 Q Are they copies of the books?
2 A There were --
3 Q Oh, interesting, interesting. I always
4 learn something new.
5 All right.
6 MR. WALKER: Just for the record, that top
7 one might have been something you have at your
8 home, but it wasn't something that you took from
9 Alcoa?
10 THE WITNESS: Oh, I'm sorry. Yes, that's
11 right.
12 MR. WATERS: We'll clarify that.
13 Q You provided me with two texts, one is the
14 United States Department of Health and Human
15 Services
16 book entitled, "Occupational Respiratory Diseases." I
17 just want to show it to the jury.
18 Was this owned by you, personally, or how
19 did you come to be in possession of it?
20 A Yes. I learned of its availability shortly
21 after I retired from Alcoa and made a request to
22 NIOSH, and they sent me a copy.
23 Q Okay. Bear with me. I have done something
24 horrible to my microphone. I am technically
25 incompetent. Thank you.
26 A And that is separate.

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1 both.
2 Q Well, from time to time, I try to buy those
3 old textbooks, and they are very, very difficult to
4 find, so you might want to put yours on the market at
5 some point in time.
6 Did you also maintain, sir, any notes or
7 other written materials that resulted from your work
8 at Alcoa over the years, any materials of that nature?
9 A No. If anything, it would be just personal
10 files. Per se, no, I would say no.
11 Q Personal files concerning your work at
12 Alcoa?
13 A On some subjects.
14 Q Okay. Did you make any effort prior to
15 this deposition to review those materials whether in
16 book selves or in boxes to determine if there were any
17 materials in there that discussed or related to your
18 involvement, understanding of the hazards of asbestos?
19 A The only ones were these that you have seen
20 before. The ones that were produced here.
21 Q These several boxes?
22 A Yep. Well, in the two volumes. There are
23 two books in there, as well.
24 Q Oh, there are?
25 A Yes.

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1 Q All right. In addition, you have produced
2 a copy of "Industrial Hygiene Highlights" edited by
3 Lester Cralley at Alcoa, Louis Cralley at the United
4 States Public Health Service and George Clayton, and
5 how did you come into possession of this book?
6 A I was an author of one of the chapters, and
7 they gave me a complementary copy.
8 Q Were there a number of Alcoa health and
9 safety professionals who were involved with the
10 research and publication of this particular text?
11 A No. As far as I know, Lester Cralley and
12 myself were the only ones.
13 Q I assume that Louis Cralley -- is he Lester
14 Cralley's brother?
15 A Twin brother, yes.
16 Q And this text was published in 1968?
17 A Yes.
18 Q With the exception of these two textbooks,
19 sir, are there any other?
20 A This other is an excerpt from the
21 documentation of the industrial -- of ACGIH threshold
22 limit values relating to asbestos.
23 Q Okay. Let's just talk about books for a
24 second. Other than these two books, sir, are there
25 any other books that you have in your possession,

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1 presently, that pertain to industrial safety or -- and
 2 in particular make reference to asbestos?
 3 A No. These are the only ones, and that's
 4 why they are here.
 5 Q Okay. And moving beyond that, let's -- I
 6 take it that there is a copy of each of these in
 7 here?
 8 MR. WALKER: No. No.
 9 MR. WATERS: Okay. Fair enough.
 10 MR. WALKER: He just brought that stack in.
 11 MR. WATERS: I misunderstood.
 12 Q Let's talk about other types of written
 13 materials that you may have in your possession. You
 14 mentioned that you have some personal notes that are
 15 from your time frame, of your employment time frame
 16 with Alcoa?
 17 A I don't know personal notes, but I have got
 18 some other texts like "Industrial Ventilation and
 19 Petrography" and a few other weird and wonderful
 20 things.
 21 Q I may have misunderstood you earlier. I
 22 thought you indicated that you believed that you had
 23 some other documentation whether it be written notes
 24 or other materials, not textbooks, that you still had
 25 maintained at your home?

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1 A Some committee work that I was involved
 2 with, personally.
 3 Q What committee would that have been?
 4 A This is one on the International Primary
 5 Aluminum Institute.
 6 Q In preparation for your deposition, sir,
 7 did you review, within the text "Industrial Hygiene
 8 Highlights," the section pertaining to asbestos?
 9 A Yes. Wherever there was a reference to
 10 asbestos, I did review that.
 11 Q Okay. And is it a fair statement, sir,
 12 that whatever information is contained in this text
 13 concerning asbestos you would have been familiar with
 14 it in 1968 when the text was published?
 15 A Yes.
 16 Q Let's take a look at some of the language.
 17 "Increased attention has been recently directed to
 18 further defining the health effects of asbestos." Did
 19 I read that correctly?
 20 A That's right.
 21 Q And, of course, you were aware of at least
 22 some of the dangerous health effects of asbestos as
 23 early as 1948; correct, sir?
 24 A Yes. It had the ability to produce
 25 asbestosis.

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1 Q Then it talks about "A major impetus in
 2 this renewed interest is the report by Doll showing an
 3 increase of lung cancer in a group of asbestos textile
 4 workers." Do you see that statement?
 5 A Yes.
 6 Q Do you recall, sir, that the Doll study was
 7 published in 1955?
 8 A Yes.
 9 MR. WALKER: Can we make reference to the
 10 page just for the record?
 11 MR. WATERS: Sure. I apologize. This is
 12 at page 11 of the text.
 13 Q And it refers to end note 16, if you will
 14 follow with me, "Mortality from lung cancer in
 15 asbestos workers in 1955 publication," do you see
 16 that?
 17 A Yes.
 18 Q Do you recall, sir, that Alcoa received
 19 that study at approximately the time it was published
 20 in 1955?
 21 A I can't say exact date, but I know we
 22 learned of that study early on.
 23 Q And the "British Journal of Industrial
 24 Medicine" I am assuming was one of the journals that
 25 either your department or the medical department

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1 received on a regular basis?
 2 A I don't know whether we did or not.
 3 Q In any event, sometime in that time frame
 4 let's say the mid 1950's, Alcoa would have been aware
 5 of the existence of this report concerning lung cancer
 6 in asbestos workers?
 7 A Yes. Certainly we in the health department
 8 and industrial hygiene would be.
 9 Q It goes on to state, again at page 11,
 10 "Another investigation by Wagner, et al., showed a
 11 significant increase in mesothelioma in persons
 12 exposed to crocidolite asbestos in the South African
 13 Cape Blue mining area." Do you also recall that
 14 Dr. Wagner's study in 1960 had identified
 15 mesothelioma
 16 as an asbestos cancer?
 17 A I don't recall that specific one, but I am
 18 sure that I was aware of it at the time.
 19 Q Okay. If you will follow along, 12 and 13,
 20 it says, "Some researchers are of the opinion that the
 21 value set by the ACGIH of 5 million particles per
 22 cubic foot of total particulates is too high." Did I
 23 read that correctly?
 24 A Yes.
 25 Q Were you among the persons in the mid to
 late 1960's who believed that the TLV was too high or

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1 did you have an opinion on it one way or another?
 2 A I didn't have an opinion one way or the
 3 other.
 4 Q All right. It says, "The finding of
 5 ferruginous bodies in the high percentage of the lungs
 6 of the residents in urban communities has also led to
 7 increased studies of the nature and source of the
 8 fibers involved since it has been suggested that if
 9 these pulmonary bodies are caused by the inhalation of
 10 asbestos fibers this may presage and increase in lung
 11 cancer in urban community residents." Did I read that
 12 correctly?
 13 A Yes.
 14 Q Do you recall, sir, as of the publication,
 15 1968, or thereabouts, that there was a concern that
 16 asbestos dust could cause lung cancer in persons who
 17 lived near facilities where asbestos was used; do you
 18 recall that?
 19 A No, I don't recall that.
 20 Q What was your chapter on, by the way, in
 21 there?
 22 A Noise.
 23 Q Was that an area concerning which you
 24 developed some significant expertise?
 25 A Yes.

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1 Q By the way, are you familiar with the term
 2 "latency" or the concept that asbestos diseases are
 3 latent diseases?
 4 A Yes, I'm familiar with it.
 5 Q And in the context of the late 1940's, when
 6 you first learned about the asbestosis, the scarring
 7 of the lungs, did you learn at that time that this was
 8 a disease process that could take 20 or 30 years to
 9 develop from the date of first exposure? That is
 10 to say that it was not something that happened
 11 instantly?
 12 A Yes. I was very much aware of that it
 13 took many years. I don't think there was any
 14 discussion about a latency effect at that particular
 15 time.
 16 Q All right. Let's take a look here at
 17 page 356 of this textbook. "The problem of asbestosis
 18 has been studied extensively since the 1920's when a
 19 definite relationship was established between
 20 the fibers and the disease." Did I read that
 21 correctly?
 22 A Yes.
 23 Q Now, in your training and when you first
 24 arrived at Alcoa, did you learn that this
 25 relationship, the fact that asbestos could causes

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1 this disease, had been known since the 1920's?
 2 A "This disease" being asbestosis?
 3 Q Yes, sir.
 4 A Correct.
 5 Q Okay. And here they talk about "The
 6 mortality of groups of asbestos workers was higher
 7 than expected." Now, just for the benefit of the
 8 jury, that means that more people were dying than
 9 were anticipated; is that a fair statement?
 10 A Yes.
 11 Q Okay. "And the excess mortality could be
 12 accounted for by cancer of the respiratory and
 13 digestive systems, a category of heart disease and
 14 asbestosis." Did I read that correctly?
 15 A Yes.
 16 Q And when they talk about excess mortality,
 17 what they are talking about is the number of
 18 additional people that died other than what you would
 19 expect could be accounted for by respiratory cancer,
 20 that's lung cancer; correct?
 21 A Yes.
 22 Q Cancer of the digestive system, that would
 23 be gastrointestinal cancers; correct?
 24 A Right.
 25 Q A category of heart disease, and also what

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1 we have talked about before, asbestosis or the
 2 scarring of the lungs; correct?
 3 A Right.
 4 Q So as of 1968 in this text that is edited
 5 by Mr. Cralley -- and what was his position at Alcoa
 6 at that time?
 7 A He was the manager of the health and safety
 8 services.
 9 Q Okay. The manager of health and safety
 10 services recognized in this text that asbestos workers
 11 were subject to the risk of dying from some of these
 12 asbestos related diseases; would you agree with that,
 13 sir?
 14 MR. WALKER: Can you show him the sentence
 15 again?
 16 Q Sure.
 17 "Excess mortality could be accounted for by
 18 cancer of the respiratory and digestive systems,
 19 category of heart disease and asbestosis."
 20 Is that a fair statement, sir?
 21 A Well, yes, but you have to put this thing
 22 in the context of time. At the time this book was
 23 written, we had many of the studies relating asbestos
 24 exposure to the cancers.
 25 Q Okay.

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1 A But we didn't know that even just a few
 2 years before this date.
 3 Q Let me object to the non-responsive
 4 portion.
 5 Certainly, sir, by 1968, it was known, it
 6 was accepted, it was recognized by Mr. Cralley, and
 7 others at Alcoa, that asbestos could cause these types
 8 of cancers, could cause a category of heart disease
 9 and, of course, could cause death from the asbestos
 10 scarring asbestosis; correct,
 11 sir?
 12 A We were aware at that time that it was a
 13 greater hazard and those diseases you cited, yes, but
 14 there still was a question about the potency of the
 15 material and also whether or not it applied to other
 16 industries rather than the asbestos industry, milling,
 17 mining and textile manufacturing.
 18 Q All right, sir. Let me object to the
 19 non-responsive portion.
 20 Tell me again how you procured the
 21 "Occupational Respiratory Diseases" text from -- did
 22 you say after you retired?
 23 A Right. Right. I read in one of the
 24 journals that it was available from NIOSH, so I made a
 25 phone call and got myself a copy.

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1 Q I haven't seen this in quite some time.
 2 Did you have an intention, sir, when you left Alcoa to
 3 perform consulting work?
 4 A I did a little bit of consulting.
 5 Q And give me an idea of the nature of that
 6 work?
 7 A It was limited to the aluminum industry, to
 8 specifically to aluminum plants. To aluminum
 9 companies.
 10 Q That consulting work would have been done
 11 on behalf of Alcoa?
 12 A No. On behalf of myself.
 13 Q Did you have clients for whom you did that
 14 work?
 15 A I beg your pardon?
 16 Q The consulting work that you did, who were
 17 your clients, who paid you?
 18 A Well, the names of the company, but they
 19 were not Alcoa companies. One plant was in Frederick
 20 and another one is outside of Charleston.
 21 Q Okay.
 22 MR. WATERS: I am going to suggest we
 23 take a break now, because I don't want to waste
 24 your time while I am trying to filter through
 25 this mess to figure out what questions to ask

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1 you.
 2 MR. WALKER: That's fine.
 3 THE VIDEOGRAPHER: This ends tape one of
 4 the deposition of Thomas Bonney. We are off the
 5 record, the time is 12:10 p.m.
 6 ---
 7 (Thereupon, at 12:10 o'clock p.m., a
 8 luncheon recess was taken until 1:05 o'clock
 9 p.m.)
 10 ---

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1 A-F-T-E-R-N-O-O-N-S-E-S-S-I-O-N
 2 (Thereupon, Alcoa Deposition Exhibit No. 1
 3 was marked for identification.)
 4 THE VIDEOGRAPHER: This begins tape two of
 5 the deposition of Thomas Bonney. We are on the
 6 record, the time is 1:05 p.m.
 7 BY MR. WATERS:
 8 Q Mr. Bonney, how are you this afternoon,
 9 sir?
 10 A Fine and dandy.
 11 Q Okay. If at any point in time you need to
 12 take a break, you just let us know; okay?
 13 A Will do.
 14 Q From time to time, sir, were you involved
 15 with the formulation or the writing of objectives and
 16 goals on the part of the Alcoa corporate industrial
 17 hygiene department or division?
 18 A Yes, I believe that I was involved with
 19 that one, yes.
 20 Q Okay. I would like to show you what I have
 21 marked as Alcoa 1, a document that is not dated, but
 22 ask you if this would have been that type of document
 23 that you all would have put together during your
 24 tenure -- at some point in time during your tenure?
 25 Is that similar to the type of documents

1 that you recall, sir?
 2 A Something similar, but this is not a
 3 document that I was involved with. It looks like
 4 something of more recent vintage.
 5 Q Okay. Fair enough.
 6 Let's take a look at the discussion of
 7 Alcoa's industrial hygiene program. It says, "There
 8 is a corporate commitment to do the right and moral
 9 thing for Alcoans worldwide. In achieving that
 10 objective, we would expect to also meet at least the
 11 minimal health protection requirements mandated by
 12 government regulations or other recognized
 13 authorities, as appropriate."
 14 Did I read that correctly?
 15 A Yes.
 16 Q During your tenure at Alcoa, sir, would you
 17 also have expected that Alcoa would meet at least the
 18 minimal health protection requirements that were
 19 stated in regulations?
 20 A Yes. I would say so.
 21 Q In order to meet those minimum
 22 requirements, you are going to have to be aware of
 23 what they are, aren't you, sir?
 24 A Yes.
 25 Q And so Alcoa recognized, did it not, sir,

1 be based on your tenure at Alcoa?
 2 A I am sorry, I was looking at the wrong one.
 3 Q I beg your pardon?
 4 MR. WALKER: Andy, are you talking about a
 5 particular time period?
 6 MR. WATERS: Just generally over the course
 7 of his time there.
 8 MR. WALKER: If any of those would change
 9 with time, answer. If they don't, just answer
 10 whatever you think.
 11 A I think in the earlier times it was maybe
 12 one-on-one communication with the employee or
 13 through
 14 safety committee meetings, and later on post-OSHA, if
 15 you will, we actually provided training for all the
 16 employees in the plants, special sessions.
 17 Q Okay. One thing I guess we can agree upon
 18 and what this question seems to imply is that Alcoa
 19 needs to communicate to employees if they are working
 20 around something that can cause cancer; you would
 21 agree with that, wouldn't you?
 22 A If they were working around material that
 23 had the opportunity to cause cancer, if it's over here
 24 left alone, that's no hazard.
 25 Q Okay. Let's put it that way, the way you
 worded it, if the material has an opportunity to cause

1 that it was its obligation to recognize and understand
 2 the regulations so that they could be followed?
 3 A Yes.
 4 Q Nothing different about that obligation on
 5 the part of Alcoa in the 1970's from, for example, the
 6 1950's, was there? A duty to its employees?
 7 A Yes. There is nothing different, no.
 8 (Thereupon, Alcoa Deposition Exhibit No. 2
 9 was marked for identification.)
 10 Q Let me show you what has been marked
 11 Alcoa 2 and ask if that appears to be Mr. Rumberger's
 12 handwriting, or if you can tell?
 13 Is that Mr. Rumberger's handwriting?
 14 A I don't know whose it is.
 15 Q You don't know whose it is?
 16 A No.
 17 Q Let me represent to you that that document
 18 came from the corporate -- Alcoa's corporate
 19 industrial hygiene files, and I want to ask you the
 20 questions that are posed here and see what your
 21 response would be.
 22 No. 2, "How do we communicate to employees
 23 that they may be working in an area with serious
 24 health hazards (e.g., carcinogens)?"
 25 What would your response to that question

1 cancer, you would agree that the employee should be
 2 advised of that risk so that they can take
 3 precautions, avoid creating or furthering that
 4 opportunity?
 5 A That's right. Yes.
 6 Q Nothing different about that duty or
 7 responsibility of a good corporate citizen in the
 8 1950's as compared to the 1970's, is there?
 9 A Yes. I think there was more communication
 10 today than there was in the past.
 11 Q Okay. There may be more communication
 12 today than there was in the past, but you will agree
 13 with me, certainly, that workers in the 1950's who
 14 faced a hazardous substance that might cause cancer,
 15 that they deserved to be told about that, didn't they,
 16 so that they could take precautions for their own
 17 health and safety?
 18 A They deserve -- if there is a risk to their
 19 health, they deserve to be told that there is a risk
 20 to their health.
 21 Q Question No. 3, "How do you judge
 22 cost/benefit ratios in solving industrial hygiene
 23 problems?"
 24 What would your response be to that, sir,
 25 based on your experience and tenure at Alcoa?

