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6 JOSEPH L. HEBERT AND  
7 MARIE HEBERT  
8 VERSUS  
9 HIGMAN BARGE LINES, INC.,  
10 ET AL  
11 Deposition of OTTO WONG, Sc.D., F.A.C.E.,  
12 given in the above-entitled cause, pursuant to the following  
13 stipulation, before Peggy C. Stahls, Certified Shorthand  
14 Reporter, authorized under the laws of the State of  
15 Louisiana to administer oaths to witnesses, taken in the Law  
16 Offices of Phelps Dunbar, 400 Poydras Street, 30th Floor,  
17 New Orleans, Louisiana 70130, on the 20th day of January,  
18 1994, commencing at 9:30 a.m.  
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21  
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23  
24  
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1 S T I P U L A T I O N

2 IT IS STIPULATED AND AGREED by and among Counsel  
3 for the various parties hereto that the deposition may be  
4 taken for all purposes, in accordance with the Texas Rules  
5 of Civil Procedure, at the time and place hereinabove  
6 recited;

7 That all formalities are hereby specifically  
8 waived, save as to reading and signing;

9 That all objections, save objections as to the  
10 form of the questions and the responsiveness of the answers,  
11 are reserved until such time as this deposition, or any part  
12 hereof, is used or sought to be used in evidence at the time  
13 of the trial of this matter.

14

15 OTTO WONG, Sc.D., F.A.C.E.,  
16 181 Second Avenue, Suite 628, San Mateo, California 94401,  
17 after having been first duly sworn to tell the whole truth,  
18 and nothing but the truth, was examined and testified as  
19 follows:

20 EXAMINATION

21 BY MR. BAGGETT:

22 Q Dr. Wong, my name is William Baggett, Jr., and I'm here  
23 to take your deposition today in the Joseph Hebert  
24 case. Do you understand that you've been listed  
25 as a testifying witness in this case?

5

1 A Yes, I do.

2 Q And are you prepared to express your expert opinion  
3 with regard to matters within the areas of your  
4 expertise in this case?

5 A Yes.

6 Q Do you recognize -- have you been furnished with a copy  
7 of the petition in this case? You may or may not  
8 have. I guess maybe I can just cut that short.

9 I'd just like you to take a look at the companies  
10 that are involved and ask you if its your  
11 understanding that you have been retained as an  
12 expert to testify in this case on behalf of these  
13 companies?

14 A I assume that's the case, although I don't know all the  
15 names of the defendants.

16 Q I may be asking you -- thank you. I'd attach the  
17 petition as Exhibit No. 1.

18 MR. SPEARS:

19 For the record, Billy, he's not representing  
20 all these companies. I mean -

21 MR. BAGGETT:

22 Well, as we're sitting here, I'd like to know  
23 who -- well, I think you got -- there's two  
24 companies that -- or two or three companies that  
25 have since been dismissed from the petition --

6

1 MR. SPEARS:

2 Oh, okay.

3 MR. BAGGETT:

4 -- and apart from -- the remaining  
5 defendants, let's just leave it that way.

6 MR. SPEARS:

7 Higman, I suspect -- he's not Higman's,  
8 Counsel.

9 MR. BAGGETT:

10 Okay.

11 MR. SPEARS:

12 He's been hired by my firm, who represents  
13 the oil company defendants.

14 MR. BAGGETT:

15 Okay. Are there any other companies that are  
16 defendants in this case that he has not been  
17 retained by?

18 MR. SPEARS:

19 No.

20 MR. BAGGETT:

21 Okay.

22 MR. SPEARS:

23 And the insurance companies.

24 MR. BAGGETT:

25 Are the insurance companies the defendants in

7

1 this case, Higman's insurers

2 MR. SPEARS:

3 Yes, well, I'll

4 MR. BAGGETT:

5 hired by them either

6 MR. SPEARS:

7 That would go along with that, I suppose.

8 MR. BAGGETT:

9 Okay. All right, then.

10 BY MR. BAGGETT:

11 Q Dr. Wong, have you received a copy of a subpoena or

12 I believe we served -- the custom is, we served

13 this through Mr. Spears and it listed a number of

14 items that you were requested to bring to the

15 deposition today. I'm going to show you this and

16 ask that it be marked as Exhibit B.

17 A Yes, I have.

18 Q Have you made a reasonable attempt to comply with the  
19 request?

20 A Yes, I have.

21 Q Have you brought some materials with you today in  
22 response to the subpoena?

23 A Yes, I have.

24 Q And is this -- does this constitute your full response  
25 to the items listed?

8

1 A Yes.

2 Q I haven't had a chance, of course, to look through  
3 these in any detail, but I don't see any  
4 depositions or any other material. Does that  
5 imply that you have not been furnished 'with any  
6 depositions taken in this case? ,

7 A I also have a folder of materials provided to me,  
8 except I didn't bring the full transcript of some  
9 depositions. I simply made a copy of the title  
10 page.

11 Q I see.

12 A I just didn't want to carry all this.

13 Q Would you mind if I look at this briefly?

14 A No, not at all.

15 Q The --

16 MR. SPEARS:

17 For the record, Billy, I think he will be  
18 able to identify which depositions are taken in  
19 this case.

20 MR. BAGGETT:

21 Yes. That was my main concern.

22 MR. SPEARS:

23 Okay. He just didn't bring the transcripts  
24 with him.

25 MR. BAGGETT:

9

1 That might be hard to do on an airplane.

2 Okay.

3 BY MR. BAGGETT:

4 Q Could you tell me the depositions that you have  
5 received and have you reviewed all the depositions  
6 that you received as of today?

7 A Yes, I have. I received a deposition of Fran Parker,  
8 Dr. Frank Garnder.

9 MR. SPEARS:

10 G-A-R-N-D-E-R, Garnder.

11 THE WITNESS:

12 And the deposition of four or five co  
13 workers.

14 BY MR. BAGGETT:

15 Q Okay, sir, if you could tell me the names of -- well,  
16 four or five sounds about right. I think there  
17 might have been six, or maybe I'm wrong.

18 A Mr. Babbin.

19 Q Dequeant.

20 A Dequeant, okay.

21 Q Do you want to spell that for the court reporter?

22 A D-E-Q-U-E-A-N-T. Istre, I-S-T-R-E.

23 Q Primeaux.

24 A P-R-I-M-E-A-U-X. I know this one -- Thomas, T-H-O-M-A

25 S.

10

1 Q Have you reviewed the deposition of Captain Underhill?

2 A No. And I also have the deposition of Joseph Hebert.

3 Q Yes, sir.

4 A That's H-E-B-E-R-T.

5 Q Let's don't forget him. Sir, did you make any notes

6 other than what you have before you when you were

7 in the course of making -- reviewing these

8 depositions?

9 A No.

10 Q Thank you. Does that -- we've listed some depositions

11 and we have a number of medical articles. I won't

12 ask you to go through them now, but I will ask

13 that they be attached as an exhibit to the

14 deposition, No. 3, in globo. Depending on how the

15 time goes or how the deposition goes, we may go

16 through them, but for now, I'd just like to ask

17 them to be marked in globo. Other than these

18 documents that we've discussed so far, are there

19 any other documents that you've reviewed in this

20 case?

21 A No.

22 Q Okay, sir. Do you have a current list of any cases --

23 of all cases, excuse me, in which you've testified

24 either by trial or by deposition?