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1 A That's one that is somewhat foreign to me.
 2 Q You don't recall being concerned about cost
 3 benefit ratios?
 4 A No. That's foreign to me, really.
 5 Q Question No. 4, "Does the union's approach
 6 to industrial hygiene differ from the company's
 7 industrial hygiene objectives?"
 8 What would your answer to that be?
 9 A I would have to speculate on that. I think
 10 you would have to direct the question like that to the
 11 union, but obviously their concern is with the
 12 employees, their members, but they may have some
 13 other
 14 concerns, as well.
 15 Q One concern that the union will not have is
 16 the cost of safety and health, because that's a cost
 17 that's going to be borne by Alcoa; isn't that correct?
 18 A That's right, yes.
 19 (Thereupon, Alcoa Deposition Exhibit No. 3
 20 was marked for identification.)
 21 Q Let me show you what has been marked
 22 Alcoa 3, which is an asbestos management plan,
 23 Rockdale operations, just a few questions for you.
 24 This document is published in -- appears to be
 25 August 30, 1996. Do you see that there at the bottom?
 26 A Yes.

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1 Q Pursuant to this management plan, this
 2 manual establishes a written Asbestos Management
 3 Program." Did I read that correctly?
 4 A Yes.
 5 Q Are you aware or were you aware before
 6 today, sir, that prior to August 1996 Alcoa Rockdale
 7 did not have a written asbestos management program?
 8 Were you aware of that fact?
 9 A I don't know whether they did or didn't.
 10 They may have had an informal one, but I am not
 11 aware
 12 of any written. This is the first time I have seen a
 13 written asbestos program.
 14 Q Page 5 discusses something called the
 15 Rockdale Operations Supervisors Asbestos Handbook.
 16 Are you familiar with that document?
 17 A No.
 18 Q Well, we will get that from
 19 Mr. Fitzpatrick.
 20 Do you suspect we will have to wait until
 21 next week and find out?
 22 MR. WALKER: It will depend on the end of
 23 the day. I will make a phone call.
 24 MR. WATERS I will put that on Mr. Iola's
 25 plate.
 26 MR. WALKER: It's called Supervisors --

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1 what's it called?
 2 MR. WATERS Rockdale Operations Supervisors
 3 Asbestos Handbook.
 4 BY MR. WATERS:
 5 Q Here is another one, the Rockdale
 6 Operations Employee Awareness Handbook.
 7 Do you know anything about that document?
 8 A No, I don't.
 9 Q Employee awareness.
 10 A These are new things, at least from my
 11 point of view.
 12 Q These types of manuals or written materials
 13 were not available, I presume, prior to your departure
 14 in 1986?
 15 A I don't recall them, but in today's world
 16 you need more structured and detailed and technical
 17 approaches to solve any environmental problems.
 18 MR. WATERS: All right. Object to the
 19 non-responsive portion.
 20 Q At page 15 it discusses something called
 21 major fiber release episodes. "A major fiber release
 22 episode is the falling or dislodging of more than 3
 23 square feet or 3 linear feet of friable asbestos
 24 containing materials. Operations personnel should
 25 immediately barricade the area with red tape,"

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1 et cetera, et cetera, et cetera.
 2 Would you agree, sir, with this definition,
 3 that if you have disturbance of, for example, three
 4 linear feet of asbestos pipe covering that that would
 5 be considered a major fiber release episode?
 6 A I wouldn't know these definitions. Look s
 7 to me like they might be following some kind of a code
 8 or regulation, but I would not be able to state that
 9 myself.
 10 Q Fair enough. Let me put the question to
 11 you this way: As a -- when you were a practicing
 12 industrial hygienist, if you were to observe, for
 13 example, a pipefitter or maintenance worker involved
 14 with the tear out or rip out of three linear feet of
 15 asbestos-containing pipe covering, would you consider
 16 that to constitute a significant health hazard?
 17 MR. WALKER: Again, the time frame?
 18 Q Let's say toward the end of your tenure
 19 with Alcoa.
 20 A Toward the end of my tenure with Alcoa,
 21 yes, I would. But prior to the 50's, 40's, '60's, no,
 22 I would not.
 23 MR. WATERS: I object to the non-responsive
 24 portion.
 25 Q If you were to observe, let's say in the

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1 early 1980's, some one individual doing rip out or
 2 tear out of asbestos work, work that created visible
 3 dust that to you would represent a risk of significant
 4 harm; would it not?
 5 A It might, possibly. I would not say
 6 definitely that it would.
 7 Q If you were to observe visible dust
 8 resulting from this type of operation, you would not
 9 necessarily be concerned?
 10 A It would depend on whether that dust was
 11 asbestos or the binding material that is almost always
 12 associated with asbestos.
 13 Q Let's assume that it is asbestos, because
 14 aren't you supposed to assume that a material is
 15 asbestos unless it has been proven otherwise for
 16 safety purposes?
 17 Isn't that one of the principles that Alcoa
 18 has purportedly followed since the '70's?
 19 A If insulating material, we would find out
 20 if its asbestos containing or not.
 21 Q Assuming that you have asbestos-containing
 22 insulation material, and visible dust is being created
 23 by the operation I described, would you not, sir, be
 24 concerned enough to halt the operation until
 25 additional precautions could be taken?

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1 **MR. WALKER:** Again, I am going to ask him
 2 to put in a time frame, if that would be
 3 helpful.
 4 Q All of these questions are with respect to
 5 the latter part of your tenure at Alcoa, let's say the
 6 early 1980's.
 7 A At the least, for situations such as that,
 8 we would require the person to have respiratory
 9 protection until we found out what it was. An
 10 evaluation of it.
 11 Q And the reason you would require
 12 respiratory protection is because you would recognize
 13 that that process, the removal of those three feet of
 14 asbestos pipe covering, what have you, constituted a
 15 significant risk of harm to the individuals in the
 16 vicinity; isn't that correct?
 17 A It might not, it will -- you need a
 18 sufficient dose.
 19 Q I apologize for interrupting you.
 20 There could be a sufficient dose to warrant
 21 the concern that you have expressed to either give the
 22 man some additional protection or stop the operation
 23 or something along those lines; is that correct?
 24 A At least want to minimize the exposure, but
 25 looking at one exposure, a brief one such as that, I

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1 am not sure that would constitute a serious risk.
 2 Q Okay. It would constitute a risk, however,
 3 or a hazard, a health hazard; would it not?
 4 A I beg your pardon?
 5 Q It would constitute a risk or a health
 6 hazard; would it not?
 7 Even if you don't want to call it a serious
 8 risk.
 9 A Again, it might depend on the magnitude of
 10 the exposure, but I agree with you that until you find
 11 out the situation, until you evaluate it, you protect
 12 the man.
 13 Q Page 16, entitled Long Range Plan,
 14 indicates that, "It should be noted that estimates to
 15 remove all of the asbestos materials from the power
 16 plant ranges from \$30 million to \$100 million."
 17 That's a significant amount of money; isn't
 18 it, sir?
 19 A Yes.
 20 Q Okay. Do you recall during your time at
 21 Alcoa that estimates were presented as to the cost of
 22 removing this cancer causing material from the
 23 workplace and from the plants where your employees
 24 were employed?
 25 A No, I can't come up with a specific

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1 instance.
 2 Q Did you recognize, prior to your retirement
 3 in 1986, that the cost of removing all of this
 4 material, asbestos material, was very, very high?
 5 Are you aware of that fact?
 6 A No, I was not.
 7 Q Too many stacks of paper.
 8 Okay. Let's go back to the textbook that
 9 you told us earlier that you had purchased, I guess,
 10 subsequent to your work for Alcoa.
 11 A Obtained.
 12 Q Obtained. Did you get it for free?
 13 A Yes.
 14 Q All right. And have you actually had an
 15 opportunity to use this in some of your consulting
 16 work, research?
 17 A Not too much. Not too much. No.
 18 Q How did you go about obtaining this
 19 textbook?
 20 A I beg your pardon?
 21 Q How did you go about obtaining it?
 22 A I just made a phone call to --
 23 Q NIOISH?
 24 A -- to NIOSH.
 25 Q And you have retained it in your personal

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1 library since that time?
 2 A Yes.
 3 Q And when you say you haven't looked at it
 4 too much, obviously you haven't read the entire thing;
 5 have you?
 6 A No.
 7 Q But from time to time you had occasion to
 8 review it for information that would be helpful to you
 9 in your consulting work?
 10 A I would say very briefly.
 11 Q I would like to look at page 289 of your
 12 book and, in particular, where it talks about
 13 asbestosis.
 14 "The first well documented case of
 15 asbestosis was reported in 1906."
 16 Do you see that?
 17 A Yes.
 18 Q It goes on to talk about some reports in
 19 the 1920's. You see that over here?
 20 A Yes.
 21 Q "By 1930 more than 75 asbestosis cases had
 22 been reported in the literature." Do you see that?
 23 A Yes.
 24 Q And that's all consistent with what you
 25 learned when you arrived at Alcoa, correct, sir?

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1 A Yes.
 2 Q Over on page 290 it indicates, "The first
 3 indication that asbestos might be a human carcinogen
 4 came in 1935."
 5 Now, carcinogen means a cancer causing
 6 agent, correct, sir?
 7 A Yes.
 8 Q It goes on to state, "Other case reports
 9 followed in 1936." Do you see that there, some
 10 additional case studies in 1936 by Groin after the
 11 1935 Lynch and Smith?
 12 A Okay.
 13 Q "In the 1947 annual report of the chief
 14 inspector of factories in England, Merriweather stated
 15 that 17.8 percent of persons who died with asbestosis
 16 also had cancer of the lung at autopsy."
 17 Do you see that?
 18 A Yes.
 19 Q It says, "The first detailed epidemiologic
 20 study to conclusively demonstrate an association
 21 between asbestos exposure and lung cancer was
 22 published in 1955 by Doll."
 23 Now, that's the same study we discussed
 24 earlier, correct?
 25 A Yes.

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1 Q It goes on to talk about the disease
 2 mesothelioma, "The first cases were reported in 1946
 3 by Meyers." Do you see that?
 4 A Yes.
 5 Q "However conclusive evidence of an
 6 association between asbestos and mesothelioma was
 7 not
 8 available until 1960 with the Wagner study." Do you
 9 see that there?
 10 A Yes.
 11 Q In your work for Alcoa, sir, did you become
 12 aware that Alcoa was a member of a number of
 13 professional organizations, or that individual
 14 professionals within Alcoa were members of such
 15 organizations?
 16 A Yes.
 17 Q And so, for example, while you were not a
 18 physician, there were physicians employed by Alcoa
 19 who
 20 would have been members of the American Medical
 21 Association, for example?
 22 A Yes.
 23 Q Are you aware that in 1949 the Journal of
 24 the American Medical Association published an article
 25 concerning the connection between asbestos and lung
 26 cancer?
 27 A I don't recall that.

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1 Q Were you a member of the Industrial Hygiene
 2 Foundation?
 3 A No.
 4 Q Was Alcoa a member?
 5 A Yes, they were associated with the IHF.
 6 Q And you and Mr. Cralley would oversee from
 7 time to time publications from the Industrial Hygiene
 8 Foundation?
 9 A Yes.
 10 Q Including what are called the abstracts
 11 where the Industrial Hygiene Foundation lists a
 12 number
 13 of significant abstracts concerning new articles in
 14 the medical and scientific literature?
 15 A Yes.
 16 Q And the purpose of you and Mr. Cralley
 17 reviewing those materials was so that you could keep
 18 up to speed with new developments, possible hazards in
 19 the workplace; correct, sir?
 20 A That's right.
 21 Q There is also an organization called the
 22 National Safety Council, are you familiar with that
 23 organization?
 24 A Yes.
 25 Q Were you a member of that organization?
 26 A No.

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1 Q Was Alcoa a member, to the best of your
2 recollection?
3 If you are not certain --
4 A I don't know if Alcoa was.
5 Q Are you aware -- did you ever attend any of
6 the National Safety Council meetings in Chicago,
7 annual meetings?
8 A I may have attended one or two.
9 Q Okay. Let me represent to you, sir,
10 that Alcoa has answered and in sworn answers to
11 interrogatories that it was a member of the National
12 Safety Council going all the way back to the 1920's.
13 Would that surprise you?
14 A No, not at all.
15 MR. WATERS: I hand that back to you all.
16 Q Let me show you, sir, the National Safety
17 News, Volume 32, No. 3, September 1935, which is a
18 journal or a trade journal, if you will, that was
19 distributed to members of the National Safety Council.
20 And in particular I want to show you an article
21 contained in that particular issue titled, "No Halfway
22 Measures in Dust Control."
23 Do you see that?
24 A Yes.
25 Q Over here it indicates -- talks about a

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1 A You read it correctly.
2 Q And what author Johnson, who worked for the
3 American Mutual Liberty Insurance Company, is
4 saying
5 here is that the five million particles, which is the
6 TLV; correct, sir?
7 A Yes.
8 Q That if you have -- that you have to have
9 something 13 to 20 times higher than that before you
10 can even see the dust; isn't that correct? What he is
11 saying there?
12 MR. WALKER: I am going to object. The
13 best evidence is what the article itself says.
14 Q You may answer, sir.
15 A That's where I am coming -- that's what the
16 article says, but I am not sure I agree with it. You
17 can even see dust of a lot lesser concentration than
18 that in your own living room with the sun coming
19 through the windows.
20 Q You don't have asbestos dust in your living
21 room; do you?
22 MR. WATERS: Strike that question. Let me
23 object to the non-responsiveness of the previous
24 answer and I will withdraw my question.
25 MR. WALKER: And for the record I am going
to object to any questions from documents because

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1 second group of dusts, and it says, "There is no
2 question but that lessened lung capacity results from
3 them after long enough exposure, but it certainly
4 takes more dust and more time to lower capacity for
5 work. Asbestosis falls in this group and apparently
6 similar conditions develop from exposure to excesses
7 of many mineral dusts relatively low in free silica
8 content."
9 Did I read that correctly?
10 A Yes.
11 Q And you are not surprised to see a
12 reference to asbestosis in a 1935 journal of this
13 sort, are you, sir?
14 A Not on that particular date, but in that
15 journal I am surprised.
16 Q Okay. Looking at the next page, which is
17 page 18, talking about, "I think we need to digress
18 for a moment to visualize what is meant by five
19 million particles of dust of such tiny size. We know
20 it is invisible to the naked eye because it takes 15
21 to 20 times that much to produce a haze, and even that
22 isn't visible as particles of materials. The
23 particles therefore are so small as to thwart the
24 imagination."
25 Firstly, did I read that correctly?

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1 I think my recollection is there is a discovery
2 request asking for all articles previously read
3 that you consider authoritative and those have
4 not -- the articles that you are questioning from
5 have not been produced.
6 MR. WATERS I am well aware of that unhappy
7 fact, but what is the point?
8 Yes, I understand that, you have not
9 produced the articles, we agree.
10 MR. WALKER: No, you haven't produced the
11 articles is what I am saying, and you are
12 questioning from articles you haven't produced
13 when I think there is an outstanding discovery
14 request for identification of those articles.
15 MR. WATERS I thought the judge addressed
16 that on Friday or --
17 MR. WALKER: He could have. I would assume
18 you are going to continue to ask questions, so if
19 you don't mind, to help the record, I would like
20 to have a running objection to that.
21 MR. WATERS: That would be acceptable.
22 MR. KINGSLEY: Can we make copies of these
23 before the end of the day?
24 MR. WATERS No, but we can make copies for
25 you. I don't let these out of my control, these

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1 are the only copies I have.
 2 **MR. WALKER:** So I guess we are requesting
 3 it, so you can send them.
 4 **BY MR. WATERS:**
 5 **Q** One further comment, sir, in this article.
 6 It states, "If you can see the dust, you know it to be
 7 a terrific hazard." Do you see that, sir?
 8 **A** Oh, yes.
 9 **Q** And that's what the National Safety Council
 10 was telling people in as early as September 1935 about
 11 asbestos; is that correct, sir?
 12 **MR. WALKER:** I am going to object to that
 13 because it's confusing at best, that proper
 14 predicate hasn't been laid, the "it" in there,
 15 that Mr. Bonney was not allowed to read the
 16 context of that to see what it would be in the
 17 context of which that statement was made.
 18 **MR. WATERS:** I will rephrase the question.
 19 **Q** Sir, in this article from the National
 20 Safety Council, am I correct, sir, that it is stated,
 21 "If you can see the dust, you know it to be a terrific
 22 hazard," is that what it so states in this article in
 23 1935?
 24 **A** That's what it states. I do not agree with
 25 that.

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1 **MR. WATERS:** Objection to the
 2 non-responsive portion.
 3 **MR. KINGSLEY:** For the record, what was the
 4 exhibit number?
 5 **MR. WATERS:** It doesn't have exhibit --
 6 well, it has a number on it, ARO1.
 7 **MR. KINGSLEY:** Would you make a copy of it
 8 even though it's not marked as an exhibit?
 9 **MR. WATERS:** I will.
 10 **BY MR. WATER:**
 11 **Q** Now we move forward.
 12 The IHF abstracts that we talked about
 13 earlier?
 14 **A** Yes.
 15 **Q** Those were available when you arrived in
 16 1948 and continued to be available when they were
 17 published, as they came out?
 18 **A** Yes. To the best of my knowledge we had
 19 them throughout my working career.
 20 **Q** And, in fact, do you recall, sir, that they
 21 were available before your arrival for Mr. Cralley or
 22 someone else to look at?
 23 **A** I don't know that for a fact.
 24 **Q** Well, let me ask you, sir, if you recall in
 25 your review of the materials there, an abstract or

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1 article entitled, "Bronchogenic Carcinoma in
 2 Association with Pulmonary Asbestosis" published in
 3 the American Journal of Pathology in April of 1942.
 4 Do you have any recollection of that?
 5 **A** I don't remember that one specifically, no.
 6 **Q** How about January 1945, "Asbestosis and
 7 Pulmonary Carcinoma," do you recall that abstract?
 8 **A** No.
 9 **Q** How about September 1950, publication on
 10 "Asbestosis and Lung Cancer," do you recall that one
 11 after you arrived?
 12 **A** No.
 13 **Q** Let's show you one from June 1953, and let
 14 me just show you -- does that appear to be the digiest
 15 that you recall in terms of the logo?
 16 **A** Yes, it is.
 17 **Q** Okay, fair enough.
 18 1953, and article entitled "Lung Carcinoma
 19 Caused by Asbestos Inhalation," do you see that?
 20 **A** Yes.
 21 **Q** And that's one of the abstracts that would
 22 have been available to you and to Mr. Cralley and
 23 whoever else at Alcoa because you would have received
 24 this abstract, the digiest; correct, sir?
 25 **A** Yes.

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1 **Q** Would you agree with me, sir, that based on
 2 this material you would have been aware that there
 3 were journals and articles out there by the early
 4 1950's that, as this one is termed, lung carcinoma,
 5 lung cancer can be caused by asbestos inhalation?
 6 **A** There were a number of those instances,
 7 isolated instances, excuse me, instances, but they
 8 were not accepted by the scientific community at the
 9 particular time.
 10 **MR. WATERS:** Let me object to the
 11 non-responsive portion.
 12 **MR. KINGSLEY:** Can we make the same
 13 agreement with respect to that document, you will
 14 produce it, it's not marked for identification at
 15 this deposition, but you will produce it?
 16 **MR. WATERS:** I will.
 17 **MR. KINGSLEY:** Is it possible to identify
 18 it more than that?
 19 **MR. WATERS:** Yes. It's ARO-102A, looks
 20 like. Little bit hard to read.
 21 **MR. KINGSLEY:** About 46 pages long, for the
 22 record.
 23 **BY MR. WATERS:**
 24 **Q** I want to show you what has been marked
 25 Alcoa 4, which is a memorandum from Mr. Cralley to

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1 Mr. Pracht at Davenport. Do you see that?
 2 A Yes.
 3 Q Was Mr. Pracht an industrial hygienist or
 4 safety professional of some sort, do you recall?
 5 A No. He was manager of the industrial
 6 hygiene committee.
 7 Q And in this memorandum Mr. Cralley is
 8 telling him about the basic industrial hygiene
 9 reference library that's that he is going to send to
 10 Mr. Pracht. Do you see that?
 11 A Yes.
 12 Q And there are several attachments, one of
 13 which -- or actually I guess it's just a two-page
 14 attachment, and it lists, for example, the Drinker &
 15 Hatch text, "Industrial Dust" that we discussed
 16 previously. Do you recall that?
 17 A Right.
 18 Q And that was one of the texts that you at
 19 Alcoa relied upon in the early 1950's for general
 20 information purposes?
 21 A Yes.
 22 Q I show you what has been marked Alcoa 5 and
 23 indicated to be a management bulletin from the
 24 Davenport Works, January 4, 1954.
 25 Just read along with me, if you will, "The

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1 industrial hygiene committee will undertake the task
 2 of determining potential health hazards associated
 3 with the handling, use and production of all materials
 4 at Davenport Works."
 5 Did I read that correctly?
 6 A Yes.
 7 Q Is this similar to the type of work that
 8 was being done at all the plants in this time frame to
 9 ascertain what materials, if any, might be hazardous
 10 to the health of workers?
 11 A This was the procedure that was followed in
 12 all of our plants.
 13 Q And one of the methods that the industrial
 14 hygienists or the professionals could take was to look
 15 at the materials used at the plant and compare that
 16 with the TLV list of hazardous materials that had been
 17 put out by the ACGIH; is that correct?
 18 A Not just that, but we looked at the manner
 19 in which the material was used and the quantity that
 20 was used.
 21 Q And you certainly had the opportunity to
 22 perform measurements to determine if certain values
 23 were exceeded and to put the use of products in the
 24 hazardous or dangerous range?
 25 A Yes, we measured only when we expected

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1 there might be a potential problem we could control in
 2 another means without measurement in many cases.
 3 MR. WALKER: Object to the non-responsive
 4 portion.
 5 Q Let me show you what has been marked
 6 Alcoa 6, a letter from Mr. Smithson at Davenport
 7 Works
 8 to the Industrial Hygiene Foundation, that's the
 9 organization of which we have been speaking that
 10 Alcoa
 11 was a member; is that correct?
 12 A Yes.
 13 Q Okay. And in this letter Mr. Smithson
 14 says, "We have been advised by Dr. Cralley," was he
 15 not in fact a doctor, I was confused by this?
 16 A Ph.D.
 17 Q Oh, okay.
 18 "Dr. Cralley of our Pittsburgh office that
 19 he has arranged for us to order directly from you
 20 reprints listed in the Industrial Hygiene Digest," and
 21 then it attaches, does it not, sir, a number of
 22 articles, et cetera, that they want prints of?
 23 A Yes.
 24 Q And, in fact, the articles contained in the
 25 IHF abstract, several of which we have already
 discussed, were readily available not just in
 Pittsburgh but at any of the other facilities in the

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1 event that they wanted more details concerning
 2 potential hazards in the workplace?
 3 A A large number of plants had the digests,
 4 but I don't know that every plant had the digests
 5 available.
 6 Q All right.
 7 June 13, 1956 memo from Mr. Cralley to
 8 Mr. Stout, "The dust sample which Mr. George
 9 Kuerner
 10 gave me on my recent visit has been turned over to the
 11 Analytical Division of ARL for certain preliminary
 12 analyses."
 13 What is ARL?
 14 A Alcoa Research Laboratories.
 15 Q Is that the place where you worked until
 16 the mid to late '50's?
 17 A Yes.
 18 Q So in this instance the laboratory was
 19 going to perform an analysis on the dust sample that
 20 had been provided by the Davenport Works -- no,
 21 excuse
 22 me, by --
 23 A Bauxite.
 24 Q Bauxite Works; is that correct?
 25 A Yes.
 Q My recollection from your earlier testimony
 is that you don't recall any attempt to analyze or

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1 quantify asbestos exposures or the amount of asbestos
 2 dust in the air prior to what, the mid to late
 3 1960's -- or you said late '60's, early '70's?
 4 A Yes.
 5 Q But certainly the capability, the capacity
 6 to do that was available in the 1940's and the 1950's?
 7 A Not at all of our plants. I am not sure
 8 all the plants had the equipment to do the dust
 9 counting.
 10 Q They had the equipment to take the samples
 11 and they could have provided the samples to laboratory
 12 for analysis; isn't that true?
 13 A Not for an impinger type sample, which is
 14 what you would have to use here.
 15 Q And that's what Mr. Kuerner was using at
 16 the Bauxite Works, an impinger, presumably, to
 17 sample
 18 the dust?
 19 A Yes, but I don't know whether he was
 20 looking for a dust count or an analysis of other
 21 material.
 22 Q Did you have impingers at the Pittsburgh
 23 facility or in New Kensington?
 24 A Yes.
 25 Q And could you take those impingers with you
 if you so desired to perform dust studies at any given

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1 location?
 2 A Yes.
 3 Q And how much, if you can recall, did a
 4 midjet impinger cost back in the 1950's; \$200, \$300?
 5 A Minimum. I mean, it was a minimal cost.
 6 It wasn't that expensive.
 7 Q Certainly if Alcoa so desired, they could
 8 have provided a midjet impinger to each and every one
 9 of their facilities where asbestos exposures were
 10 possible; isn't that true?
 11 A They could have provided the impinger, but
 12 not the expertise to count the dust.
 13 Q Let's take a look at -- for your records,
 14 this is ARO 106 -- Industrial Hygiene Digest from
 15 September of 1955, where we see an abstract on the
 16 Doll article.
 17 Do you see that?
 18 A Yes.
 19 Q "Mortality," that means death; correct?
 20 A That's right.
 21 Q "From lung cancer in asbestos workers."
 22 Okay. From the British Journal of Industrial
 23 Medicine.
 24 Now, certainly you will agree with me, sir,
 25 that upon receipt of this information, even if Alcoa

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1 didn't ever read the full article, Alcoa would have
 2 been aware that asbestos workers were prone to
 3 develop
 4 lung cancer which could cause death?
 5 A Well, you got to look at this in the
 6 context of time. This was a single study, and it was
 7 not generally accepted until the further studies came
 8 along in the late '60's that confirmed that. Any
 9 scientific study, you come up with a hypothesis, which
 10 is what Doll has here. And you required the rest of
 11 the scientific community to confirm that, well, that
 12 confirmation didn't come until much later.
 13 Q I appreciate that.
 14 MR. WATERS: And let me object to the
 15 non-responsiveness.
 16 Q My question simply put is, sir, as of 1955
 17 Alcoa would have been aware that there was research
 18 concluding that there was excess mortality, deaths
 19 from lung cancer in asbestos workers because they
 20 would have been in receipt of this material?
 21 A We were aware of that, yes.
 22 MR. KINGSLEY: Can we get the same
 23 agreement with respect to that document?
 24 MR. WATERS You can have it with respect to
 25 all of them. In fact, if you are just keeping a
 list, you can give it to me at the end of the

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1 day, and I'll take care of it for you.
 2 MR. WALKER: Is this a pile and we can just
 3 mark them at the end of the day or push them off
 4 to the side?
 5 MR. WATERS Yes, I don't care.
 6 MR. KINGSLEY: Okay.
 7 BY MR. WATERS:
 8 Q Here is the Industrial Hygiene Digest from
 9 February 1956, and there is one article, "Carcinoma of
 10 the Lung in Asbestosis Report of Two Additional
 11 Cases." Do you see that?
 12 A Yes.
 13 Q And the same journal, "Asbestosis and
 14 Pulmonary Carcinoma in an Asbestos Spinner Lopes
 15 on
 16 the Induction of Lung Cancer by Asbestos Fibers." Do
 17 you see that?
 18 A Yes.
 19 Q And that would have provided additional
 20 information to Alcoa -- that would have provided
 21 additional information to Alcoa concerning the
 22 potential for asbestos to cause lung cancer as of
 23 1956?
 24 A If we have to weigh the evidence of the
 25 total picture.
 MR. WATERS: Let me object as

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1 non-responsive.
 2 **MR. KINGSLEY:** For the record, this is ARO
 3 109.
 4 **Q** Sir, the Industrial Hygiene Digest,
 5 February 1956, that we just looked at, contains two
 6 additional references to asbestos causing lung
 7 cancer. Did we just review that?
 8 **A** Yes.
 9 **Q** And that would have provided additional
 10 information to Alcoa concerning the connection -- the
 11 cancer connection between asbestos and lung cancer; is
 12 that not true?
 13 **A** Well, it would certainly get our attention,
 14 but it certainly wasn't conclusive at that time.
 15 **Q** Do you recall, sir, as you sit here today
 16 that these articles did in fact get your attention and
 17 became a source of some issue or discussion?
 18 And if you don't have a specific
 19 recollection, I appreciate that. I just need to ask
 20 you the question.
 21 **A** Yes.
 22 As the studies came in in the late '60's,
 23 it was obvious that there was something more there.
 24 **MR. WATERS:** Let me object to the
 25 non-responsiveness.

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1 industrial, whatever you're reading from, I
 2 wasn't speaking of numbers.
 3 **MR. WATERS:** Let's start over.
 4 **BY MR. WATERS:**
 5 **Q** Here, sir, is another industrial hygiene
 6 digest from September of 1956, and this, again, would
 7 be one of the digests that would have crossed your
 8 desk presumably in that time frame, sir?
 9 **A** Yes.
 10 **Q** And it indicates on page 29, a new article
 11 entitled, "New Viewpoints on Pulmonary Cancer in
 12 Asbestos Workers." Do you see that, sir?
 13 **A** Yes.
 14 **MR. WATERS:** Let me point further -- go
 15 ahead.
 16 **MR. KINGSLEY:** It's ARO 111.
 17 **Q** Let me show you, sir, what we will mark as
 18 Alcoa 8, which is a letter addressed to Mr. Cralley,
 19 actually Dr. Cralley, I apologize. Well, maybe it's a
 20 different Cralley, this indicates Department of Plant
 21 Pathology, University of Arkansas. Is that the same
 22 Cralley?
 23 **A** That's a third one.
 24 **Q** Oh.
 25 **A** It's not one of the above.

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1 **Q** My question is, sir, going back to the
 2 middle 1950's, do you recall that this was a subject
 3 of some concern based on what you had seen or were
 4 seeing in the literature?
 5 **A** I would say it was not of great concern, it
 6 was of interest, but it was not associated with the
 7 uses as we had them in Alcoa. These studies were
 8 mostly mining, milling and textile.
 9 **MR. WATERS:** Let me object to the
 10 non-responsive portion.
 11 **Q** Fair statement, sir, that regardless of
 12 these articles and this additional information,
 13 asbestos, as you stated earlier, continued to be a low
 14 priority until the late 1960's?
 15 **A** Yes.
 16 **Q** Here's one from September of 1956.
 17 **MR. WALKER:** Could you identify it,
 18 please?
 19 **MR. WATERS:** Yes. I don't really want this
 20 identification in my question. I will be happy
 21 to identify it after my question because I don't
 22 want the jury gobbledy gooked up with a bunch of
 23 extra numbers.
 24 So I will be happy to do it --
 25 **MR. WALKER:** You said "here" from the

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1 **Q** I understand. Okay.
 2 Were they triplets?
 3 **A** No. Two of them were identical twins and
 4 he had several other brothers.
 5 **Q** Okay. In any event, in this July 27, 1956
 6 correspondence, Mr. Stout, the Works manager, with a
 7 copy to Dr. Lester Cralley, working with you in
 8 Pittsburgh, sends this letter to apparently a
 9 pathologist named another Dr. Cralley, who is related
 10 to the Dr. Lester Cralley; correct, sir?
 11 **A** Yes.
 12 **Q** And he states, "On June 26, 1956, I wrote
 13 to you suggesting that you might defer your report on
 14 our problem until you had an analysis of dust. I have
 15 just talked with your brother" -- that would be the
 16 Cralley that worked with you; correct, sir?
 17 Is that correct?
 18 **A** I would guess.
 19 **Q** -- "who has now returned from his vacation,
 20 and he suggests that your report might appear to the
 21 general public to possibly be biased if you knew the
 22 analysis of the material. He suggests, and I concur,
 23 that you not include the analysis in your report, but
 24 we will attach the analysis here to the report as an
 25 addendum."

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1 First of all, did I read that correctly?
 2 A Yes.
 3 Q Okay. And what Mr. Stout is saying to
 4 this Dr. Cralley, and at the same time telling
 5 Dr. Cralley at Alcoa, is that he doesn't want the
 6 doctor's report to appear biased, so he doesn't want
 7 the general public to know that Dr. Cralley had seen
 8 the analysis; isn't that correct?
 9 MR. WALKER: I object.
 10 A I am not sure I know what that means.
 11 MR. WALKER: The document speaks for
 12 itself, best evidence rule.
 13 Q You don't know what that means; do you?
 14 A No.
 15 Q You would agree with me, however, that it
 16 would be very improper, if not unethical, for someone
 17 to pretend that they had not seen an analysis so that
 18 others might not think that their report was biased;
 19 that would be improper, wouldn't it, sir?
 20 MR. WALKER: I object to the form of the
 21 question, the predicate is not in evidence,
 22 obviously that letter says that the survey or
 23 whatever it is is going to be attached to the
 24 report, so there is no hiding from the general
 25 public. In fact, it might give more information

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1 A I do not necessarily see that as an
 2 improper report.
 3 MR. WATERS: Objection, non-responsive.
 4 Q My point, sir, is if this is improper and
 5 the jury in this case determines it is improper, you
 6 would agree with me that Dr. Cralley was involved in
 7 it on behalf of Alcoa?
 8 MR. WALKER: I'm going to object.
 9 Argumentative, it's highly speculative --
 10 argumentative, highly speculative, calls for an
 11 answer that is incapable of answering based upon
 12 any facts in this case.
 13 A I don't think it's capable of an answer.
 14 Q Certainly Dr. Lester Cralley, who is copied
 15 on this letter is your boss at Alcoa; correct?
 16 A Yes.
 17 Q And you don't have any reason to dispute
 18 that Dr. Cralley, Dr. Lester Cralley would have
 19 received this correspondence?
 20 A I have no reason to doubt that.
 21 Q Sir, were you aware that the State of Texas
 22 adopted as state law the threshold limit values that
 23 we have been previously discussing?
 24 A I wasn't aware of it, no.
 25 Q Let me show you this document,

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1 to the general public.
 2 Q You may answer my question, sir.
 3 A Depends on how you interpret that, and I am
 4 not sure I know how to interpret that.
 5 Q Well, let's interpret it in the simple
 6 way. Let's talk about what the words say. He's
 7 telling Dr. Cralley that his report might appear
 8 biased if it's known that he reviewed the analysis
 9 before he issued his report; correct?
 10 A He may wish an evaluation, a conclusion
 11 before he knew what the material was in it. I don't
 12 know. I just don't understand what that was all
 13 about.
 14 Q Certainly you would agree with me, sir,
 15 that it would be improper or incorrect for a physician
 16 to issue a report and to try to avoid potential for
 17 the public perceiving bias by pretending he hasn't
 18 seen some significant material, you don't think that
 19 would be proper; would you?
 20 A If it were significant to the evaluation,
 21 it would be improper. It would be.
 22 Q And if this improper procedure took place,
 23 it would appear that Dr. Lester Cralley, the
 24 Pittsburgh office of Alcoa, was aware of it since he
 25 is copied on the letter?