25 A I don't have such a list.

11

1 Q Okay, sir. And you've got your c.v.? That was Item  
2 No. 3. And the c.v. is described with a list of  
3 all publications and I assume that your  
4 interpretation of that -- and I'm not suggesting  
5 it's not a reasonable one -- those would be the  
6 peer review papers -

7 A Yes.

8 Q -- and that -- of all publications? No. 4 is copies of  
9 all articles, texts, publications and authorities  
10 upon which the witness relies in whole or in part  
11 in reaching conclusions and/or forming opinions  
12 with regard to the plaintiff and the facilities at  
13 which the plaintiff worked. Would those also be  
14 included in the medical articles and the  
15 deposition testimony or would there be other  
16 materials?

17 A That would be those documents.

18 Q Okay, sir. Have you -- No. 5 is copies of reports or  
19 writings which contain your opinions or  
20 conclusions with regard to Mr. Hebert. Have you  
21 prepared any such reports?

22 A I have not prepared any reports.

23 Q Okay. Were you requested not to prepare a report or -

24 A I have not been asked to prepare such a report.

25 Q Have you written any letters to anyone concerning this

12

1 case?

2 A No.

3 Q Okay. That would include letters to any of the

4 attorneys in this case.

5 A The only letter that I have wrote was to Mr. Bellfor

6 (phonetic) on January 12, 1994. It's just a short

7 cover letter to go with a document that I sent to

8 him and the document itself is also in this

9 package that I've referred to.

10 Q I think -- may I see that just to keep me from having

11 to dig through here?

12 A (The witness complies.)

13 Q This -- the only thing that -- this is a citation of

14 your article on the health effects of gasoline

15 exposure in U.S. distribution workers?

16 A Right.

17 Q Is that included among the reports that are -- that you

18 brought with you today?

19 A Yes.

20 Q No. 6 is documents and all articles, including drafts,

21 which you published, which concern benzene,

22 butadiene, ethylene oxide and other chemicals

23 which the witness believes contributed to

24 plaintiff's injuries. I take it -- well, that may

25 qualify it somewhat. Did you bring any documents

13

1 in response to that? I'm referring to No. 6. I  
2 didn't read it verbatim.

3 A Well, I did not bring any articles on chemicals that  
4 are not germane to this case.

5 Q I see.

6 A There are some articles on benzene that I relied on in  
7 this case and those documents are in that pile in  
8 front of you.

9 Q Let me ask you, Doctor -- I don't want to interrupt us,  
10 but do you have an opinion as to whether any  
11 chemical more probably than not caused Mr. Hebert  
12 or contributed in causing Mr. Hebert to contract  
13 leukemia?

14 A Yes, I have an opinion.

15 Q Okay, sir. And what is that opinion?

16 A The opinion is his leukemia is not related to his  
17 exposure, occupational exposure.

18 Q Yes, sir. My question was probably not clear. In  
19 fact, it was just pretty much the opposite of, I  
20 think, the way you took it. Do you believe that  
21 there were any chemicals, occupational or  
22 otherwise, or any other cause of Mr. Hebert's  
23 leukemia that you can say more probably than not  
24 contributed in causing it?

25 A No, I don't know of any cause.

14

1 Q So would it be a correct summary to say in your  
2 opinion, his leukemia has an unknown etiology?

3 A That's true.

4 Q Okay, sir. No. 7 requests, as I interpret this,  
5 documents which you either submitted by yourself  
6 or in collaboration with other individuals to OSHA  
7 or any governmental or regulatory body. Have you  
8 made any such submissions to OSHA or any other  
9 governmental or regulatory body?

10 A I submitted a statement to OSHA many, many years ago.

11 Q 186 -- 185 or 186?

12 A At one of the benzene hearings.

13 Q Okay, sir. Apart from that. I take it --

14 A And I assume you have a copy?

15 Q Yes.

16 A I didn't bring that with me.

17 Q In fact, I haven't been able to locate it, so -- but I  
18 understand the one that you're speaking of. But  
19 had there been others, apart from the wood dust  
20 submission?

21 A There was one on wood dust. I don't think there was  
22 any besides those two.

23 Q I believe I've already covered this, but No. 8 does  
24 include all documents and tangible things -- well,  
25 it says "supplied by the plaintiff's attorneys,"

15

1 so it's probably -- it looks like we cloned one of  
2 the defendant's subpoenas. That's what happened.

3 MR. VERON:

4 The sincerest form of flattery.

5 MR. BAGGETT:

6 That's right. We figured we'd draw less  
7 objections that way.

8 BY MR. BAGGETT:

9 Q Let me ask you this, sir: have you been furnished any  
10 documents or tangible things other than what you  
11 brought today with reference to the plaintiff?

12 A No.

13 Q Finally, there was a ninth request, which I'll read  
14 into the record. It was "With specific reference  
15 to the API Report entitled 'A Mortality Study of  
16 Marketing and Marine Distribution Workers with  
17 Potential Exposure to Gasoline in the Petroleum  
18 Industry,' produce the following: (1) All drafts  
19 and corrected drafts of the final report." Have  
20 you produced any drafts or corrected drafts of the  
21 final report today?

22 A I don't keep drafts.

23 Q Okay, sir. So the answer to that is that you don't and  
24 that you don't have them because you have -- what  
25 has happened to the -- let me retract that. Why

16

1 don't you keep drafts?

2 A We just don't. We've gone through the draft once and  
3 we make whatever changes, modify the report,  
4 change it in the word processor and, you know,  
5 print out the final report, submit to API and  
6 that's the end.

7 Q Okay, sir. Are drafts submitted to the API?

8 A Yes.

9 Q And I assume that those are submitted on paper,  
10 correct?

11 A Yes.

12 Q What happens to the copy, the paper copies, of the  
13 drafts that you retain?

14 A I don't retain any draft because -

15 Q Okay. You don't retain them for an instant? I mean,  
16 even before you get the feedback from your  
17 sponsors? I mean, I assume you retain them for  
18 some period of time? Until the next one comes out  
19 at least?

20 A When we get our comments back, what we usually do is -  
21 what I usually do is to make changes on the hard  
22 copies.

23 Q Yes, sir.

24 A As a draft, make all those changes -

25 Q Okay.

17

1 A -- and then enter that, have somebody to enter that,  
2 into the word processor and then I will throw away  
3 that marked up copy.

4 Q Okay, sir. Have you ever been directed by one of your  
5 sponsors to destroy drafts?

6 A No.

7 Q And you're sure of that?

8 A Yes.

9 Q How many drafts of this report were there? And if you  
10 have to estimate, just let me know that it's an  
11 estimate.

12 A I know that because we only allow API to comment once,  
13 one draft.

14 Q Okay, sir. What is the document I'm showing you here?

15 I don't want to attach the whole document, but if

16 I need to, I can attach the first page of it.

17 A That would be the final report.

18 Q Okay, sir. So that is not a draft?

19 A That's not.

20 Q Okay, sir. But that's not the document you brought  
21 with you today either, though, is it?

22 A I did not bring that report with me.

23 Q Okay, sir. The report that you did bring that relates  
24 to -- what is this, a final final or --

25 A That's the final final. I think there may be confusion

18

1 over the nature of two documents on the same  
2 study. That's a report from us to API. That's  
3 the end product of the project.

4 Q Yes, sir.

5 A And what I have brought with me today is what we call  
6 the galley proof of the manuscript that's going to  
7 be published in a journal called Environmental  
8 Health Perspectives.