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1 "Occupational health regulations, maximum
 2 permissible
 3 concentrations of atmospheric contaminants in places
 4 of employment." Do you see that?
 5 A Yes.
 6 Q And the effective date, sir?
 7 A July, '58?
 8 Q Yes, sir.
 9 A All right.
 10 Q And it talks about health hazards to all
 11 workers and industrial diseases and injuries; correct,
 12 sir?
 13 Do you see that?
 14 A Yes.
 15 Q Issued by the Texas Department of Health,
 16 Division of Occupational Health in Austin, Texas?
 17 A Yes.
 18 Q And it has a little Texas seal there. Do
 19 you see that?
 20 A I see the seal.
 21 Q And you are aware from your own knowledge
 22 that in 1958 the threshold limit values included a
 23 reference to asbestos as one of the substances for
 24 which the threshold should not be exceeded, are you
 25 aware of that, sir?
 A Exceeded is what I am struggling with here.

1 Short term excursions are permissible.
 2 **MR. WATERS:** Objection, non-responsive.
 3 **Q** My question, and I apologize if I made it
 4 too confusing, my question simply put is, sir, as of
 5 1958 you were aware that asbestos was one of the
 6 regulated substances under the threshold limit values
 7 that had been promulgated by the ACGIH?
 8 **A** Yes.
 9 And we used those just as Texas do.
 10 **Q** And, for example, you have a listing for
 11 toxic dusts, fumes and mists, do you see that?
 12 **A** Yes.
 13 **Q** And the TLV for asbestos at that time would
 14 have been five million particles per cubic foot?
 15 **A** Right.
 16 **Q** I take it from your earlier testimony,
 17 sir, that you were not aware that those values had
 18 the force of law in the State of Texas as of
 19 July 1, 1958?
 20 **A** I was not aware of that.
 21 **Q** That is information that you would have
 22 expected your local supervisory personnel at Rockdale
 23 and Point Comfort to be aware of?
 24 **A** If anyone knew it, they would know it, yes.
 25 **Q** Any reason you can think of why they would

1 get anyone excited. My objection, as I stated
 2 earlier, because there was some pending objection
 3 to it before it was read back, of course I object
 4 to it that the proper predicate has not been
 5 laid, that particular law defines exposure, Mr.
 6 Bonney has not had the benefit of reading that
 7 exposure level, so as such a proper predicate has
 8 not been laid for him to meaningfully answer the
 9 question. What I was trying to -- attempting to
 10 do before -- anyway, what I was attempting to do
 11 was show him the levels that that law addresses.
 12 And if you will ask him, I think he has the right
 13 to read the entire document or any portion of the
 14 document that you are going to question him on so
 15 the proper predicate will be laid.
 16 **MR. WATERS:** I am not questioning from the
 17 document. I mean, I have stated my question, it
 18 has been read back twice.
 19 **Q** Do you need it read back again?
 20 **A** No.
 21 **Q** Would you please answer my question?
 22 Do you know of any reason? That was the
 23 question.
 24 **A** I don't know the reason, but the only one I
 25 can possibly think of is that it didn't have that much

1 not have been aware as of July 1, 1958 or shortly
 2 thereafter that there were limits above which persons
 3 should not be exposed?
 4 **MR. WALKER:** Again, I object to the
 5 predicate of it because exposed as set out in
 6 that particular regulation.
 7 **Q** Okay. You may answer.
 8 **A** I don't know whether that was well enough
 9 known for them to be aware of it.
 10 **MR. WATERS:** Objection, non-responsive.
 11 Can you read that one back for me?
 12 (Record read.)
 13 **MR. WALKER:** (Unintelligible).
 14 **MR. WATERS:** Okay. You can do that after I
 15 have finished my question. If you want to ask
 16 him a question, you can. There is a question
 17 pending, if you have an objection, feel free to
 18 make it, if you we need to call Judge
 19 Landsburger, we will do it. But there is a
 20 question, it is a proper question, I asked it
 21 once, I had it read back a second time, you asked
 22 for it a third time, and I appreciate an answer
 23 to my question unless you have some further
 24 objection.
 25 **MR. WALKER:** Excuse me, I didn't mean to

1 publicity in the state.
 2 **MR. WALKER:** I object as being
 3 non-responsive.
 4 **MR. WATERS:** Do you want to look at that
 5 some more?
 6 **MR. KINGSLEY:** Can you identify it, there
 7 is an exhibit number in the lower --
 8 **MR. WATERS:** Yes. That's not a good way to
 9 identify it. It's better to identify it as the
 10 Texas 1958 TLV, because this means nothing, it's
 11 just a sticker on it. If you want a copy of it,
 12 we will get that to you.
 13 **MR. KINGSLEY:** Okay.
 14 Can we leave this out, we may have some
 15 questions about it later?
 16 **MR. WATERS:** All right.
 17 **BY MR. WATERS:**
 18 **Q** Do you recall, sir, that the threshold
 19 limit values with respect to asbestos were established
 20 not to address possibility or the probability of lung
 21 cancer, but rather to address the potential for an
 22 individual to develop asbestosis?
 23 **A** Yes, I recall that was the reason.
 24 **Q** The purpose of the TLV's, not just with
 25 asbestos but with other materials as well, was not to

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1 safeguard against the development of occupational
 2 cancers, but rather to safeguard against the
 3 development of nonmalignant diseases; is that correct?
 4 A To safeguard against nonmalignancies and to
 5 minimize problems associated with nuisance.
 6 Q Were you a member of the ACGIH yourself?
 7 A No, I was not.
 8 Q Let's look at the industrial hygiene
 9 digest, March of 1960, reference to "morbidity and
 10 pathology of lung cancer with asbestosis." Do you see
 11 that?
 12 A Yes.
 13 Q What is morbidity?
 14 A Illness.
 15 Q Here's another one, from the same
 16 abstract -- let me start over, same abstract series,
 17 Doctor, excuse me, Mr. Bonney, "Are silicosis and
 18 asbestosis predisposing causes of cancer of the
 19 lung?" Do you recall that article being reviewed
 20 during your tenure at Alcoa?
 21 A No, I don't recall.
 22 MR. KINGSLEY: Can you identify this one,
 23 too?
 24 MR. WATERS Sure, ARO 117.
 25 Q Let's take a look at what we will call

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1 these rings."
 2 Do you recall, sir, that the State of
 3 California instructed Alcoa not to do this work
 4 because it violated the threshold limit values?
 5 A I am not aware of that, no.
 6 Q Do you recall any concern from the State of
 7 California about the work that you were doing?
 8 A No.
 9 Q You don't recall this document at all?
 10 A Not at all.
 11 Q I take it that this was not among the
 12 documents that was provided to you by the Alcoa
 13 lawyers that they paid you to review and in
 14 anticipation of your testimony?
 15 A I don't recall seeing that document. No.
 16 Q Do you recall there being a problem
 17 generally in California because health officials were
 18 concerned that you were sawing marinite material and
 19 it was creating dust levels vastly in excess of
 20 threshold limits?
 21 A I don't interpret that from that letter,
 22 but to answer your question, no, I am not aware of
 23 that.
 24 Q Okay.
 25 And I take it you were not -- the Alcoa

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1 Alcoa 9, handwritten note from the corporate files
 2 dated 12-26-61, "Attached is a letter and photo from
 3 Massina showing a marinite hole saw for sawing rings
 4 in the machine shop. The State of California may be
 5 giving us a lack of consideration by our not being
 6 able to saw these rings. Would you please read the
 7 letter and give it your consideration, reference,
 8 Bonny's letter of November 13, 1961," it's signed by
 9 Mr. Allen.
 10 Firstly, did I read that correctly?
 11 A Yes, as far as I can see.
 12 (Thereupon, Alcoa Deposition Exhibit No. 9
 13 was marked for identification.)
 14 Q Do you recall, sir, in late 1961 that there
 15 was a concern from the State of California that the
 16 State of California would not allow Alcoa to saw this
 17 marinite material because of potential hazards from
 18 the asbestos?
 19 MR. WALKER: I am sorry, does the letter
 20 say that or --
 21 MR. WATERS: If he recalls that.
 22 A I am not sure I could interpret that way,
 23 too.
 24 Q "The State of California may be giving us a
 25 lack of consideration by our not being able to saw

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1 lawyers did not pay you to review some of the
 2 documents that you reviewed and generated
 3 concerning
 4 that issue?
 4 A How can I answer that; how can I say that?
 5 Q Well, you looked at these two boxes of
 6 documents, correct, over the course of the last
 7 several weeks, and I take it from your responses as we
 8 sit here today that those documents did not include a
 9 series of correspondence involving California health
 10 officials very concerned that you were overexposing
 11 Alcoa workers to asbestos dust.
 12 MR. WALKER: I am going to object, proper
 13 predicate hasn't been laid. There is no evidence
 14 that California officials were very concerned.
 15 MR. WATERS: We have got that, I just want
 16 to hear the answer before I start showing him the
 17 documents.
 18 MR. WALKER: Again, I am objecting to the
 19 question where a proper predicate hasn't been
 20 laid because it's not in evidence.
 21 Q You may answer the question, sir.
 22 A I was not aware of it, I didn't see that
 23 document.
 24 Q Those documents that we are about to look
 25 at concerning the Vernon plant and the health

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1 authorities concerns were not given to you by Alcoa to
 2 review to provide your testimony; is that correct?
 3 **MR. WALKER:** Excuse me, documents that he
 4 hasn't seen?
 5 **MR. WATERS:** Yes, because you didn't give
 6 them to him.
 7 **MR. WALKER:** No, I thought you said
 8 "documents we are about to review," you did have
 9 them reviewed?
 10 **MR. WATERS:** That's correct.
 11 **MR. WALKER:** I guess that calls for
 12 speculation because he doesn't know what
 13 documents you are about to give to him. I object
 14 on that ground.
 15 You can go ahead and answer.
 16 **Q** I will clarify the question for you.
 17 Sir, we are about to review for the benefit
 18 of the jury a series of correspondence from late 1961,
 19 early 1962 where California health authorities were
 20 very concerned that Alcoa was overexposing its workers
 21 to asbestos dust. Now, before we begin that review,
 22 do you have any independent recollection of that
 23 process?
 24 **MR. WALKER:** I am going to object to the
 25 proper predicate as not in evidence that the

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Works,

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1 California officials were very, very concerned.
 2 **A** I just can't recall anything of that
 3 nature.
 4 **Q** And in the several boxes of materials that
 5 were provided to you by the Alcoa lawyers for which
 6 you charged them \$125 an hour to review, am I correct,
 7 sir, that that did not include the series of
 8 communications that you were involved with from '61
 9 and '62 on this problem?
 10 **A** At least the two letters that you showed me
 11 I hadn't seen before. They were not presented.
 12 **Q** Well, sir, I apologize for interrupting.
 13 Will you agree with me, sir, that in the event that
 14 the Alcoa lawyers had provided you those materials,
 15 you would have seen them when you reviewed these
 16 boxes of documents and they would be somewhat fresh
 17 in
 18 your mind?
 19 **A** Very likely would.
 20 **Q** So can we presume from that, sir, that the
 21 Alcoa attorneys did not provide you these documents?
 22 **A** I think I have to wait and see what's
 23 coming up.
 24 **Q** Okay. That's fair enough.
 25 Let's start with Alcoa 10. From someone at
 the Vernon Works to someone else at the Vernon

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1 Mr. Regehr at the Vernon Works -- did you know
 2 Mr. Regehr?
 3 **A** Yes.
 4 (Thereupon, Alcoa Deposition Exhibit No. 10
 5 was marked for identification.)
 6 **Q** January 16, 1962, "Reference: Visit by the
 7 Vernon Health Department. On January 12 Mr. Hilton
 8 and Hougen of the Vernon Health Department visited
 9 the
 10 Pattern Shop to inspect facilities for sawing
 11 marinite. They made the following recommendations:
 12 That an exhaust systems similar to the one in the
 13 enclosed drawing be used to increase dust velocity.
 14 That an exhaust system be placed over the top of the
 15 table. That better sealing be made around the exhaust
 16 system. That the ducting system be reviewed to
 17 eliminate sharp curves and branch ducts. That brushes
 18 be installed on the saws to remove marinite adhering
 19 to the band saw blade.
 20 "Mr. Hilton stated that the exhaust systems
 21 on the other two band saws were quite good. He also
 22 said that our present method for cutting large
 23 marinite sheets outside was satisfactory."
 24 First of all, did I read that correctly?
 25 **A** Yes.
Q Do you recall, sir, that the maranite

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1 product was one that was used extensively at many
 2 Alcoa facilities in this time frame?
 3 A Yes, I was.
 4 Q And it was product that was made by the
 5 Johns-Mansville Corporation; correct, sir?
 6 A Yes.
 7 Q It was a product that was 50 percent
 8 asbestos?
 9 A The exact percentage, I don't know. It
 10 could well be.
 11 Q Next we have Alcoa 11, memo from Mr. Regehr
 12 to Dr. Cralley. That's your boss; correct, sir?
 13 A Yes.
 14 (Thereupon, Alcoa Deposition Exhibit No. 11
 15 was marked for identification.)
 16 Q And looks like TB initials are there, and
 17 you reviewed this, right?
 18 A No reason to doubt it.
 19 Q And it's regarding the visit by the Vernon
 20 Health Department.
 21 "Some time ago we equipped one of our
 22 Pattern Shop band saws with exhaust system for the
 23 purposes of sawing 'marinite.' After a number of
 24 experiments, we finally decided to discontinue this
 25 practice and have sent our work to outside shops. The

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1 A No, I do not agree. You have to use time
 2 weighted average, and then I would agree with you
 3 then.
 4 Q So this to you, Mr. Bonney, a professional
 5 industrial hygienist in 1951, this is perfectly safe,
 6 is that what you are telling this jury?
 7 MR. WALKER: Again, I'm going to object to
 8 the proper predicate hasn't been laid. What does
 9 "this" mean?
 10 Q You can answer.
 11 A I am not saying it's perfectly safe,
 12 whether it is or whether it isn't, I am saying it's
 13 within the limits.
 14 Q So you wouldn't be concerned by this
 15 figure?
 16 A I wouldn't be concerned. I think I would
 17 like to see it lower, just if it were pure nuisance
 18 dust, I would.
 19 Q Let's look at the next one. This one,
 20 30 million particles per cubic foot. Mr. Bonney,
 21 Alcoa, reason for concern?
 22 A That's higher than I would like to see, no
 23 question there.
 24 Q That's a dangerous level, isn't it,
 25 Mr. Bonney?

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1 attached datasheets indicate the reason for our
 2 decision."
 3 And the attached datasheets demonstrate, for
 4 example, here, 9.5 million particles per cubic foot
 5 and their analysis for asbestos fiber during the
 6 cutting, do you see that marinite sawing right there?
 7 A Yes.
 8 Q Okay. Now, you would agree with me, sir,
 9 that that is close to being twice the threshold limit
 10 value?
 11 A No. No.
 12 Q 9.5 is not close to twice five?
 13 A Well, this is a ten minute sample, and you
 14 are allowed excursions by at least twofold, so that
 15 would be within the top.
 16 MR. WATERS: Let me object to the
 17 non-responsiveness.
 18 Q Sir, will you agree with me that 9.5
 19 million particles per cubic foot is twice the five
 20 million particles per cubic foot stated to be the
 21 maximum allowable concentration?
 22 MR. WALKER: I'm going to object to asked
 23 and answered, you asked that question and he
 24 sufficiently answered it last time.
 25 Q You may answer, sir.

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1 A I wouldn't call it dangerous necessarily.
 2 Threshold limits aren't stop-go limits, they are as
 3 they are implied, thresholds of the area around where
 4 they might be concerned. When they're put in a
 5 regulation, that might be something different. When
 6 they were put into a regulation, that would be
 7 something different.
 8 Q So, for example, if these results were
 9 found at Rockdale, where we have already seen that
 10 Texas adopted the five million particle regulation,
 11 that would be a cause of greater concern, is that a
 12 fair statement?
 13 A It would be the same concern regardless of
 14 where the sample was taken.
 15 Q Okay.
 16 MR. KINGSLEY: When you talk about concern,
 17 are we talking about contemporaneous with the
 18 document? MR. WATERS: The question is what it
 19 is, i can only ask the questions. I am asking
 20 about his concern, he is expressing his response,
 21 if he wants to qualify it in terms of time, he is
 22 entitled to do that.
 23 Q No greater concern on your part, Mr.
 24 Bonney, regardless of whether or not a state has
 25 adopted as a regulation the threshold limit value; is

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1 that a fair statement?
 2 A That's right.
 3 Q Because it's the safety of the employees
 4 that's paramount; correct, sir?
 5 A That's right.
 6 Q It goes on to state, "Subsequent to receipt
 7 of Mr. Allen's memo, I had an opportunity to discuss
 8 the matter casually with Mr. Hilton of the Vernon
 9 Health Department, I assured him we were no longer
 10 sawing 'maranite' but might decide to do it again at
 11 some future time if there was a reasonable solution to
 12 the problem." Did I read that correctly?
 13 A Yes.
 14 Q Does it appear, sir, that Mr. Regehr, as a
 15 result of the concern expressed by the health
 16 department, stopped this process because it was
 17 considered to be unsafe?
 18 A It would appear that way.
 19 Q Fair enough. And Mr. Regehr communicated
 20 to headquarters at Alcoa through Mr. Cralley that at
 21 Vernon they had decided to stop sawing maranite
 22 because of the high values of asbestos dust that
 23 resulted from the operation. Mr. Cralley would have
 24 been aware of that, correct, sir, since he received
 25 this memo?

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1 in terms of TLV as to whether they were
 2 a one-time only TLV or eight hour TLV, and that's
 3 the substance of your question because it's
 4 indicated they were in excess of TLV which might
 5 have been an eight hour TLV. The proper
 6 predicate hasn't been laid.
 7 Q You can answer the question, sir.
 8 A Better read that one back.
 9 Q Let me ask it again, it was kind of long.
 10 You will agree with me, sir, that based on
 11 this letter, it would appear that Alcoa had in place a
 12 local exhaust system of some sort that was designed to
 13 suck away some portion of the dust; correct, sir?
 14 A Yes.
 15 Q And despite that fact, we still had values
 16 that you personally indicated you thought some of
 17 which would have been of concern; isn't that correct?
 18 MR. WALKER: I am going to object, assumes
 19 evidence not in fact as to whether it was being
 20 properly operated or things of that sort, what
 21 particular type it was.
 22 A Well, I know nothing about the ventilation
 23 system, per se, was it a good one or a bad one.
 24 Q Well, there was a ventilation system that
 25 was designed to remove some significant portion of the

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1 A Yes, he would be.
 2 (Thereupon, Alcoa Deposition Exhibit No. 12
 3 was marked for identification.)
 4 Q Next we have Alcoa No. 12. Looks like a
 5 72. Three-page letter addressed to Mr. Regehr at the
 6 Alcoa plant in Vernon on the letterhead of the City of
 7 Vernon Department of Public Health. Do you see that?
 8 A Yes.
 9 Q And it says, "Subject: Preliminary study
 10 of a proposed 'marinite' cutting operation in the
 11 pattern shop." Do you see that?
 12 A Yes.
 13 Q It says that, "The pieces of 'marinite'
 14 were cut on a band saw which is provided with a local
 15 exhaust connection to the lower pulley housing and a
 16 small hood." Do you see that there?
 17 A Yes.
 18 Q So the marinite that was cut and that
 19 resulted in these excessive values, these values that
 20 exceeded the TLV's, those results were even though or
 21 even despite the fact that they had localized exhaust
 22 there to assist in sucking away some portion of the
 23 dust?
 24 MR. WALKER: I object to the form of the
 25 question. The proper predicate hasn't been laid

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1 dust, sir, isn't that correct?
 2 A But they don't always do what they are
 3 supposed to do, so I don't know that you could say
 4 that it is a state-of-the-art type ventilation
 5 system.
 6 Q What we do know, sir, that is whatever
 7 local exhaust system they had that was presumably
 8 designed to suck away some of the dust either didn't
 9 work very well or the levels resulting from marinite
 10 cutting are extremely high, one or the other; correct,
 11 sir?
 12 A Or both.
 13 Q Or both. Fair enough.
 14 On page 2 the Department of Public Health
 15 makes a series of recommendations in the event Alcoa
 16 decides to again in the future cut this marinite
 17 board. Do you see that, it says "Recommendations"
 18 there?
 19 A Yes.
 20 Q And No. 5 there on page 3 is, "If large
 21 pieces of 'marinite' are cut out of doors, the
 22 operator should be provided with a respirator approved
 23 for use against toxic dust."
 24 Now, would you agree with that
 25 recommendation, sir, as of 1962?

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1 A Sure.
 2 Q Okay.
 3 And the reason is that cutting marinite can
 4 give off excessive amounts of asbestos dust; correct,
 5 sir?
 6 A The reason is that it generates too much
 7 dust, asbestos or otherwise.
 8 Q And so this author is recommending, and I
 9 am understanding that you agree that respirators
 10 ought
 11 to be given to people doing this operation that
 12 protect or are approved for use against toxic dusts,
 13 and that would include asbestos; correct, sir?
 14 A Yes.
 15 **MR. WALKER:** I am going to object, proper
 16 predicate hasn't been laid, that was addressing a
 17 specific method of cutting marinite, and your
 18 question was just addressed generally.
 19 Q All right. It goes on to state that the
 20 Department of Public Health is telling Alcoa the
 21 operation, and this, again, is cutting the marinite
 22 out of doors, should be conducted so that all dust
 23 produced will be blown away from windows, doors and
 24 air intakes so that other workers will not be exposed,
 25 so you see that?
 Now, would you agree, sir, with the

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1 Department of Public Health in 1962, when they
 2 express
 3 concern about other workers, not necessarily workers
 4 cutting the material, creating the dust, but other
 5 workers who might be in the vicinity or inside the
 6 building, actually, is that a concern that you at
 7 Alcoa would have shared?
 8 A This is standard industrial hygiene
 9 practice.
 10 Q And the reason -- am I correct, sir, that
 11 the reason for that standard industrial hygiene
 12 practice is so that bystanders who might be in the
 13 vicinity of the cutting of asbestos materials, so that
 14 they can avoid exposure?
 15 A Yes.
 16 Q And this piece of information is just as
 17 valid in 1952 as it is in 1962, isn't it?
 18 A Yes.
 19 (Thereupon, Alcoa Deposition Exhibit No. 13
 20 was marked for identification.)
 21 Q Next is Alcoa 13. It's again to
 22 Dr. Cralley from Mr. Regehr, discussing the same
 23 subject, appears that you reviewed this memo, as well?
 24 A Yes.
 25 Q Attached is a photostatic copy of a letter
 from the Department of Health which is

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1 self-explanatory, previous correspondence was sent to
 2 you in January, okay, this is really just a
 3 transition.
 4 (Thereupon, Alcoa Deposition Exhibit No. 14
 5 was marked for identification.)
 6 Q Then we have Alcoa 14, and this is when you
 7 appear to get involved. Now, let's just stop there.
 8 The documents we have looked at so far, that it
 9 appears were circulated to you, am I correct,
 10 Mr. Bonney, that as of that date, early 1962, you
 11 would have been aware that there was at least a
 12 potential hazard from sawing of the marinite asbestos
 13 material to those who might be sawing it as well as
 14 those those who might be in the vicinity?
 15 A Yes.
 16 Q Okay.
 17 And to the extent, sir, that you relied
 18 upon the threshold limit value, will you agree with
 19 me, sir, that that reliance would do nothing with
 20 respect to individuals who might develop cancer?
 21 A Again, let's look at a time frame. We
 22 would consider that today, yes, but when these
 23 incidents occur, no. It would be little more than a
 24 nuisance material, much like silica, but without the
 25 continuous exposure.

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1 Q Okay. You knew in the 1950's, or late
 2 1940's that the TLV's were not designed to stop the
 3 development of cancer; correct, sir? I think you have
 4 already told us that.
 5 A We knew only that it was supposed to
 6 prevent asbestosis, that was all we knew.
 7 Q You also knew as of the early 1950's that
 8 there was at least alleged to be a significant
 9 connection between asbestos and cancer based on the
 10 materials received from the IHF, et cetera; isn't that
 11 true?
 12 A Alleged, perhaps, significant, no.
 13 Q You had a substance that you knew at least
 14 it was alleged that there was peer reviewed articles
 15 in the literature stating or suggesting that asbestos
 16 could cause cancer, you knew that as of 1955 and
 17 Doll's study; correct, sir?
 18 A First, I am not sure all were peer
 19 reviewed. Second, like I referred to this earlier,
 20 Doll's study was not considered a definitive study
 21 until late in the '60's, when his study was confirmed.
 22 **MR. WATERS:** All right. Let me object as
 23 non-responsive. Let me ask her to read the
 24 question back.
 25 (Record read.)

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1 A I was aware that the Doll study said there
 2 was association of cancer with asbestos.
 3 Q Going back to Alcoa 14, which is your
 4 memorandum on the subject, you go on to tell the
 5 people in California that there may be several good
 6 reasons for ventilating the saw but that the decision
 7 to ventilate it cannot be made on the basis of its
 8 being a health hazard, do you see that?
 9 A Yes.
 10 Q And you advised Mr. Regehr at that time
 11 against spending the money to get this additional
 12 equipment because you didn't consider this to be a
 13 health hazard; is that a fair statement?
 14 A It appears what I am saying there.
 15 Q Okay. At the end of your communication you
 16 state, "Although it may not be important in this case,
 17 a realistic appraisal of potential hazards and the
 18 judicious use of threshold limit values may be
 19 extremely important in other instances. Whether or
 20 not costly controls are to be installed may depend on
 21 a careful analysis of each individual problem."
 22 Did I read that correctly?
 23 A Yes.
 24 Q Is that a fair summary of Alcoa's corporate
 25 policy as of February 8, 1962, when it comes to

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1 Q But that was part and parcel of your duties
 2 at least in the early 1960's, was it not, sir?
 3 A We would help our compensation people to
 4 determine if some occupational disease might be
 5 related or some disease might be related to the
 6 occupation.
 7 Q And you would also assist the legal
 8 department in that regard?
 9 A We had very little contact with the legal
 10 department at that time.
 11 Q Is that, sir, I quote again, "Another
 12 possible objective is that of being able to disprove
 13 alleged injury." Is that, sir, one of the purposes
 14 for your engagement by Alcoa in this case?
 15 MR. WALKER: Would you mind showing him
 16 what you are reading so he can understand you?
 17 You might want to read the full context of the
 18 paragraph.
 19 A This is a problem when you're picking
 20 out --
 21 MR. WALKER: Would it be helpful to you,
 22 Mr. Bonney, to read the entire letter?
 23 THE WITNESS: Very much so.
 24 Q All right. Do you remember the question?
 25 I will try to rephrase it.

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1 determining whether or not costly engineering or
 2 environmental controls should be installed?
 3 A The need for environmental controls would
 4 be based on our evaluation of the hazard. At the time
 5 I considered that was not a great hazard.
 6 Q Okay. Let me object as non-responsive.
 7 Can you read the question back to him?
 8 I was asking about the corporate policy.
 9 (Record read.)
 10 A I am not sure any policies of that nature
 11 existed at that particular time.
 12 Q That would have been your policy?
 13 A Our interpretation of that situation at
 14 that time.
 15 Q Okay. You indicated in the foregoing
 16 paragraph that another possible objective following
 17 the TLV's is that of being able to disprove alleged
 18 injury. Do you see that?
 19 A Yes.
 20 Q Was that something that you as an
 21 industrial hygienist had concern about on behalf of
 22 Alcoa to try to assist Alcoa in disproving that an
 23 individual's injury was the result of his employment?
 24 Was that in your job description?
 25 A Not in the job description, no.

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1 A No, let's go back again.
 2 Q Sure. You talk about in this paragraph
 3 about using the TLV's. Do you see that?
 4 Flexibly and sensibly.
 5 Then you go on to state that another
 6 possible objective in that regard is that of being
 7 able to disprove alleged injury. Do you see that?
 8 A Yes.
 9 Q And what you are saying there, I presume,
 10 is that, "Hey, if it appears that we are following or
 11 adhering to the threshold limit values, we may be able
 12 to disprove that a person's injury was caused by this
 13 exposure." That's what you are saying there; isn't
 14 it?
 15 A Yes. Yes.
 16 Q Okay.
 17 A I may have known that Mr. Regehr had a
 18 compensation responsibility, but in all of this, I
 19 have said that this does not exceed the threshold
 20 limit value, the exposures.
 21 Q I understand.
 22 MR. WATERS: I object to the non-responsive
 23 portion.
 24 Q You go on to state, "Without strict
 25 adherence to the TLV's, this latter, that is to say

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1 trying to disprove alleged injury, this latter end
 2 will be difficult to gain." Do you see that?
 3 A Yes.
 4 Q What you are saying is, "If we don't
 5 strictly adhere to the TLV's, it will be hard for us
 6 to disprove that injuries are caused by exposures at
 7 Alcoa;" isn't that what you are saying?
 8 A Not to the TLV which is eight hour time
 9 weighted average, but exceed the number that the TLV
 10 is printed on.
 11 Q You go on to state that, "The problem is
 12 likely to be almost as great even with strict
 13 adherence." Do you see that?
 14 A Yes.
 15 Q What you are saying there is, "We may have
 16 injuries anyway, the problem is likely to be almost as
 17 great even if Alcoa does strictly adhere to the
 18 TLV's." Isn't that what that says, Mr. Bonney?
 19 A All I am saying is there you can't prove a
 20 negative.
 21 MR. WATERS: Let me object as
 22 non-responsive.
 23 Q This is taking a long time, and I
 24 appreciate you are getting tired, and if you want to
 25 take a break, you let me know. But the way it is

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1 supposed to work is I am supposed to ask the questions
 2 and you are supposed to answer the questions I ask.
 3 They will have an opportunity to ask you a lot of
 4 additional questions down the road.
 5 Let's go back to this.
 6 "Without strict adherence to the TLV's,
 7 this latter end, that is to say disproving alleged
 8 injuries, will be difficult to gain, but the problem
 9 is likely to be almost as great even with strict
 10 adherence."
 11 Am I not correct, sir, that what you are
 12 stating is that even if Alcoa strictly adheres to the
 13 TLV's, you are still going to have injuries or alleged
 14 injuries?
 15 A No, that's not what I say there at all.
 16 Q What do you mean by that, sir? Maybe you
 17 can explain that to the jury because that's sure what
 18 it seems to mean to me.
 19 MR. WALKER: I object as being an
 20 argumentative question.
 21 Q What problem is likely to be almost as
 22 great even with strict adherence, what problem are you
 23 referring to there?
 24 A Trying to prove that you didn't cause
 25 injury to the employee.

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1 Q So your concern here is not with whether or
 2 not you are injuring an employee, your concern is
 3 whether or not you can prove or not prove that the
 4 injury was caused by the exposure, that's what you are
 5 focused on here?
 6 A That's the secondary focus. The first
 7 focus is we are not injuring our employee, and the
 8 second focus is we are not sure that you can prove
 9 someone who alleges an injury.
 10 Q So even if you strictly adhere to the TLV
 11 one hundred percent, every single Alcoa plant, nobody
 12 has an exposure over the TLV, if injuries result, you
 13 are not going to be able to prove that they weren't
 14 Alcoa's fault; isn't that a fair statement?
 15 A Not a fair statement. It's not likely that
 16 we will have any resulting harm to people if we do
 17 conform to the TLV's.
 18 Q Okay.
 19 MR. WALKER: How much longer do we have? A
 20 break sounds awful good.
 21 MR. WATERS: I am happy to do that. We are
 22 clearly not going to get finished today, so a
 23 break is fine.
 24 THE VIDEOGRAPHER: This ends tape two of
 25 the deposition of Thomas Bonney. We are off the

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1 record. The time is 2:46 p.m.
 2 (Recess taken.)
 3 THE VIDEOGRAPHER: This begins tape three
 4 of the deposition of Thomas Bonney. We are back
 5 on the record. The time is 3:00 o'clock p.m.
 6 (Thereupon, Alcoa Deposition Exhibit No. 15
 7 was marked for identification.)
 8 BY MR. WATERS:
 9 Q Mr. Bonney, let me show you what has been
 10 marked Alcoa 15, a letter from the Department of
 11 Health to Mr. Regehr dated February 13 continuing the
 12 sequence. And do you see where Mr. Regehr is told by
 13 the Department of Public Health that approximately
 14 50 percent of this marinite product is asbestos?
 15 A Yes.
 16 Q And does that comport with your approximate
 17 recollection of fact?
 18 A Yes.
 19 Q It goes on to state, "In view of the above
 20 analysis, we recommend that a Threshold Limit Value
 21 of
 22 5 million particles per cubic foot of air be used when
 23 designing controls and making studies of potential
 24 exposures to this material. This value is based on
 25 the asbestos content."
 Now, do you -- first of all, did I read

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1 that correctly?
 2 A Yes.
 3 Q Is that a recommendation that you,
 4 Mr. Bonney, agree with?
 5 MR. WALKER: If it would be helpful to read
 6 the whole letter, do that. If it wouldn't be,
 7 that's fine, including the first page.
 8 A I would say yes, I would agree with that,
 9 with the exception I would add an eight hour time
 10 weighted average, limit of five.
 11 MR. WALKER: That's at the time the letter
 12 was written?
 13 A '62.
 14 Q Would that have been your conclusion in
 15 1962?
 16 A Yes.
 17 (Thereupon, Alcoa Deposition Exhibit No. 16
 18 was marked for identification.)
 19 Q I show you Alcoa 16, which is a letter from
 20 Mr. Regehr on February 16, a couple days later, to
 21 Dr. Cralley referring to your letter of February 8.
 22 "We have just received another letter from the Vernon
 23 City Health Department which is attached and self
 24 explanatory." That's the one you just looked at. "We
 25 will do nothing further with respect to this subject

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1 Q What he said there and what you are
 2 agreeing is it doesn't matter if you have short-term
 3 numbers that are in violation of five million
 4 particles per cubic foot; isn't that correct?
 5 You have got to look at the whole eight
 6 hour day to be able to do that?
 7 A Yes. But I wouldn't say it doesn't matter.
 8 Q Okay.
 9 Well, he is indicating that it could be two
 10 or three times, that is to say ten or 15 million
 11 particles per cubic foot, and as long as it's just a
 12 few hours, it's not a problem; isn't that what he is
 13 saying?
 14 A That, in essence, is what he is saying,
 15 what the TLV committee says, as well.
 16 Q What he is saying and what the TLV
 17 committee is saying is that this is what is okay when
 18 we are talking about pneumoconiosis, like asbestosis;
 19 correct?
 20 A Yes.
 21 Q But as we have already stated, the TLV, and
 22 as you had indicated you knew beforehand, is that TLV
 23 was not designed to addresses the possibility of
 24 cancer; correct, sir?
 25 A That is right.