9 Q Yes, sir.

10 A And that's a much shorter version of the long report.  
11 So there are two different documents.

12 Q Well, the request was for drafts and corrected drafts  
13 of the final report. Which of either one of these  
14 would you consider to be the final report?

15 A There are two different documents. I don't think you  
16 should consider one as the final or the draft of  
17 the other.

18 Q Okay, sir.

19 MR. SPEARS:

20 Billy, let's go off the record.

21 (Off-the-record discussion.)

22 MR. BAGGETT:

23 Back on the record.

24 BY MR. BAGGETT:

25 Q And sir, it's your testimony, then, that the report is

19

1 what I was referring to a second ago, which is  
2 marked, for some reason, Morgan No. 10, and the  
3 document you brought with you is the actual  
4 publication or the document as submitted for  
5 publication as distinguished from the final report  
6 to the API?

7 A Well, to be 100 percent correct, what I have here is  
8 the galley proof of the manuscript that's going to  
9 appear in Environmental Health Perspectives.

10 Q Has it been accepted for publication?

11 A It has been. This is the galley proof.

12 Q Oh, okay. Yes, sir. The second request with regard to  
13 the API Report -- well, before I move on, there  
14 were two prior drafts of this report; that being  
15 Morgan 10?

16 A I don't know where you get the two drafts.

17 Q Okay. I'm sorry. I thought I understood you to say  
18 that API was only allowed two comments --

19 A One.

20 Q Oh, I'm sorry They were allowed to make a comment on  
21 one prior draft and then you make -- you consider  
22 their changes and incorporate some and not others  
23 or -- but they only have an opportunity to do this  
24 one time?

25 A That's right.

20

1 Q Is that something that is standard with you, with  
2 regard to the epidemiological work you've done in  
3 the past for various companies or industries?

4 A That is the standard procedure, to allow the sponsor to  
5 look at the draft report once, make comments and  
6 then we look at those comments and finalize our  
7 report based on that.

8 Q What's the -- what is the greatest number of times  
9 you've ever allowed a sponsor to make corrections  
10 and subsequent -- and you make subsequent  
11 modifications of your report prior to the final  
12 report?

13 A I'm not so sure I understand your question.

14 Q Yes. I'm not sure it was clear. Have you ever allowed  
15 more than one -- have you ever allowed your  
16 sponsors to have more than one crack at making  
17 comments on your drafts?

18 A Only on very rare occasions. I can't even think of any  
19 occasions, but I'd hate to say no to that  
20 question.

21 Q Have you ever allowed -- you can't think of a specific  
22 occasion?

23 A No.

24 Q Have you ever allowed half a dozen drafts of a report  
25 to be marked up by your sponsors and subsequently

21

1 changes incorporated?

2 A Six times? You said half a dozen?

3 Q Six or more?

4 A I don't think so.

5 Q How about three or more?

6 A Most likely not.

7 Q Why is it that if they're paid -- have you ever been

8 paid to allow them to make multiple passes over

9 drafts?

10 A Well, there is one simple fact in, I guess, reality.

11 Q You wouldn't do it?

12 A In all our project, we only budget for one review and

13 usually, by the time we get to the stage of

14 writing a report, if we have not spent most of our

15 money, it would be very close to that and it would

16 be very difficult to, you know, have the luxury of

17 writing and rewriting and rewriting the reports,

18 and usually, I don't see the need to do that.

19 Q Okay. And certainly, if that were something that had

20 occurred, it would be an extraordinary

21 circumstance?

22 A It must be some good reasons to justify that.

23 Q Yes, sir. I will go on now to Item No. 9(3), which is

24 "You or your companies' contract with the API

25 relative to the study and all correspondence

22

1 concerning the contract." Did you bring with you  
2 any items in response to that request?

3 A Let me explain the contract for that, for the API  
4 project. That was a project I started at another  
5 company.

6 Q EHA?

7 A EHA, Environmental Health Associates. And  
8 subsequently, ERA became ENSR, ENSR Health  
9 Sciences, and I left ENSR Health Sciences the end  
10 of 1990, and continued to finish the project as a  
11 consultant to ENSR. So I don't have any contract  
12 with API, per se, because the contract was written  
13 along time ago between API and EHA.

14 Q So at the time Mr. Hobson took your deposition, for  
15 example, back in July of 1993, you had already  
16 rendered your final report to the API with regard  
17 to the mortality study of marketing and marine  
18 distribution workers; is that correct?

19 A Yes.

20 Q So I may be inferring something from your answer, but  
21 does that mean you don't have a copy of the  
22 contract?

23 A No, I don't.

24 Q Do you have access to the contract?

25 A I question that. I mean, I have not tried to ask ENSR

23

1 to provide me with a copy.

2 Q Do they receive any portion of your remuneration for  
3 conducting the study for ENSR?

4 A ENSR?

5 Q Yes, sir.

6 A Oh, yes, because even after I left, I continued ,to work  
7 on that project to them, as I've said, and at the  
8 same time, the staff there continued to work on  
9 that project under my supervision.

10 Q So indeed, if you were to ask for a copy of the  
11 contract, they'd give you one, wouldn't they?

12 A I don't know.

13 Q In any event, you haven't asked?

14 A I have not asked, because I don't have a copy.

15 Q In order to write the report that you've written, is it  
16 necessary for you to obtain other documents from  
17 ENSR?

18 A Only information related to the technical part or the  
19 scientific part of the study.

20 Q Have you ever asked ENSR for information and they --  
21 with regard to the work that you did on the  
22 mortality study of marketing and marine  
23 distribution workers and they refused to give it  
24 to you?

25 A Not when I was writing the report.

24

1 Q At any time?

2 A I have not made any request after I finished writing  
3 the report.

4 Q Do you have any reason to think they wouldn't have  
5 given you the contract if you'd asked for it?

6 A I don't know.

7 Q I'm sorry. The question was, do you have any reason to  
8 think that they wouldn't have given it to you?

9 A I really do not know how they would react and I can't  
10 think of any .reason.

11 Q Yes, sir. With regard to Item No. 2, I seem to have  
12 overlooked -- I probably read it, but didn't ask  
13 you about it. No. 2 referred to correspondence  
14 with API or API members relative to the drafts or  
15 reports. Are there any such documents that have  
16 been produced today?

17 A No.

18 Q And why is that?

19 A I don't have those documents.

20 Q Do you mean to say you don't possess a single piece of  
21 correspondence with any API members relative to  
22 these reports?

23 A When the project is done, basically I threw away  
24 everything except the report.

25 Q Okay. How did you throw them away?

25

1 A Put it in the garbage can.

2 Q Is this something you do with all the work that you do  
3 for industry or trade associations or individual  
4 companies?

5 A I do that for all the projects. When a project is  
6 done, we close the project. The report is,  
7 finalized. There is no reason to keep anything.

8 Q Do you keep any of your raw data?

9 A The raw data is actually at ENSR. I did not have the  
10 raw data.

11 Q Do you have the exposure estimates?

12 A The exposure estimates -- ENSR has some of the summary  
13 data on exposure estimates. Let me explain. The  
14 exposure estimate, that portion of the study -  
15 actually, it's an independent study -- was done by  
16 Professor Thomas Smith at the University of  
17 Massachusetts, and he has the raw data and he  
18 provided summary data to ENSR to allow us to  
19 analyze the epidemiological data, combining the  
20 industrial hygiene and the epidemiological data.