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1 until we have your comments on the attached letter."
 2 And it looks like you were copied on this. Do you see
 3 that?
 4 A Yes.
 5 (Thereupon, Alcoa Deposition Exhibit No. 17
 6 was marked for identification.)
 7 Q Mr. Cralley writes back, says that, "I
 8 certainly agree that a threshold limit value for a
 9 weighted eight hour repeated daily exposure would be
 10 five million particles per cubic foot;" correct?
 11 A Yes.
 12 Q "One of the things we were anxious to
 13 avoid, though, is misinterpretation of the meaning of
 14 the threshold limit values for pneumoconiosis
 15 producing dust. Certainly, atmospheric levels of 2 to
 16 3 times the threshold limit value for repeated daily
 17 exposures of 1 to 2 hours would be well within the
 18 interpretation of this limit provided the individual
 19 is not exposed to significant atmospheric levels of
 20 other pneumoconiosis-producing dust during the day."
 21 Did I read that correctly?
 22 A Yes.
 23 Q And that summarizes your opinion, as well;
 24 does it not?
 25 A Yes.

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1 Q Mr. Bonney, I did not get an opportunity
 2 earlier with you to run through the remainder of your
 3 career.
 4 Can you tell me, sir, what your title was
 5 in the late '60's?
 6 A Probably chief industrial hygienist then.
 7 Q As of the late 1960's, would it be fair to
 8 say that you were the senior industrial hygienist
 9 working for Alcoa?
 10 A Well, my supervisor, Lester Cralley, was
 11 still around for a while.
 12 Q When did he retire?
 13 A I think it was around '70 or so.
 14 Q And after he retired, what was your
 15 position?
 16 A I was chief.
 17 Q Your position did not change?
 18 A I became manager after that.
 19 That is essentially the same. Manager of
 20 industrial hygiene.
 21 Q And what was Mr. Rumberger's position when
 22 he was employed?
 23 A Okay. He was manager of industrial
 24 hygiene. I got out of the administrative end and went
 25 into the purely technical things.

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1 Q All right. When Mr. Rumberger was hired to
 2 be manager of industrial hygiene, am I correct, sir,
 3 that he did not have any previous industrial hygiene
 4 experience?
 5 A That is right.
 6 Q Was that a job that you wanted?
 7 A I beg your pardon?
 8 Q Was that a job that you wanted?
 9 A Oh, no, no, I stepped out of it.
 10 Q You didn't like the administrative aspect?
 11 A You got it.
 12 Q Was it difficult for Mr. Rumberger, who had
 13 apparently 20 or 30 years with the company, but no
 14 experience in industrial health and safety, was it
 15 difficult for him to step in and fill those shoes?
 16 A I don't think so. We complimented
 17 ourselves very well. He was a good manager and good
 18 learner.
 19 Q Would you agree with me, sir -- and what
 20 time did Mr. Rumberger come in, early '70's?
 21 A Probably '74, in that area.
 22 Q Would you agree with me that in terms of
 23 experience and expertise and practical knowledge, you
 24 were the senior industrial hygienist, the person with
 25 the most experience at Alcoa from the early 1970's

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1 until you retired in 1986?
 2 A Yes.
 3 Q You indicated earlier that you have been to
 4 the Rockdale facility on several occasions.
 5 A That's right.
 6 Q And you presumably have walked around and
 7 done some inspections and things of that nature?
 8 A Yes.
 9 Q We believe that the testimony in this case
 10 that there are literally miles of steam piping
 11 insulated with asbestos material at that facility.
 12 And my question is if that comports with your
 13 recollection of the facility?
 14 MR. WALKER: During his last inspection or
 15 can we have a time?
 16 MR. WATERS: Any inspection.
 17 A When you say literally miles of piping,
 18 steam piping, it doesn't follow with my recollection,
 19 no.
 20 Q Do you think there is a lot of steam piping
 21 there, or was when -- in your tenure?
 22 A My impression was that it would be a
 23 relatively small amount.
 24 Q Okay.
 25 Your impression, if I understand you

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1 correctly, from your visits to Rockdale, is that there
 2 was a small or limited amount of steam piping,
 3 insulated steam piping?
 4 A That is my impression. Yes.
 5 Q Did you ever go down there to look
 6 specifically at the asbestos problem?
 7 A No, I did not.
 8 Q Are you aware of any effort ever being made
 9 to quantify the amount of asbestos in that facility?
 10 A I know that in the '70's in all of our
 11 plants we were trying to find out exactly what was
 12 used and where it was used, and Rockdale would be
 13 included.
 14 Q Are you aware, sir, that in the 1950's,
 15 1960's and 1970's that Rockdale, it was necessary on a
 16 continuing basis for maintenance workers, pipefitters
 17 to both remove and install asbestos-containing
 18 insulation at Rockdale?
 19 A I have no personal knowledge of that.
 20 Q Are you aware of that, sir, regardless of
 21 your personal knowledge from your general
 22 understanding of the facility?
 23 A I am not sure what you are driving at. I
 24 understand the facility all right, what is going on
 25 there.

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1 Q And based on your number of trips you have
 2 made to the facility and whatever else you may have
 3 heard from other Alcoa employees, are you aware that
 4 it was necessary on a continuing basis and that there
 5 were employees designated to remove and repair and
 6 reinstall asbestos insulation during the time frame
 7 from the '50's to the '70's?
 8 A No. My personal knowledge is not such that
 9 I know the detail.
 10 Q Again, I am not asking you about your
 11 personal knowledge, I am not asking what you saw, I
 12 am
 13 not asking what you observed, I am asking if you
 14 are aware or have that understanding.
 15 A Well, I can say that steam pipes have to be
 16 covered and occasionally pulled apart, that's about as
 17 much as I can say.
 18 I apologize.
 19 Q And you were aware of that in the 1950's
 20 and 1960's that steam steam piping systems were
 21 insulated with asbestos?
 22 A Well, I don't know whether we were or
 23 weren't, we probably were, but again, it was never
 24 considered to be anything of a concern at that time.
 25 Q Would you also, sir, have been generally
 aware that as a part and parcel of utilizing asbestos

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1 insulation on steam piping systems, for example, that
 2 it would be necessary from time to time to cut or saw
 3 asbestos-containing products so that they could be
 4 fitted properly?
 5 A Yes. I was aware that this was the case.
 6 Q Am I correct that you do not have any
 7 recollection of Alcoa ever doing dust monitoring or
 8 dust studies prior to the 1970's in order to determine
 9 what levels of asbestos dust were created when that
 10 cutting and sawing took place?
 11 A That is correct.
 12 Q Now, do you recall, sir, that in 1964 there
 13 was an additional flurry of activity and concern about
 14 the cutting and sawing of marinite material?
 15 A Certainly was.
 16 Q There was, you recall that one?
 17 A Yes.
 18 Q Is it fair to say, sir, that before the
 19 commencement of your deposition today you had
 20 recalled
 21 the 1964 incident but did not recall the 1962 incident
 22 that we discovered?
 23 A Yes.
 24 Q All right. Fair enough.
 25 For the record, the last letter we
 discussed from -- memo from Mr. Cralley was Alcoa 17.

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1 Alcoa 18 is a memorandum from yourself to Mr.
 Thomas
 2 McClintock at Vernon, March 3, 1964. Do you see that?
 3 A Yes.
 4 (Thereupon, Alcoa Deposition Exhibit No. 18
 5 was marked for identification.)
 6 Q And it discusses marinite and says, "Since
 7 you have had similar problems in the past, you will
 8 probably be interested in the attached
 9 correspondence." Do you see that?
 10 A Yes.
 11 Q There are a couple of attachments,
 12 including one that's from Mr. Farrah at Industrial
 13 Hygiene Laboratory in New Kensington?
 14 A Yes.
 15 Q And to somebody's name I can't read,
 16 unfortunately, but it appears that you would have
 17 reviewed this document; is that correct?
 18 A Yes.
 19 Q Mr. Speer.
 20 Let me show you a March 9th attachment to
 21 Dr. Farrah from Mr. Speer at New Kensington
 22 regarding
 23 the marinite material. Do you see that?
 24 A Right.
 25 Q "Several of the men in the shop have
 expressed to the foreman that during the machining of

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1 the captioned marinite they experience some
 discomfort
 2 on account of clogging of the sinus and difficulty in
 3 breathing." Do you see that?
 4 A Yes.
 5 What was the date on that?
 6 Q March 9, 1964. A couple weeks before your
 7 memo attaching it.
 8 Second page Mr. Speer says, "Will you
 9 please arrange to have your division make this check
 10 for us? We will arrange to give you advanced notice
 11 when we will be machining marinite on the lathe, as we
 12 consider this the most objectionable operation. If
 13 there is additional information needed or if we can
 14 help in any way, please let us know, Mr. Speer,"
 15 signed by Mr. Speer.
 16 Now, did you know Mr. Speer?
 17 A Yes, I know him. Not well, but the name
 18 I know very well. I apologize.
 19 Q Do you recall or do you know why they were
 20 machining marinite on a lathe, cutting it on a lathe
 21 at the laboratory; any recollection of that?
 22 A Oh, yes. The laboratory had miniature
 23 operations that mimicked what they did at the plants.
 24 Q I take it from your earlier discussion that
 25 you would disagree with Mr. Speer when he says that

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1 this cutting of the marinite is an objectionable
 2 operation?
 3 MR. WALKER: Mr. Bonney, would it be
 4 helpful for you to read the entire letter?
 5 THE WITNESS: No, I don't think so. At
 6 least right now.
 7 A Yes, I would say that it was objectionable
 8 on the basis of what is on the front page there. The
 9 men were objecting to it. It irritated them, so by
 10 that reason alone, it was objectionable.
 11 Q Did you consider it a matter of some
 12 concern in that time frame?
 13 A Not of any significant health concern, no.
 14 Q Here's a two-page memo, Alcoa 18, from
 15 yourself to the industrial hygiene committee chairman
 16 regarding sawing of marinite. Do you see that?
 17 A Yes.
 18 Q Do you recall that there was some potential
 19 concern that there might be epoxy resins involved with
 20 this material?
 21 A Very clearly that was our initial concern.
 22 We felt that was of more concern than asbestos.
 23 Q Well, it's interesting you say that, but in
 24 the 1962 correspondence we just reviewed, there
 25 wasn't
 any reference of there being a concern about epoxy;

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1 do you recall that?
 2 Am I correct, sir, that in the 1962
 3 correspondence, the sole concern was the asbestos
 4 exposures that resulted from the operation?
 5 A Could well be, but we got a lot of
 6 misinformation about the composition of marinite
 7 which
 8 will be clarified in the next one.
 9 Q Did you, in fact, get clarification from
 10 Johns Manville that there were no epoxies in the
 11 material, and that the only health issue involving
 12 marinite had to do with the asbestos?
 13 A That's correct.
 14 Q Incidentally, am I correct that the
 15 marinite material was used until about 1980?
 16 A I don't know the exact cut off. I know in
 17 that time period they were trying to look for a
 18 substitute. Whether they found anything completely
 19 suitable, I am not sure now.
 20 Q Let me show you what will be Alcoa 23,
 21 appears to be a telegram from yourself to Mr. Beers at
 22 the Vernon Works concerning marinite, "Based on
 23 asbestos content alone an eight hour weighted
 24 exposure
 25 of 5 MMPC is an appropriate TLV. J-M's clarification
 might casue us to lower this value. We are not likely
 to raise it. We will keep you advised." Now, in your

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1 estimation, sir, why were you not likely to raise the
 2 five million particles per cubic centimeter value?
 3 A That was a fairly high threshold limit
 4 value, and in order to raise it, you would have to
 5 have something from the literature that says this
 6 material is pure as the driven snow before we raise
 7 it.
 8 Q And you recognized from the literature that
 9 there was a risk or a hazard from asbestos exposure
 10 which was why you accepted the TLV that was present;
 11 correct?
 12 A Yes. The risk of asbestosis.
 13 Q You also indicate, "J-M's clarification
 14 might cause us to lower this value." Do you recall
 15 what Mansville told you that suggested that perhaps
 16 the value was too high and should be lowered?
 17 A I draw a complete blank on that one.
 18 Q I take it from the general tone of the
 19 correspondence that there was a significant stir -- a
 20 significant concern among employees, perhaps some
 21 supervisors, about the potential hazards involved with
 22 the marinite exposure; is that a fair statement?
 23 A No, I don't recall that, no.
 24 Q Okay. Do you recall referring to -- let's
 25 see, "Continuously" -- "As you doubtlessly are aware,"

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1 this is Alcoa 27, "there exists in Alcoa a
 2 continuously expanding group with interest in the
 3 industrial hygiene aspects of the J-M product,
 4 marinite." Do you see that?
 5 A Yes.
 6 (Thereupon, Alcoa Deposition Exhibit No. 26
 7 was marked for identification.)
 8 Q And at the very end of the letter, "I'm
 9 sorry if our interest may appear disproportionate to
 10 the problem. However, through a series of unfortunate
 11 events we have bred and nurtured a Frankenstein
 12 monster. With understandable bias, I would prefer
 13 that the monster be eliminated. Can you help us out
 14 with this problem?" Signed by Mr. Bonney -- or, not
 15 signed, but that's you; right?
 16 A Yes.
 17 Q Do you recall referring to this as a
 18 Frankenstein monster?
 19 A I would like to see the whole letter before
 20 I respond sensibly to that.
 21 Q Well, okay. This is one of the documents
 22 that Alcoa asked you to review; isn't it?
 23 A I don't know whether it is or not.
 24 Q Fair enough.
 25 A If I look at it, I might be able to tell.

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1 Q Okay. Take a look at it.
 2 Can you answer my question?
 3 A The Frankenstein monster reference was to
 4 the complaints of the respiratory irritation.
 5 Q Does reading the entire letter refresh your
 6 recollection?
 7 A Yes, it sure does.
 8 Q Okay. "With understandable bias, I would
 9 prefer that the monster be eliminated. Can you help
 10 us out with this problem?" Now, in making that
 11 request of the Johns-Manville Corporation, sir, you
 12 talk about your bias. What was your bias in this
 13 case, to try to set the employees at ease about a
 14 potential hazard? Is that what you are referring to
 15 there?
 16 A Yes. I am not sure what I was referring to
 17 on the bias.
 18 Q Okay.
 19 A I know I was relieved because of their
 20 response.
 21 (Thereupon, Alcoa Deposition Exhibit No. 27
 22 was marked for identification.)
 23 Q Okay. And, in fact, the response came a
 24 number of days later from the Johns Manville
 25 Corporation. At Alcoa 27, do you see where it's

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- 1 A I am sorry. I have to find out how that
2 was phrased.
- 3 Q Let me ask you another question. Where the
4 author, Mr. Semken, states "There have been reports of
5 an increased incidence of lung cancers in persons with
6 asbestosis," am I correct, sir, that he is presumably
7 referring to the same type of reports that we have
8 already discussed that were seen in the literature
9 back in the 1940's and 1950's?
- 10 A I can only speculate that that might be the
11 case.
- 12 Q Are you aware of any other reports of
13 increased incidence of lung cancer other than the ones
14 that we have discussed already today?
- 15 A No, I don't.
- 16 Q I show you another industrial hygiene
17 digest from May of 1964 and ask if you will read with
18 me an article entitled, "Asbestos Exposure and
19 Neoplasia" by Dr. Selikoff. Do you see that?
- 20 A Yes.
- 21 Q Do you recall Selikoff -- articles from
22 Dr. Selikoff in the 1950's and 1960's?
- 23 A Yes.
- 24 Q And --
- 25 A '60's, I don't know about the '50's.