21 Q Sir, you're the principal author of those report,  
22 aren't you?

23 A Which report?

24 Q Of the report, "The Health Effects of Gasoline  
25 Exposure" et cetera, the one that's before us and

26

1 that we're talking about?

2 A The reason I ask is, there are two parts to that  
3 report. The first author of Part II, which deals  
4 with the mortality of the study.

5 Q Yes, sir.

6 A Part I deals with the exposure estimate.

7 Q Yes, sir.

8 A I'm one of the co-authors of the first report, the  
9 Part I. Professor Smith is the lead author of  
10 that article.

11 Q Yes, sir. And that article is referenced in the  
12 footnotes to the second part; is it not?

13 A Yes. And you also have a copy as one of the -- it's  
14 right here -- one of -- Exhibit 3.

15 Q Now, I want to make sure I understand your testimony.

16 Is it your testimony that you don't have access to  
17 correspondence with the -- that is retained by  
18 ENSR?

19 A No, I don't.

20 Q You're a consultant to ENSR?

21 A Right.

22 Q And do you have an opinion as to what would happen if  
23 you had said, "Hey, I'd like to comply with this  
24 subpoena and would it be all right if I looked  
25 through your records for drafts or corrected

27

1 drafts; would it be all right if I looked for  
2 correspondence with API members; would it be all  
3 right if I looked through our contract that we're  
4 going to share money on with the API? Do you  
5 have any fact that you can point to or any  
6 opinion, for that matter, which would lead you to  
7 believe that they would not have furnished you  
8 with such information or documents?

9 MR. SPEARS:

10 Let me -- for the record, let me state,  
11 Billy, for some clarification here. You probably  
12 gave me that and we do have an agreement that if  
13 he serves that on me, I will give it to the  
14 witnesses just like I do with him and other  
15 witnesses, but I did not direct Dr. Wong to go out  
16 and try to retrieve documents other than what he  
17 has. I think the -- in fairness to Dr. Wong, he  
18 interpreted that the same way I did, anything that  
19 he had in his possession that was listed in that  
20 subpoena, I asked him to bring or to explain why  
21 he didn't have it, but I didn't affirmatively ask  
22 him to go out and make a search at other locations  
23 or other organizations.

24 MR. BAGGETT:

25 Since we're making statements on the record,

28

1 it was my understanding that my father had called  
2 you and explained that this was an -- it's not a  
3 request similar to any request we've made of Dr.  
4 Wong in prior depositions.

5 MR. SPEARS:

6 That's correct. He specifically made a point  
7 of identifying No. 8 and 9, I believe, and I  
8 referred that -- you see in my cover letter to Dr.  
9 Wong, I asked him to review that because it was  
10 out of the ordinary, but I still, in fairness, I  
11 think he understood it the way I did, if he had  
12 anything in his possession that was descriptive in  
13 there, he would bring it.

14 BY MR. BAGGETT:

15 Q May I see that letter, please, sir?

16 A (The witness complies.)

17 Q And I'd like to attach that as Exhibit No. 4. I think  
18 there were multiple copies in there or am I wrong?

19 MR. SPEARS:

20 That's the letter of transmittal where I  
21 transmitted that wish list.

22 MR. BAGGETT:

23 And the letter, as you just said, reflects  
24 that you told Dr. Wong, with the exception of the  
25 items listed in request Nos. 9 and 10, I believe

29

1 you may have already furnished Baggett with these  
2 materials in connection with other litigation.

3 MR. SPEARS:

4 Because Items 9 and 10 have never heretofore  
5 been asked from Dr. Wong, so I made a point of  
6 pointing that out to him in anticipation that he  
7 may have those documents. We had never been asked  
8 before for them.

9 MR. BAGGETT:

10 Yes, sir, and with that clarification, would  
11 you read back the question, please? The doctor  
12 may recall the question.

13 BY MR. BAGGETT:

14 Q Do you recall the question, sir?

15 A Yes, to some extent. My answer is, I don't know how  
16 they would react. I don't even know whether they  
17 still have that or not. I mean, as far as they're  
18 concerned, the project is over. I don't know what  
19 they're going to do or what they have done to all  
20 those records.

21 Q Yes, sir. So is it a correct statement that you've  
22 made no attempt to obtain these documents from

23 ENSR?

24 A I have not made any attempt and I won't do so until Mr.

25 Spears asks me to do so.

30

1 Q Yes, sir. And -- very well.

2 MR. BAGGETT:

3 We will reserve the right to redepose Dr.

4 Wong when he has made a reasonable effort to

5 comply with the subpoena. I don't know -- I

6 understand your position and I don't believe that

7 the breadth of the subpoena is at all limited to

8 documents which are in your office or -- it's

9 documents that you have reasonable access and I

10 don't need to make these little oratories for the

11 record, but I will, for what it's worth, make that

12 reservation.

13 MR. SPEARS:

14 In all fairness to Dr. Wong, I think I did

15 not ask him to go out and look for anything other

16 than what -- and I really didn't believe that you

17 were asking me to go -- instruct Dr. Wong to go to

18 another organization. I did point out to him the

19 difference in that subpoena as opposed to the ones

20 that have been served on him before just so that

21 he did not assume it was just a run-of-the-mill

22 subpoena, but I did not affirmatively ask him and

23 certainly, if those documents are made available

24 to Dr. Wong in the future and they have any

25 bearing on this case and you want to redepose him

31

1 as to those documents, you're certainly free to do  
2 so.

3 MR. BAGGETT:

4 Thank you.

5 BY MR. BAGGETT:

6 Q Doctor, with regard to this report, which is the  
7 subject of Item No. 9, is that the primary article  
8 which you intend to rely upon in expressing your  
9 opinions in this case?

10 A It's one of the major articles I'm going to rely on,  
11 yes.

12 Q Okay, sir. And in fact, you are still a consultant to  
13 ENSR with regard to this article?

14 A No, I'm not. The project is over.

15 Q Okay. Correct. But even after you left them, you  
16 continued to be a consultant with regard to this  
17 project?

18 A On that project until it was over.

19 Q Thank you. Sir, when you left ENSR, what did you take  
20 with you which related to this report or what you  
21 obtained since that time which relates to this  
22 report from ENSR?

23 A Basically, I have computer analysis printouts and also,  
24 the tables. They were responsible for making  
25 those tables in the report.

32

1 Q The comment that the client -- that would be API -- was  
2 allowed to make on your draft, when,  
3 approximately, was that received by either you or  
4 ENSR?

5 A It must be two or three months before the date on that.

6 Q On the final report?

7 A On the final report.

8 Q So it would have been sometime in either early '92 or  
9 late '91?

10 A Yes, around that time.

11 Q And when did you leave ENSR?

12 A The end of 1990.

13 Q So sir, if you were going to incorporate any changes  
14 made as a result of the review by the API, you  
15 would have had to have received it at your current  
16 office; is that not correct?

17 A Yes.

18 Q I don't want to be repetitive, but what do you think  
19 happened to them?

20 A I throw everything away at the end of the project.

21 Q Okay. Sir, you're aware, of course, that the mortality  
22 of marketing and marine distribution workers with  
23 potential exposure to gasoline in the petroleum  
24 industry is a very important document to the  
25 industry with regard to both regulations and also

33

1 with regard to litigation? This is something that  
2 it's foreseeable that they may use, as I believe,  
3 in fact, they're going to use in this case, in  
4 support of positions they may take in litigation  
5 and regulation. You understand that, don't you?

6 A I don't know what you mean when you say "They are going  
7 to use this in this case." I am going to use this  
8 in this case. I don't care what. they use.

9 Q True, sir. Well, with that qualification, you are  
10 aware of the way in which documents, for example,  
11 studies that you published, the way that API made  
12 arguments based upon those studies; for example,  
13 at the time of the 1986 hearings on benzene,  
14 correct?

15 A Yes.

16 Q And you have some reason to think that -- of course,  
17 you are aware that this document is likely to be  
18 used in a similar manner if it was -- you know, . if  
19 there's something in there that the industry feels  
20 the government needs. to know about, they will use  
21 the document, correct?

22 A I assume so.

23 Q And plaintiff's lawyers and environmental nuts and  
24 people who are paranoid and suspicious of things  
25 are going to question the influence that sponsors

34

1 have on such studies. I'm sure you consider that  
2 wrong, but you are aware of that fact?

3 MR. SPEARS:

4 Is that -- I'm not sure if that's a  
5 question --

6 BY MR. BAGGETT:

7 Q Are you aware of the fact, of a perception or  
8 allegations or of the possibility that one day,  
9 someone is going to say or take a cheap shot at  
10 this paper and say, "Well, this is an industry  
11 sponsored study and so it's subject to some index  
12 of suspicion"; you're aware of that sort of  
13 concern some individual's may have?

14 A That crossed my mind once or twice.

15 Q Yes, sir. Now, if you had retained copies of the  
16 suggestions they made, you'd be able to show us,  
17 "Hey, these were all legitimate suggestions and  
18 nothing that shouldn't have been done in the first  
19 place," couldn't you?

20 A Most of the changes are very, very minor and in fact,  
21 most of the suggestions, other than proof the  
22 report, the reading of the report, came from -  
23 not from API or from the company participants in  
24 the study, but coming from the outside review  
25 committee. And I assume if somebody wants to

35

1 really look at those statements or suggestions,  
2 API may have a copy of those comments. And I  
3 would just like to make it clear that when the  
4 project was going on, especially toward the end  
5 where we started sending results to API as well as  
6 the outside review committee, we had meetings  
7 every month, basically, and a lot of comments were  
8 made at a meeting; not written comments, but  
9 comments just made at the meeting.

10 Q Were any of these meetings transcribed?

11 A I don't think so.

12 Q Did you make notes at any of these meetings?

13 A I make comments on -- for example, the draft report, I  
14 made suggestions -- like people will say, "Hey,  
15 maybe the wording in this paragraph should be this  
16 or that" or "This is not clear" and I made notes  
17 on them.

18 Q And it's your recollection, sir, that the comments that  
19 were made, the suggestions that were made, did not  
20 relate to the substance of the study, but were  
21 mainly with regard to the readability or the more  
22 superficial aspects of the study?

23 A Oh, absolutely.

24 Q And if you had retained -- you recognize that if you  
25 had retained your notes, your drafts, your

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1 correspondence with the API, we would have more to  
2 rely upon than your recollection and in a sense,  
3 if someone were to unfairly challenge you on that  
4 statement, you would have written evidence to  
5 support your position; is that something that you  
6 recognize? .

7 A Well, I don't know what to tell you. I just don't have  
8 the lawyer's mentality of keeping every piece of  
9 paper in the office.

10 Q Have you ever been advised by lawyers that it's a good  
11 idea to destroy documents?

12 A No.

13 Q Never?

14 A Never.

15 Q Have you ever been advised by lawyers that it's a good  
16 idea for drafts to be destroyed?

17 A No.

18 Q Have you ever been copied on correspondence in which  
19 sponsoring companies informed each other to  
20 destroy all previous copies?

21 A I don't -- I have never seen those documents if they  
22 exist.

23 Q When you received correspondence -

24 MR. SPEARS:

25 In all fairness, do you have the piece of

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1 correspondence that you want to show Dr. Wong?

2 MR. BAGGETT:

3 Not today. Let's take a break.

4 (A short break was taken.)

5 MR. BAGGETT:

6 Back on the record.

7 BY MR. BAGGETT:

8 Q Sir, during the break, you had a conference in which

9 you discussed documents with your names on it and

10 I was just wondering if you could enlighten us as

11 to what the subject matter of that discussion was?

12 A Mr. Kenneth Spears asked me, do I have any idea what

13 you're talking about and I responded by saying, "I

14 really don't." And you're putting me in an

15 embarrassing position because I also said to him

16 that I think this is a waste of time.

17 Q Don't be embarrassed. I'm good at wasting time. Sir,

18 what -- is that all that was said?

19 A That's pretty much it.

20 Q It wasn't a statement about subpoenaing the documents

21 with your name on it?

22 A Well, what he's going to do -- I don't know what he's

23 going to do.

24 Q Well, you know because he just told you.

25 A He said that he would do something to find out what you

38

1 have or have not and I really don't pay attention  
2 to that.

3 Q Is that why, when I asked you, you didn't tell me?

4 A I'm trying to summarize the key points of our  
5 conversation. The only thing I remember is, he  
6 asked me whether I have anything that I know of  
7 and I said, "I really don't know what you're  
8 talking about" and I made the comment that you're  
9 wasting time.

10 Q Okay, sir. Well, I'm going to try to move on. No. 4,  
11 is "All correspondence with any member of the HSRC  
12 Benzene Task Force." I go on to mention another  
13 organization. Have you had any correspondence  
14 with any member of the HSRC Benzene Task Force  
15 with regard to this study?

16 A No, I have not.

17 Q And that would be at any time?

18 A At any.

19 Q What is your understanding, if you have an  
20 understanding, of what the HSRC Benzene Task Force  
21 is?

22 A I don't.

23 Q Okay. You've never heard of it?

24 A No.

25 Q Have you ever heard of the HSRC?

39

1 A No.

2 Q Have you ever heard of the API Joint Benzene Cancer  
3 Policy Task Force?

4 A No.

5 Q Are you familiar with any organization, however  
6 denominated, whose purpose in whole or in part is  
7 to coordinate epidemiology regulatory efforts in  
8 litigation to make sure that they're all mutually  
9 supported?

10 A No.

11 Q Would that be a proper goal in your mind if the API  
12 were to decide that the sponsored epidemiological  
13 studies -- excuse me, the epidemiological studies  
14 they would sponsor should be supportive of the  
15 positions they take in litigation; would that be  
16 proper in your opinion?

17 MR. SPEARS:

18 Let me just object. Are you asking him what

19 -- I don't know if I understand the question, but  
20 are you asking him what API should or should not  
21 do?

22 MR. BAGGETT:

23 Yes, sir.

24 MR. SPEARS:

25 I'm not sure Dr. Wong is qualified to testify

40

1 about what they -

2 BY MR. BAGGETT:

3 Q Well, I'm asking what you think is right. Do you think

4 it's right to conduct studies that from the get-go

5 are intended to be supportive of positions taken

6 in regulatory efforts and litigation or should you

7 just do a study and let the chips fall where they

8 may?

9 A Well, generally, I object to anybody who sponsors study

10 to prove their point. I think they should sponsor

11 a study and let whatever the result comes out to

12 be.

13 Q Sir, have you ever assisted in any effort to educate

14 lawyers on how to defend benzene cases?

15 A I mean, through all these cases, I educated lawyers in

16 terms of the epidemiology. I mean, number one,

17 you know, Epidemiology 101; what epidemiology

18 is -

19 Q True.

20 A -- how we use the results and how we interpret data and

21 so on.