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- 1 A Yes.
- 2 Q It talks about "Of the persons studied,
3 three of the pleural tumors were mesotheliomas. There
4 was also one peritoneal mesothelioma. Four
5 mesotheliomas in a total of 255 deaths is an
6 exceedingly high incidence for such a rare tumor."
7 First of all, did I read that correctly?
- 8 A Yes.
- 9 Q Then he goes on to talk about an
10 unexpectedly large number of men died of cancer of the
11 stomach, colon or rectum. Do you see that?
- 12 A Yes.
- 13 Q Do you recall, sir, in the early 1960's
14 personally becoming aware of this disease,
15 mesothelioma, that was associated with asbestos
16 exposure in insulation workers?
- 17 A I just don't know when I was aware, but it
18 had to be certainly in the late '60's.
- 19 Q Well, this is 1964.
- 20 A From that period, from the mid '60's to the
21 '70's, we became increasingly concerned about asbestos
22 as our knowledge increased.
- 23 Q Certainly you will agree with me as of May
24 1964, when this abstract would have crossed your desk
25 that Alcoa was put on notice that insulation workers

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- 1 Q Fair enough. Do you recall that he was
2 acknowledged to be a very significant, if not the
3 preeminent researcher, concerning the hazards of
4 asbestos?
- 5 A Very well known.
- 6 Q And in this abstract, it indicates
7 "Building trades insulation workers have relatively
8 light intermittent exposure to asbestos." Did I read
9 that correctly?
- 10 A Yes.
- 11 Q Would you agree with me, sir, that to the
12 extent Alcoa employees had exposure to asbestos, you
13 would have in that time frame characterized it as
14 being relatively light and intermittent?
- 15 A I would have, but whether that's the same
16 light, intermittent as Selikoff refers to, I don't
17 know. No basis for that.
- 18 Q Fair enough. You certainly were aware in
19 1964 that Alcoa employed individuals whose duties had
20 to do with insulation; correct, sir?
- 21 A Yes. I don't think they were full time
22 insulation workers, but we did have people who
23 installed insulation.
- 24 Q And who also were involved with replacing
25 or tearing out, ripping out old insulation?

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- 1 with relatively light intermittent exposure to
2 asbestos were at a significantly increased risk of
3 developing mesothelioma?
- 4 A We were aware of the results of that one
5 investigator, yes.
- 6 MR. KINGSLEY: Can you identify that for
7 the record?
- 8 MR. WATERS: ARO 140.
- 9 MR. KINGSLEY: 140?
- 10 MR. WATERS: Yes.
- 11 MR. WALKER: Object as being
12 non-responsive.
- 13 Q Let's look at the industrial hygiene digest
14 from September 1966, and in particular, an abstract
15 entitled, "Cancer of the Lungs and Other Diseases
16 after Exposure to Asbestos Dust." Do you see that?
- 17 A Yes.
- 18 MR. KINGSLEY: What is that, for the
19 record?
- 20 MR. WATERS: ARO 153.
- 21 Q And then let's look at January 1966
22 industrial hygiene digest, two articles on the same
23 page. One is "Diffuse Mesothelioma of the Pleura and
24 Asbestos." Do you see that?
- 25 A Yes.

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1 stated, "I am truly story that I apparently added to
 2 the breeding and nurturing of the Frankenstein
 3 monster, which is the potential health hazards of our
 4 Molten Marinite product." In fact, Dr. Smith has
 5 picked up your language here, hasn't he?
 6 A He certainly has.
 7 Q And he goes on to state, "I do hope that
 8 this information will help you to allay the fears of
 9 some of your people and finally lay the Frankenstein
 10 monster to rest; however, if you have any other
 11 problems or worries, please do not hesitate to contact
 12 me." Okay.
 13 Now, in response to that, you relay that
 14 information that there wasn't a problem and we didn't
 15 need to be overly concerned about marinite at least
 16 from the epoxy resin side, you relayed that
 17 information throughout the corporation, didn't you?
 18 A Yes, sir.
 19 Q And, in fact, you sent out a memo, which is
 20 Alcoa 28, dated September 25, 1964, discussing the
 21 whole issue of epoxy resins, and at the end you said,
 22 "We wish to emphasize that the absence of epoxies in
 23 marinite does not necessarily mean the elimination of
 24 the need for ventilation. It means merely that the
 25 short-term penalties one might pay for not having

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1 Mr. Chrisco at Rockdale, copy to Dr. Cralley, April 9,
 2 1965. Looks like you reviewed it and crossed your
 3 name off; correct?
 4 A Right.
 5 (Thereupon, Alcoa Deposition Exhibit No. 30
 6 was marked for identification.)
 7 Q And on page 2, there is a discussion of the
 8 use of asbestos in potlining operations. Do you see
 9 that there?
 10 A Yes, sir.
 11 Q "The following comments are in response to
 12 a request for information on this subject by potlining
 13 personnel: Asbestosis, a disease resulting only from
 14 breathing asbestos dust, is now recognized as being a
 15 significant industrial exposure hazard." Let me ask
 16 first if I read that correctly.
 17 A Yes.
 18 Q As of April 9, 1965, were you, Tom Bonney,
 19 in agreement with the author of this memoranda that
 20 asbestos was recognized as being a significant
 21 industrial exposure hazard?
 22 MR. WALKER: Do you want to read the entire
 23 letter? You can.
 24 THE WITNESS: No, I think I recall that.
 25 MR. WALKER: Okay.

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1 appropriate control measures are lessened." Did I
 2 read that correctly?
 3 A That's right.
 4 (Thereupon, Alcoa Deposition Exhibit No. 28
 5 was marked for identification.)
 6 Q And what you are saying is there, since we
 7 don't have epoxy resin in the material, we don't have
 8 to worry about short-term health problems resulting
 9 from exposures to the dust; correct?
 10 MR. WALKER: Again, if you feel the need to
 11 read the entire thing, go ahead.
 12 A What I was saying there was that the
 13 short-term hazard would be eliminated. It would be
 14 non-existent since the epoxy was not present. The
 15 only thing you would have to worry about was the
 16 possible long-term exposures to something such as
 17 asbestos.
 18 Q Right. Okay.
 19 And, in fact, marinite continued to be an
 20 issue of some concern because of the asbestos in the
 21 material throughout the remainder of the time that it
 22 was used by Alcoa; isn't that correct?
 23 A Yes, it was a concern. Right.
 24 Q I will show you what we will mark as
 25 Alcoa 30. This is from Mr. Semken at Rockdale to

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1 A Yes. I would say significant, but with the
 2 reservation in certain industries. I think I would
 3 qualify that.
 4 Q Would you think it would be a significant
 5 industrial exposure hazard for people exposed in
 6 potlining operations, like this Mr. Semken seems to
 7 think?
 8 A No, I would not think so.
 9 Q Okay. "Even intermittent exposures to high
 10 concentrations, over long periods of time, can result
 11 in varying degrees of asbestosis according to
 12 individual susceptibility. There have been reports of
 13 an increased incidence of lung cancers in persons with
 14 asbestosis." Did I read that correctly?
 15 A Yes.
 16 Q And he is referring to the same reports
 17 that you have seen as early as the 1940's and 1950's
 18 concerning possible cancer connection; correct?
 19 A Yes.
 20 MR. WALKER: I am going to object. That
 21 calls for speculation, unless you specifically
 22 know that.
 23 Q Can you again answer the question, because
 24 I think the objection treaded on you? Was your answer
 25 yes, sir?

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1 Q And "Relation Between Exposure to Asbestos
2 and Mesothelioma." Do you see that?
3 A Yes.
4 Q Now, by the time these materials are
5 available and reviewed by folks like yourself at
6 Alcoa, will you agree with me, sir, that already there
7 is a pretty significant body of literature that is
8 telling folks like Alcoa asbestos causes this
9 otherwise rare type of cancer?
10 A There is a significant body of literature
11 building, but you can take another contaminant --
12 many
13 other contaminants with a lot of other exposures and
14 some of which are confirmed and some are not.
15 Q How many people have to die, how many
16 people have to suffer and die from this disease before
17 you at Alcoa decide something needs to be done?
18 MR. WALKER: Object as being argumentative.
19 A We are using our best judgment of the best
20 scientific consensus available to us, and we acted on
21 that.
22 Q Objection, non-responsive.
23 Can you answer my question?
24 MR. WALKER: I don't think it's answerable.
25 I am going to object to it because it's strictly
argumentative.

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1 MR. WATERS: If he wants to state he can't
2 answer it, then we can have that as his answer.
3 MR. WALKER: Well, he stated an answer
4 already. You said he can fully answer the
5 question, he fully did.
6 MR. WATERS: It was non-responsive.
7 Q How many people, sir, in your estimation
8 have to die before a company like Alcoa steps up to
9 the plate and starts providing protection for
10 asbestos?
11 MR. WALKER: I am going to object as being
12 asked and answered, and if your last answer was
13 sufficient, then just state that.
14 MR. WATERS: I want an answer on the
15 record.
16 MR. WALKER: There is an answer on the
17 record.
18 MR. WATERS: He tried to say, "I can't
19 answer that," you interrupted him.
20 MR. WALKER: I am going object to that. I
21 don't think that's what the record reflects.
22 Q Can you answer my question, sir?
23 A There is no answer to that.
24 MR. KINGSLEY: Can you identify that
25 January '66 IH digest?

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1 MR. WATERS: ARO 149.
2 Q We talked sometime earlier about the
3 National Safety Council. Do you recall that
4 discussion?
5 A Yes.
6 Q Now, were the National Safety Council
7 materials available to you as an industrial hygienist
8 or were they kept somewhere else by the safety
9 department?
10 A I seldom saw anything coming out of
11 National Safety Council.
12 Q Who would have had that material available,
13 who would have reviewed that material?
14 A If anybody received it, it would have been
15 the safety director.
16 Q Okay. Let me show you an article from the
17 1967 National Safety Congress entitled "Occupational
18 Health in the Construction Industry." Do you see
19 that?
20 A Yes.
21 Q It states, "Articles appear from time to
22 time in the American literature on specific health
23 hazards such as lung cancer in asbestos insulators,"
24 Do you see that?
25 A I don't.

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1 Q That's all right. I should have held it
2 closer for you.
3 A I see that, yes.
4 Q Would you agree with me, sir, that if this
5 document was received by the safety department, that
6 they would have been in possession of an independent
7 basis for understanding that asbestos could cause lung
8 cancer in insulators?
9 A You are asking whether they would know as
10 contrasted to our knowing?
11 Q Sure. If they read that, could they
12 understand that?
13 A I am sure they could, if they read it.
14 Q Let me show you, from the next page of the
15 article, I will try to get a little closer here "Yet
16 data coming in regularly from studies of men working
17 around asbestos dust leave very little doubt that gun
18 operators and other craftsmen in the area are being
19 subjected to the risk of asbestosis and lung cancer."
20 Did I read that correctly?
21 A Yes.
22 Q And what that means, does it's not, sir, is
23 that it's not just the person who is creating the
24 dust, it's the ones in the vicinity who may also be at
25 risk for developing cancer from asbestos exposure?

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1 **MR. WALKER:** Mr. Bonney, would it be
 2 helpful for you to read the entire article or at
 3 least up to that point to give an opinion as to
 4 what the author is meaning?
 5 **THE WITNESS:** I might look at that just a
 6 little closer.
 7 **Q** The question doesn't require you to read
 8 anything. We read it, and I asked you your opinion on
 9 that.
 10 **MR. WALKER:** Again, are you asking him to
 11 give an opinion of what the writer intends to
 12 convey without him reading that?
 13 **MR. WATERS:** I am asking what it conveys.
 14 Do you need my question read back? Do you recall
 15 my question?
 16 **MR. WALKER:** I recall your question as
 17 asking what the author of that article intended
 18 to -- the opinions he intended to convey.
 19 **MR. WATERS:** Fine. We will ask the
 20 question a different way.
 21 **MR. WALKER:** Okay.
 22 **Q** You have read this along with me, haven't
 23 you, sir?
 24 **MR. WALKER:** Read what?
 25 **A** That portion.

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1 **Q** You have read that portion, and what that
 2 states is that the other people in the area are being
 3 subjected to the risk of asbestosis and lung cancer.
 4 Did I read that correctly?
 5 **A** That's right.
 6 **MR. WALKER:** The question was, did you read
 7 it correctly.
 8 **MR. WATERS:** And he answered it. I don't
 9 need you to repeat my questions after he answers
 10 them.
 11 **MR. WALKER:** I am sorry. The only thing,
 12 Andy, you asked two questions. I wanted to make
 13 sure he was answering the second question and not
 14 the first question.
 15 **Q** My question now is, sir, if you read this
 16 in, 1967 this information that was available to Alcoa
 17 and received by Alcoa, would this tell you that not
 18 only the persons who worked with the material but the
 19 ones that work around it are also at risk for
 20 developing lung cancer?
 21 **MR. WALKER:** And my objection to that is
 22 that I think he said that he would like to read
 23 the entire article before he ventured an opinion
 24 on what this author --
 25 **MR. WATERS:** I am not going to spend the

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1 entire time to have him read the article. The
 2 question is as to this portion I read to him, and
 3 if he can't answer the question, he can so state.
 4 **MR. WALKER:** If you think you need to read
 5 the entire article, you need to say that. If you
 6 don't need to read the entire article, then
 7 please do.
 8 **A** For that, I don't think I do. For that
 9 particular job, yes, you have to be concerned with the
 10 people around the man performing the job, as well.
 11 **MR. KINGSLEY:** Are we going to make that an
 12 exhibit or --
 13 **MR. WATERS:** 195.
 14 **MR. KINGSLEY:** That's ARO 195.
 15 **MR. WATERS:** It doesn't say ARO, but I
 16 forgot to put that on there.
 17 **MR. KINGSLEY:** 195?
 18 **MR. WATERS:** Yes.
 19 **Q** Again from the National Safety Council
 20 1967, "At the present time, it's generally agreed that
 21 the most important sources of industrial disease of
 22 the lungs are free or uncombined silica and asbestos."
 23 Firstly, did I read that correctly?
 24 **A** Yes.
 25 **Q** And do you agree or disagree with this

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1 statement with respect to the state of knowledge in
 2 1967?
 3 **A** Yes, they were the predominant ones.
 4 **MR. KINGSLEY:** Just for the record, that
 5 was from the same article; right?
 6 **MR. WATERS:** Uh-huh.
 7 **Q** Is one of the reasons, sir, that you
 8 considered asbestos along with silica to be the two
 9 most significant industrial hazards in this context,
 10 because by 1967, you recognized the significant cancer
 11 risk that was associated with asbestos?
 12 **A** No. Asbestosis was my basic concern.
 13 **Q** So even just based on asbestosis, assuming
 14 that was the only disease that asbestos caused, you
 15 considered in 1967 asbestos along with silica to be
 16 the two biggest industrial hazards out there?
 17 **A** Not the two biggest hazards, per se, in the
 18 mineral -- among the mineral exposures, and would be
 19 confined to certain industries in which there are
 20 exposures.
 21 **Q** So for industry -- as of 1967, for
 22 industries where asbestos and silica exposures took
 23 place, you would consider those to be very significant
 24 health hazards?
 25 **A** Yes. And --

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1 Q Regardless of the issue of whether or not
2 silica or asbestos can cause cancer?
3 A That's right, yes.
4 Q Will you agree with me, sir, that the
5 nature of the risk, the significance of the hazard, is
6 tremendously enhanced once you recognize that it also
7 causes cancer?
8 A Oh, yes, and this is where we were in that
9 learning phase, between let's say '65 and '70, we were
10 reading these.
11 Q Well, didn't your learning phase start back
12 in the late 1940's or early 1950's, when you began to
13 read articles over and over again talking about
14 asbestos causing lung cancer?
15 A These are not over and over again. If you
16 pick them out, yes, they concentrate, but this is in
17 the midst of a lot of literature. A lot of studies
18 are good, a lot of them are not so good, and one has
19 to evaluate the totality of information you have on
20 hand.
21 Q I take it that you are not able to quote
22 for me or to cite for me a single study from 1950 to
23 1970 that says asbestos does not cause cancer? You
24 are not able to do that because there aren't any, are
25 there?