22 Q I see your confusion and I don't mean to be asking you

23 -- I may learn something today; who knows. And

24 that's not what I mean. Have you ever conducted

25 what would be described as a seminar or a

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1 presentation, the purpose of which was to educate  
2 defense lawyers on how to defend benzene cases?

3 A The only thing that's close to what you just described  
4 would be a seminar that I was invited to by Shell  
5 several years ago to talk about benzene; basically  
6 talk on my study, my CMA benzene study.

7 Q Sir, what is your understanding of the purpose for  
8 which you were invited to talk about your  
9 experience with benzene and your studies of  
10 benzene by Shell?

11 A My understanding is, at least for my part -- is to  
12 educate the audience what my study says.

13 Q Were there handouts at that meeting?

14 A I didn't give anything out.

15 Q Did you use any overheads or slides?

16 A I might have some overheads based on the publication -  
17 two publications that I have on that study.

18 Q Did you express opinions as to what was a high risk  
19 case to defend from a defendant's point of view;  
20 in other words, what cases you felt they were an  
21 industry -- like chemical -- let me start over  
22 again. A company like Shell, did you ever express  
23 your opinion as to what sort of cases would be  
24 easy or difficult to defend?

25 A No.

42

1 Q Did you ever express your opinions as to strategy that  
2 the lawyers might employ in conducting the defense  
3 of benzene litigation?

4 A No.

5 Q Did Shell -- how, exactly, did you come to attend this  
6 meeting?

7 A Somebody at Shell invited me to give a talk, basically,  
8 on my study, on the CMA benzene study.

9 Q Who attended this meeting?

10 A John Tyler, an attorney. Richard Faulk. I think at  
11 that time, he was the in-house Shell -- Shell in  
12 house attorney. There were some toxicologists and  
13 I don't remember their names.

14 Q You don't remember Dr. Irons (phonetic)?

15 A I think Dr. Irons was one of the speakers. Dr. Irons  
16 was -- what I'm trying to say is there were some  
17 company toxicologists in the audience. I just  
18 don't remember who or what their names were.

19 Q Sir, wasn't there explicit discussion of the Skeen case  
20 at the time of this?

21 A There may be some questions on the Skeen case, but  
22 basically my -- I'm talking about my presentation.

23 I don't know whether you're referring to the  
24 entire seminar or just my part. Maybe you can  
25 clarify the --

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1 Q Yes, sir, I appreciate that. In your part, were you  
2 asked about your testimony in the Skeen case?

3 A I'm sure there were some questions on that case, yes.

4 Q Were you asked about the expert testimony of witnesses  
5 called on behalf of the plaintiffs in that case?

6 A There were some questions, in general, relating to that  
7 case. I just don't remember the specifics of  
8 those questions.

9 Q Were you asked questions as to how that trial might  
10 have been conducted which might have led to a more  
11 favorable result for the defendants in that case?

12 A I don't remember any questions like that.

13 Q Nothing to the effect of "What went wrong" or "What do  
14 you think we could have done better?"

15 A No. Most of the questions were on my study.

16 Q Okay, sir. Now, with regard to the other  
17 presentations, who else made presentations at this  
18 meeting? Mr. Tyler and Dr. Irons, correct?

19 A Yes.

20 Q Mr. Faulk?

21 A I think Mr. Faulk also made a presentation.

22 Q Who took you to the airport when you left that day, if  
23 you recall?

24 A You're really trying my memory.

25 Q Yes. I'm not saying -- do you remember?

44

1 A I don't.

2 Q Who paid for your transportation to Houston?

3 A I'm sure it's either Shell or maybe the outside law  
4 firm, whoever invited me.

5 Q That would be the Tyler firm?

6 A Right.

7 MR. VERON:

8 Don't ask about breakfast.

9 BY MR. BAGGETT:

10 Q Well, how about lunch; did you go for lunch at the  
11 Plaza?

12 A I have no idea. You're serious, right?

13 Q Yes, sir.

14 A You're asking me about lunch?

15 Q Yes, sir. I'm very serious.

16 A I don't know where I ate lunch that day.

17 Q Okay. Have you testified for anybody that was at that  
18 meeting or any company who was represented at that  
19 meeting since the time of that meeting?

20 A Well, I'm sure. I have worked for Shell since then.

21 That was quite a few years ago and Shell, I'm

22 sure, has been one of the defendants in some of

23 the cases that I've been working on over the last

24 few years.

25 Q Do you recall seeing this overhead that I'm going to

45

1 refer to, a document that's marked PNH700701-91 on  
2 the left corner and No. 91 on the right corner?

3 MR. SPEARS:

4 You're representing -- what is that?

5 MR. BAGGETT:

6 These are attachments to the Faulk -  
7 deposition.

8 MR. SPEARS:

9 And the question is, is that an overhead  
10 projection or representation of an overhead  
11 projection presented in that meeting?

12 MR. BAGGETT:

13 Yes, sir.

14 MR. VERON:

15 By whom?

16 MR. BAGGETT:

17 I believe it was by Mr. Faulk.

18 MR. VERON:

19 It wasn't by this witness?

20 MR. BAGGETT:

21 That's not my understanding, but I was going  
22 to ask.

23 MR. VERON:

24 Okay. I'm sorry.

25 THE WITNESS:

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1 What was the question again?

2 BY MR. BAGGETT:

3 Q Do you recall this overhead being presented?

4 MR. SPEARS:

5 I think he's referring just to this page.

6 MR. BAGGETT:

7 I am just referring to that page for now.

8 THE WITNESS:

9 You're putting me in another very

10 embarrassing situation, because I didn't really

11 pay much attention to what the lawyer said at that  
12 time.

13 BY MR. BAGGETT:

14 Q Okay, sir. But you were present during the  
15 presentation?

16 A I was.

17 Q Do you recall -- I'm going to refer -- I'm not going to

18 give the long number on the left; I'm going to

19 give the number on the right. Let me ask you

20 specifically, if there was discussion that a trial

21 may present a high risk if the plaintiff suffers  
22 from AML?

23 A As I said, I didn't pay much attention to the lawyers'  
24 presentations.

25 Q Do you remember --

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1 A You really want to get at that?

2 Q Sir, I think my questions speak for what I'm trying to  
3 get at. Do you remember the lawyers discussing  
4 that a trial would present a high risk if the  
5 plaintiff was a high exposure worker and by that,  
6 they included barge and dock workers; do you  
7 remember that?

8 A As I said, I didn't pay attention to the presentation.

9 Q So the answer is no?

10 A The answer is no.

11 Q Do you remember any discussions of the importance of  
12 maintaining security with regard to damaging  
13 documents?

14 A No, I don't remember hearing that at all.

15 Q So if there are transparencies that refer to this, you  
16 either have forgotten or just never paid any  
17 attention to it in the first place?

18 A Most likely, I did not pay attention in the first  
19 place.

20 MR. SPEARS:

21 And for the record, there's also a  
22 possibility that if -

23 MR. BAGGETT:

24 Let's don't suggest whatever is possible.

25 MR. SPEARS:

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1 I'm saying -

2 MR. BAGGETT:

3 The witness can speak for himself as to what

4 the other possibilities. Please, Ken.

5 MR. SPEARS:

6 All I'm objecting to is that you haven't

7 established that he was there the whole time this

8 was going on.

9 MR. BAGGETT:

10 Same thing. I think I have established that.

11 BY MR. BAGGETT:

12 Q And you were present during Mr. Faulk's presentation;

13 you said that?

14 A I was there.

15 Q Sir, I'm going to show you a document that the top says

16 "Industry Response: A Comprehensive Strategy."

17 Do you remember the lawyers discussing the need

18 for there to be a comprehensive strategy in

19 industry response, a united front in defense of

20 such cases?

21 A I don't remember seeing that. As I said, the whole

22 presentation was of no interest to me. It's just

23 not part of my work.

24 Q Well, actually, sir, you say it's not part of your

25 work. You testified in the Skeen case, correct?

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1 A Yes.

2 Q Made about \$100,000 testifying in the Skeen case or  
3 more, correct?

4 A I don't think I made \$100,000.

5 Q So when you say it's not your business, I mean, you  
6 weren't there as some disinterested party you  
7 testified in these cases on a regular basis, am I  
8 wrong?

9 A I am only interested in providing scientific.  
10 information to whoever asked me for their  
11 information. I'm not interested in the strategy.  
12 I'm not interested in the lawyer's way of handling  
13 cases.

14 Q Yes, sir.

15 A To me -- can I finish?

16 Q Well, I don't know if there's a question that you're  
17 answering, but go ahead.

18 A To me, that's boring and that's not germane to what I  
19 do.

20 Q Well, I remember things that are boring to me, too, and  
21 sometimes I remember boring things more than I  
22 remember a lot of other things, so the reason -  
23 I'm not suggesting that you're interested and I  
24 really don't care if you're interested. I'm  
25 asking you what you remember.

50

1 MR. VERON:

2 Object to that.

3 MR. BAGGETT:

4 Well, I'm trying to explain to the witness

5 that --

6 BY MR. BAGGETT:

7 Q -- for example, there's a statement on page 88 of the

8 document that I've just shown you which indicates

9 the final rule, as listed on this overhead, is to

10 disclose sensitive benzene documents only on a

11 court order. Now, I know that you're not in a

12 position to disclose sensitive benzene documents

13 only on a court order. My question is relating

14 to, we have outstanding discovery requests in this

15 case. I don't know if you've been told this.

16 Some of the information you've been furnished by

17 the defendants, I believe, would be subject to our

18 discovery request. They haven't been furnished

19 and I think you can see whether you were a part of

20 it or not. You were a witness to a meeting and

21 I'm going to ask you if you can remember

22 discussions that centered on the importance of

23 holding on to sensitive benzene documents and

24 releasing them only on a court order?

25 MR. SPEARS:

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1 Before you answer this, let me enter an  
2 objection. It's a compound question you've got in  
3 there, but somewhere in there, at least I inferred  
4 that you indicated that somehow my clients had  
5 furnished Dr. Wong some information in this case  
6 that he hasn't revealed to you and I object to any  
7 inference of that. I don't know if you've gone  
8 through everything that I've given you.

9 MR. BAGGETT:

10 Well, there's no question that your client  
11 has furnished that data to him which he has not  
12 revealed to me because he didn't ask ENSR, but I  
13 don't know that these model -- these -- I  
14 appreciate your position and I hope you appreciate  
15 mine.

16 MR. SPEARS:

17 I just wanted to -

18 MR. BAGGETT:

19 There was a question pending.

20 MR. SPEARS:

21 Right. But what I'm saying is I object to  
22 any -- the form of the question to the extent it  
23 infers that somehow my firm, Jones Tete, or the  
24 clients I represent, have furnished documents to  
25 Dr. Wong that he hasn't given to you in this --

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1 MR. BAGGETT:

2 Yes, sir, and I appreciate that.

3 MR. SPEARS:

4 And I object to the form of the question

5 because it states a number of facts that are not  
6 questions, that have not been established through

7 any witness of which I'm aware. I have no idea

8 where these statements of fact come from, so just

9 for the record, I want to object to the form of

10 the question. It's also compound.

11 MR. BAGGETT:

12 I think you're right about the question. I'm

13 going to rephrase it, if that's all right.

14 BY MR. BAGGETT:

15 Q Sir, do you remember discussions of the need to have a

16 comprehensive strategy, whether you were

17 interested or not -- a comprehensive strategy in

18 defending benzene cases on behalf of the industry,

19 an industry response, a comprehensive strategy?

20 MR. SPEARS:

21 For the record, Billy, are you talking about

22 the point in time when he attended this seminar?

23 MR. BAGGETT:

24 Precisely.

25 MR. SPEARS:

53

1 Okay.

2 THE WITNESS:

3 I don't remember that and as I said before, I  
4 did not pay attention to the presentation or the  
5 discussion of the legal issues or their strategies  
6 in the first place.

7 BY MR. BAGGETT:

8 Q Yes, sir. Do you remember any discussions of the need  
9 for in-house counsel to closely monitor outside  
10 counsel to ensure control of documents; do you  
11 remember any discussions like that?

12 A The answer is no, and I'll give you the same answer to  
13 the previous question.

14 Q Do you remember any discussions of the need to even  
15 settle meritless cases rather than produce  
16 sensitive documents?

17 A I will give you the same answer.

18 Q And is it true, sir, that you could have sat through a  
19 meeting in which -- you did sit through a meeting  
20 in which the importance of controlling documents,  
21 controlling outside counsel, centralizing  
22 responses to discovery requests, could have been  
23 discussed, disclosing sensitive benzene documents  
24 only on court order, and you wouldn't have noticed  
25 it -- and you didn't notice it? Excuse me.

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1 A I did not pay any attention to it.

2 Q Sir, do you ever think about the companies that you're  
3 working for and whether they are being candid in  
4 their discovery responses; is that of any concern  
5 to you at all?

6 A My concern is to conduct epidemiologic studies and what  
7 else they do is not under my control or -- that's  
8 not my concern.

9 Q Have you ever been asked by a sponsor to disavow  
10 implications made in your published studies, in  
11 writing?

12 A No.

13 Q Have you ever been threatened implicitly or -- well,  
14 have you ever been threatened expressly, first,  
15 with the loss of future business from sponsors if  
16 you would not accede to certain requests, any  
17 request?

18 A No, and I would not like to work for those companies if  
19 that's the case.

20 Q Have you ever participated in conference calls with  
21 sponsors of your studies or are they usually  
22 conducted -- or have they always been conducted in  
23 person?

24 A Will you please say that -

25 Q Have you ever -- these meetings that you have with your

55

1 sponsors, you referred to the fact that they occur  
2 sometimes as often as monthly. Have you ever  
3 participated in such meetings by conference call?

4 A Yes. Sometimes we have conference calls.

5 Q Do you receive transcriptions of those conference  
6 calls?

7 A No.

8 Q Sir, I'm going to ask you to, if you would, please, to  
9 thumb through the exhibits to the Faulk.  
10 depositions and ask me which -- I mean, tell me  
11 which, if any, of them, you recognize as having  
12 seen before today. We can take a break while you  
13 do that.

14 MR. SPEARS:

15 You're going to attach this to the  
16 deposition, Billy?

17 MR. BAGGETT:

18 I'd be glad -- I did bring an extra copy for  
19 that reason, if you'd like.

20 (A short break was taken.)

21 THE WITNESS:

22 What was the question?

23 BY MR. BAGGETT:

24 Q My question, sir, was, have you had an opportunity to  
25 review the documents which I represent were the

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1 exhibits to the deposition of Richard Faulk, taken  
2 in the Brenda Carter case, Brenda Carter versus  
3 Shell Oil, pending in the Roanoke Division of U.S.  
4 District Court of West Virginia, and I'm asking  
5 you if you recognize any of these documents that  
6 were exhibits to that deposition?