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1 A Sure. One, I think Brown did a study of
2 crysotile workers in Canada. There was one, a
3 McCormick, and I think even in the '70's, so you do
4 have these pluses and minuses.
5 Q Those are studies that are sponsored by
6 industry, aren't they, sir?
7 A I wouldn't know who they were sponsored by.
8 (Thereupon, Alcoa Deposition Exhibit No. 31
9 was marked for identification.)
10 Q Fair enough.
11 Let's look at Alcoa 31, memo from you,
12 Tom Bonney, to Mr. Parsons at Warrick. What state is
13 that, Rhode Island?
14 A No. That's Indiana.
15 Q Indiana, okay. May 23, 1966. "This is the
16 latest and most accurate information we have
17 concerning marinite. I don't think that there is
18 anything further that can be said. Considering the
19 earlier misinformation, we have already said too much.
20 Regards Thomas Bonney."
21 Do you have an independent recollection of
22 the circumstances surrounding this communication,
23 one
24 way or the other?
25 A Yes. That refers to the marinite
newsletter that clarified the absence of epoxy in the

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1 marinite.
2 Q I take it that in response to Mr. Parsons'
3 request for information, you didn't think it was
4 necessary, as of May 1966, to advise him of the
5 potential asbestos hazard in that material?
6 A Oh, in the newsletter?
7 Q In this letter.
8 MR. WALKER: Excuse me. I think he was in
9 the middle of his answer. He said "in the
10 newsletter."
11 Q Go ahead. I apologize.
12 A In the newsletter, we cited the presence of
13 asbestos, but I didn't do it there.
14 Q Objection to everything, other than "I
15 didn't do it there," as being non-responsive.
16 Looking at Alcoa 32 from Mr. Parsons at
17 Warrick to Mr. Whitehead, copy to Dr. Cralley, "The
18 Industrial Hygiene committee has discussed the dust
19 problems associated with Marinite handling in several
20 of its meetings." Did I read that correctly?
21 A Yes.
22 (Thereupon, Alcoa Deposition Exhibit No. 32
23 was marked for identification.)
24 Q Will you agree with me, sir, that as of
25 this date, May 2, 1967, the only problems of which you

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1 were aware would be related to the asbestos content of
2 this material?
3 A Yes.
4 Q "It has often been stated that the
5 ventilation systems would be improved. While some
6 progress has been made, the job is obviously not yet
7 complete." Did I read that correctly?
8 A Yes.
9 Q Do you have a recollection, sir, that
10 between 1962 and 1967, there were efforts made at
11 some
12 of the facilities to provide ventilation systems for
13 this material so that men would not be exposed to the
14 dust?
15 A Yes, I am, but they improved the
16 ventilation on a lot of dust generating equipment,
17 sawing equipment, machinery.
18 Q In any event, five years after the initial
19 concern about asbestos in the marinite product, this
20 gentleman is saying, "the job is obviously not yet
21 complete." Do you see that?
22 A Yes.
23 Q Any explanation that you can give us for
24 why five years after identification of a significant
25 hazard, the job hasn't been done?
A I think they have to consider it a

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1 significant hazard before it would be acted upon
 2 properly. Other than that, I can't get into Parsons'
 3 head.
 4 Q Fair enough. He does go on to state that
 5 "We would like to have you give us a firm target date
 6 for completion of this job because the dust itself is
 7 a health hazard." Do you see that?
 8 A Yes.
 9 Q He doesn't say it may be a health hazard,
 10 he doesn't say it could conceivably be a health
 11 hazard, he says it is a health hazard, doesn't he?
 12 A That's what he says.
 13 Q And you disagree with that, don't you?
 14 A No, I don't. I don't think he was careful
 15 in his choice of words when he was writing this quick
 16 memo.
 17 Q Mr. Parsons is the chairman of the
 18 industrial hygiene committee at Warrick, I presume?
 19 A Right.
 20 Q And what he is concerned about is that the
 21 men who work at his facility are being -- continuing
 22 to be exposed to asbestos in the process of sawing
 23 marinite, because Alcoa has yet to provide the
 24 ventilation systems that he has requested?
 25 A The engineers.

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1 Q Well, they are Alcoa employees, aren't
 2 they, sir?
 3 MR. WALKER: You need -- Mr. Bonney, do you
 4 need to look at that entire letter again or --
 5 Q You are welcome to.
 6 A Well, the men were using respiratory
 7 protection which gives them protection until the
 8 engineering controls were effective.
 9 Q All right, sir. Okay. Just a few more
 10 questions and we will wrap it up for today.
 11 Let's talk a little bit more about
 12 Rockdale, and this will be Alcoa 33. Here's a memo
 13 from Mr. Semken again to Dr. Cralley, dated
 14 January 12, 1968, and it indicates it is a
 15 confidential memo. Do you see that?
 16 A Yes.
 17 (Thereupon Alcoa Exhibit No. 33 was marked
 18 for identification.)
 19 Q Do you know why these memorandum -- some of
 20 them are marked confidential? Do you recall?
 21 A No. Depends on the individuals.
 22 Q All right. "One of our brickmasons, who
 23 regularly works on potroom crucible and furnace
 24 liner repairs, is greatly concerned about the hazard
 25 to his and his family's health, from his exposure to

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1 asbestos dust. He has clipped some recent articles
 2 from the Austin Statesmen on the subject and sent
 3 them
 4 to his foreman. I have not personally seen the
 5 articles, but supposedly they relate the hazard of
 6 cancer of the chest cavity from even short and
 7 intermittent exposures to asbestos." Now, what he is
 8 referring to there is mesothelioma, isn't he, sir?
 9 A That would be fair.
 10 Q "One article also relates that a workman's
 11 wife died from a similar cancer of the chest cavity
 12 after washing the workman's clothes". Now that's the
 13 household type of exposure case we talked about;
 14 correct?
 15 A That's the one you cited earlier.
 16 Q So here in January of 1968, at Rockdale,
 17 Mr. Semken is acknowledging and telling headquarters
 18 we have got information that tells us people are dying
 19 from this stuff just from washing their husband's
 20 clothes? That's what this shows, doesn't it?
 21 A That's how it says, yes.
 22 Q "The article further states that the cancer
 23 is terminal, generally within one year of the time of
 24 detection.
 25 "Several times a week this man dry-mixes
 asbestos shorts and Lumnite cement used in the

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1 crucible. We would appreciate having your comments,
 2 as soon as possible, as to what this man should be
 3 told, and also your suggestions as to what additional
 4 protective devices we should consider." Did I read
 5 that properly?
 6 A Yes.
 7 Q And who was Mr. Semken; was he the plant
 8 manager?
 9 A No. He was the industrial hygiene
 10 representative.
 11 MR. WATERS: What was that number?
 12 MR. WALKER: 33.
 13 MR. KINGSLEY: 33.
 14 A May I read those comments when you are
 15 finished with it?
 16 Q Sure.
 17 A In this case, the exposure was the
 18 crocidolite, and we didn't have exposures to
 19 crocidolite in Alcoa.
 20 Q Let me object to the non-responsive
 21 comment.
 22 (Thereupon, Alcoa Deposition Exhibit No. 34
 23 was marked for identification.)
 24 Q Let me show you Mr. Cralley's --
 25 Dr. Cralley's response to Mr. Semken, Alcoa 34,

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1 (Thereupon, Alcoa Deposition Exhibit No. 35
 2 was marked for identification.)
 3 Q Was Dr. Richards the plant physician
 4 hired -- retained by Alcoa?
 5 A Yes.
 6 Q This indicates Mr. Semken was going to have
 7 Dr. Richards talk to this gentleman?
 8 A Yes.
 9 Q The article itself was received by
 10 Dr. Cralley back in January of 1968 entitled "New
 11 Cancer Cause Puzzle to Doctors." Do you see that?
 12 A Yes.
 13 Q "A fatal cancer of the chest and abdominal
 14 cavities is cropping up among the nation's asbestos
 15 workers." Do you see that?
 16 A Yes.
 17 Q And, of course, by January of 1968 you were
 18 already familiar with this fact, weren't you? That is
 19 to say that this disease was cropping up among
 20 asbestos workers? We have seen some instances of that
 21 already?
 22 A We interpret this as cropping up among
 23 asbestos workers who were exposed to crocidolite not
 24 chrysotile.
 25 Q Objection to the non-responsive portion.

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1 "Ironically, those stricken with the deadly
 2 disease include a nurse whose father worked in an
 3 asbestos plant and a man who handled asbestos for no
 4 more than a month while he insulated the plumbing in
 5 his own house." Did I read that correctly?
 6 A Yes.
 7 Q What do you think about that? Is that kind
 8 of unusual? Does that indicate to you that this is a
 9 highly toxic, highly carcinogenic material?
 10 A Not something that I would read in a
 11 newspaper, no. I would not regard that as highly as
 12 if it were in a journal.
 13 Q So when this article came across your desk,
 14 as we see that it did, do you see that?
 15 A Yes.
 16 Q You said, "Aw, it's just in a newspaper, I
 17 am not going to be concerned about that"; is that your
 18 reaction to this article then?
 19 A No. My reaction is what Dr. Cralley's was.
 20 Q Does this refresh your recollection, sir,
 21 that at least as early as January 1968, you were aware
 22 that there were cases reported, household exposures
 23 caused mesothelioma?
 24 A Yes. This jogs my memory that that -- such
 25 was the case, but we felt it didn't apply to us, the

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1 manner in which we handled our asbestos.
 2 Q Objection to the non-responsive portion.
 3 Additionally, sir, does this jog your
 4 memory that as early as January of 1968, you were
 5 aware of a case where a man who handled asbestos for
 6 no more than a month had developed this deadly form
 7 of
 8 asbestos cancer?
 9 A I was not aware of anything like that.
 10 Q Does this jog your memory that you were
 11 made aware when you read this article?
 12 A I don't remember reading that particular
 13 article, no, I don't.
 14 Q Well, this indicates that you read it,
 15 doesn't it, sir? You received it?
 16 A Yes. If that were attached, I probably
 17 read it, but I just don't recall it.
 18 Q It talks about a study conducted by the
 19 Pennsylvania State Department of Health. That's here
 20 where Alcoa is located, isn't it, sir, Pennsylvania?
 21 A In Pennsylvania?
 22 Q Yes, sir.
 23 A Yes.
 24 Q "A blind study to find out how mesothelioma
 25 might be affecting the more than 5,000 asbestos
 workers scattered around the state.

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1 "To 162 hospitals, they sent a
 2 questionnaire asking the hospitals to report all
 3 mesotheliomas diagnosed between 1958 and 1963.
 4 "Back came 42 documented cases of the
 5 disease, only 11 of which could not be traced to
 6 asbestos exposure.
 7 "Ten of the victims worked in asbestos
 8 plants." Do you see that?
 9 A Yes.
 10 Q "Eight were people who lived near asbestos
 11 plants most of their lives." Do you recall, sir,
 12 learning in 1968 that people who merely had the
 13 misfortune of living close to asbestos plants could
 14 develop this disease?
 15 A I don't remember that.
 16 Q Do you recall at some time becoming aware
 17 that direct exposure was not necessary to cause this
 18 disease?
 19 A Well, all I can say --
 20 MR. WALKER: Could you clarify "direct
 21 exposure?" Maybe it's just me --
 22 MR. WATERS: As in hands-on, somebody using
 23 the product.
 24 MR. WALKER: Thank you.
 25 A All I can say is that I was aware of such

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1 January 16, 1968. "In connection with your letter
2 concerning employees who use an asbestos-Lumnite
3 material, we made contact with Johns-Manville. The
4 asbestos component is crysolite. It contains no
5 crocidolite" Did I read that correctly?
6 A Yes.
7 Q It also goes on to talk about respirators
8 in order to avoid asbestos exposure, do you see that,
9 approved by the Bureau of Mines?
10 A Yes.
11 Q "The Martindale respirator is not
12 recognized as being suitable in this application." So
13 that the respirator that was being used by this
14 gentleman is not effective against asbestos. Do you
15 see that?
16 MR. WALKER: Mr. Bonney, would you like to
17 read that entire letter before you answer any
18 questions concerning it?
19 THE WITNESS: Yes, I think I would.
20 Q Take your time.
21 Did you have a chance to look it over?
22 I have got a question to ask.
23 MR. WALKER: I haven't had the opportunity
24 to read it.
25 MR. WATERS: Well, I am not going to wait

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1 like to read that letter, because I might have
2 some objection to it, or I may not. I don't
3 know.
4 MR. WATERS: I will happy to let you
5 reserve your objections. You can look over his
6 shoulder. I have just got a couple more
7 questions.
8 Q I would like you to look with me, sir, on
9 the last paragraph?
10 MR. WALKER: The one I wanted to read. Go
11 ahead.
12 Q "Mr. Dawson will be in touch with
13 Dr. Richards concerning this subject. One of the
14 things that disturbs us is the abundance of incorrect
15 information now being circulated in relation to
16 asbestosis." Do you see that?
17 A Yes.
18 Q Now, Mr. Bonney, was this also a
19 concern of yours in 1968 that there was too much
20 information being circulated that suggested that
21 asbestos was hazardous, or is it just Mr. Cralley's
22 opinion?
23 A What he is suggesting is a lot of
24 misinformation here, and really, I relied a lot, on
25 toxicological matters, to Dr. Lester Cralley who is a

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1 for to you read the document. These are all
2 produced to you and you bloody well got them and
3 you can look at your own.
4 MR. WALKER: Andy --
5 MR. WATERS: I am sorry. I am trying to
6 conduct a cross examination of the witness, and I
7 don't appreciate you interrupting me, and I don't
8 appreciate you trying to delay the process so
9 that I can't ask the witness the questions I want
10 to today.
11 MR. WALKER: You can ask him all the
12 questions you want to. There is no need to get
13 riled up. I had the opportunity to read one last
14 sentence you jerked it out from under me, and
15 that's not the proper type of deal. Now, I have
16 the right to look at that. We happened to
17 produce that to you.
18 MR. WATERS: Yes.
19 MR. WALKER: And -- but at the same time, I
20 think I have the right to look at that.
21 MR. WATERS: Well, your response in the
22 past has been that if I have a document, you
23 don't to have produce it to me again, because I
24 have already got it. But regardless --
25 MR. WALKER: Regardless of that, I would

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1 toxicologist.
2 Q Objection, non-responsive.
3 My question is, sir, were you of the same
4 opinion as Dr. Cralley that there was too much
5 misinformation being circulated about this stuff being
6 hazardous?
7 A Yes, at the time, I was.
8 Q Okay. "Probably the most outstanding
9 feature printed now in newspapers is cancer known as
10 mesothelioma." Do you see that?
11 A That's right.
12 Q Certainly by January of 1968, you were were
13 well aware of the existence of that disease?
14 A I was. It was associated with crocidolite
15 at the time.
16 Q Objection to the non-responsive portion.
17 I show you Alcoa 35 from Mr. Semken again
18 to Dr. Cralley, January 22, 1968, the same time frame,
19 "Attached is a copy of the newspaper article referred
20 to in our letter of January 12 concerning employees
21 who use asbestos-Lumnite cement in crucible and
22 liner repairs. Dr. Richards is prepared to talk to
23 this employee as soon as the necessary arrangements
24 can be made." Did I read that correctly?
25 A Yes.

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1 allegations, but I don't know how factual they were.
 2 **Q** All right. "Three of the people who
 3 developed this disease were members of families who
 4 had one or more asbestos worker members." That's this
 5 kind of household exposure we are talking about; is
 6 that the same thing, as you understand?
 7 **A** As I understand it, yes.
 8 **Q** For example, "A three-year old girl whose
 9 father was an asbestos engineer, a nurse whose father
 10 had worked for 35 years in an asbestos plant and a
 11 woman with two sons who worked as asbestos
 12 insulators
 13 in a shipyard." Did I read all that correctly?
 14 **A** Yes.
 15 **Q** Mr. Bonney, didn't this make some
 16 significant impression upon you when it crossed your
 17 desk?
 18 **A** Certainly, but we responded as Dr. Cralley
 19 did, it was crocidolite that was of concern then not
 20 chrysotile.
 21 **Q** Okay. Objection to the non-responsive
 22 portion.
 23 It goes on to state -- it quotes a doctor
 24 here as saying, "The disease is one hundred percent
 25 fatal and usually takes less than a year after
 diagnosis to run its course." Were you aware, sir, in

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1 **MR. KINGSLEY:** Just so we have a copy with
 2 the exhibit tag on it, and then the documents
 3 that were not made exhibits but were referenced,
 4 Mr. Waters has agreed to produce those to us.
 5 ---
 6 (Thereupon, at 4:14 o'clock p.m., the
 7 deposition was adjourned sien die.)
 8 ---

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1 the late 1960's that this was a fatal disease?
 2 **A** Yes.
 3 **Q** Did you continue, sir, in this time frame,
 4 1968, to be of the view that the threshold limit value
 5 would in some way protect your workers from asbestos
 6 exposure that could cause this type of disease?
 7 **MR. WALKER:** When you talk this "type of
 8 disease" --
 9 **MR. WATERS:** Cancer.
 10 **A** We felt that it would protect against
 11 asbestosis, and still cancer was not an issue within
 12 our company at that time.
 13 **Q** Okay.
 14 **MR. WATERS:** I think now is a good time to
 15 recess the deposition. Doctor -- I meant Mr.
 16 Bonney, I keep wanting to call you doctor, thank
 17 you for coming down.
 18 **THE VIDEOGRAPHER:** This ends tape three of
 19 the deposition of Thomas Bonney. We are off the
 20 record. The time is 4:14 p.m.
 21 **MR. KINGSLEY:** The exhibits are going to
 22 be, I guess, given to you and distributed to
 23 everyone who asked for a copy of the transcript.
 24 **MR. WATERS:** I get the originals, but
 25 everyone gets a copy.

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1 **CERTIFICATE**
 2 **COMMONWEALTH OF PENNSYLVANIA,)**
 3 **) SS:**
 4 **COUNTY OF ALLEGHENY.)**
 5 I, Colleen O'Brien Adams, do hereby certify that
 6 before me, a Notary Public in and for the
 7 Commonwealth
 8 aforesaid, personally appeared THOMAS B. BONNEY,
 9 who then was by me first duly cautioned and sworn to
 10 testify the truth, the whole truth, and nothing but
 11 the truth in the taking of his oral deposition in the
 12 cause aforesaid; that the testimony then given by him
 13 as above set forth was by me reduced to stenotypy in
 14 the presence of said witness, and afterwards
 15 transcribed by means of computer-aided transcription.
 16 I do further certify that this deposition was
 17 taken at the time and place in the foregoing caption
 18 specified.
 19 I do further certify that I am not a relative,
 20 Council or attorney of either party, or otherwise
 21 interested in the event of this action.
 22 **IN WITNESS WHEREOF, I have hereunto set my**

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hand
 14 and affixed my seal of office at Pittsburgh,
 14 Pennsylvania, on this ----- day of -----,
 15 1998.

15
 16
 16
 17 -----
 17 Colleen O'Brien Adams, Notary Public
 18 In and for the Commonwealth of Pennsylvania
 18 My commission expires November 19, 1999.

19
 19
 20 ---

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