7 A Well, the first -- there's a table in the document and  
8 the number is 0060.

9 Q Yes, sir.

10 A And that, I recognize as a table from a publication  
11 written by Aksoy, A-K-S-O-Y.

12 Q That would be a study of Turkish workers with solvents  
13 and shoes; is that the study we're talking about?

14 A Yes.

15 Q What is your interpretation of that study? Before I  
16 get to that, in what context have you seen this  
17 before?

18 A I must have looked at this study many, many times.  
19 That's one of the early studies on benzene and  
20 leukemia.

21 Q All right, sir, and what was the observed or expected  
22 or SMR for AML in that cohort?

23 A Well, actually, Aksoy did not have a cohort, per se.  
24 It simply lists the number of cases of different  
25 cell type leukemia that he and these groups saw at

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1 the clinic.

2 Q Yes, sir. So this is something that you've seen in the  
3 literature. Do you recall having seen it at this  
4 particular meeting to which we've referred, the  
5 Shell seminar?

6 A I don't recall whether I paid attention to this 'table  
7 when it was presented at the seminar, but what I  
8 told you earlier was that I recognized this table  
9 as one of the tables in one of Aksoy's  
10 publications.

11 Q That was not something that you presented at the  
12 meeting as far as you recall?

13 A No.

14 Q Okay, sir. Were there any other documents that you  
15 recognized?

16 A The next document 'I recognize is 0071, and that looks  
17 like one of the exhibits that I used in the Skeen  
18 case.

19 Q Okay.

20 A I don't know whether it is exactly one of the exhibits  
21 or somebody modified that, but basically, that's  
22 something that I recall using at trial.

23 Q And the title is "Do Benzene-Exposed Populations have  
24 more CML than the General Population"; is that  
25 correct?

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1 A Well, that's the title of this document that we're  
2 looking at and I don't know whether I actually  
3 have that title in my exhibit at trial.

4 Q I see. Was this something that you recall having  
5 presented at the seminar?

6 A I don't remember whether I used it or not.

7 Q And of these articles which answer the question, "Do  
8 benzene-exposed folks get more CML than most  
9 people," you're the author or principal author --  
10 you're at least an author in three of those what,  
11 nine studies?

12 A Yes.

13 Q Sir, the Decoufle Study of Baltimore, that was a Conoco  
14 plant, wasn't it?

15 A The Decoufl6 Study was based on an old Conoco plant in  
16 Baltimore.

17 Q And you've done some work with Pierre Decoufl6 before?

18 A Yes. He also graduated from the University of  
19 Pittsburgh a couple of years before I did and we  
20 know each other.

21 Q Are you familiar -- oh, that's D-E-C-O-U-F-L-E. Have  
22 you ever talked with Pierre or anyone else about  
23 any influence which Conoco may have had in  
24 rewriting that study or altering the findings of  
25 that study or incorporating changes which they

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1 suggested even in the title of the study?

2 A I'm not aware of that.

3 Q Has any client or has any sponsor of any of the work

4 that you've done over the years ever requested you

5 to change your methods of analysis after a study

6 had been completed and after you had submitted a

7 final report?

8 MR. VERON:

9 For the record, I think that would have been

10 covered by your other question.

11 MR. BAGGETT:

12 Well, I want to be very specific.

13 MR. SPEARS:

14 Well, I think it has been asked and answered.

15 MR. BAGGETT:

16 I may have said in a general term, "Has

17 anybody ever done anything wrong," you know, and

18 he said no, but I -

19 MR. VERON:

20 Well, I think you asked him about four times

21 if anybody ever made recommendations for any

22 changes at all. He has said that and that would

23 include certain -

24 MR. BAGGETT:

25 I know. Certainly, they recommended changes.

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1 You're not suggesting -

2 MR. VERON:

3 He means in his results, you know, and in his

4 data -

5 MR. BAGGETT:

6 This is more specific and it has to do with

7 methods of analysis. For example, the definition

8 of latency -- excuse me -- the definition of

9 exposure.

10 BY MR. BAGGETT:

11 Q Have you ever submitted a final report and then had a

12 sponsor come back and ask you to redefine exposure

13 - in such a manner as it would alter the dose

14 response curve?

15 A No.

16 Q That would be wrong, wouldn't it?

17 A Unless they have a very good justification of making

18 those changes, unless they can say that the first

19 classification of exposure was pretty wrong or

20 some reason. I mean -

21 Q Have you ever recommended that a company conduct

22 studies in order to resolve ambiguities in your

23 work which they refused to allow you to conduct

24 because it would require you to contact cases?

25 And I'm referring specifically to case control

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1 studies?

2 A I'm trying to think whether I have actually made some  
3 recommendation of doing certain studies,  
4 recommending further work that would -

5 Q Cases involving studies of brain cancer in the vinyl  
6 industry, sir; have you ever recommended or given  
7 a proposal to study that and then your protocols  
8 were changed and there was discussion as to how  
9 you would conduct these studies without actually  
10 contacting the plaintiff -- excuse me, the  
11 subjects of the study; do you ever remember that  
12 being a factor in your vinyl chloride work?

13 A You're referring to a protocol on the case control  
14 study?

15 Q Yes.

16 A I don't remember a protocol of a case control study.  
17 We did not do any case control studies.

18 Q Okay. And you don't recall ever having suggested that  
19 a case control study of brain cancer in the vinyl  
20 industry would be appropriate?

21 A I don't remember whether we made a recommendation or  
22 not on that.

23 Q Have you ever made a recommendation, sir, that a study  
24 be conducted of histopathological tissue of  
25 workers classified in vinyl chloride studies as

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1 having liver cancer in order to determine -- or  
2 biliary tract cancer in order to determine whether  
3 the diagnoses were correct or not?

4 A I remember that, in fact -- I think CMA sponsor  
5 continued -- more or less, our scope work to do  
6 exactly what you just described.

7 Q And was a part of the protocol that you agree not to  
8 contact any of the families of the cancer victims  
9 in order to conduct the study? .

10 A I don't recall whether we made that recommendation or  
11 not.

12 Q Do you recall -- have you ever heard of discussions -  
13 who is Hai (phonetic) Shah?

14 A Dr. Shah, S-H-A-H -- I believe his title is called  
15 program manager for a number of substances at CMA  
16 and vinyl chloride is one of the substances that  
17 they manage.

18 Q And who is Carol Stagg?

19 A Carol Stagg is the program manager for, I believe,  
20 among other chemicals, benzene.

21 Q Did you ever give her preliminary results of your  
22 studies prior to publication?

23 A We might have sent the results to the group that we  
24 work with at one of the meetings.

25 Q She was your -- she's not a scientist, is she?

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1 A She has a Ph.D. in some biological sciences. I don't  
2 remember what.

3 Q She was more or less a liaison, though, among the  
4 sponsors, correct, for CMA?

5 A Her function was to manage activities in the area.

6 Q Did she have anything to do with your industry-wide  
7 survey of benzene-exposed chemical workers? I may  
8 have misphrased the subject and you can -- please  
9 correct me if I didn't describe the cohort  
10 correctly.

11 A Yes, to the extent that she was my contact at CMA for  
12 that project.

13 Q Did all the studies -- did all the participants in that  
14 study continue through the completion of the  
15 study?

16 A No.

17 Q Who dropped out?

18 A ARCO dropped out of this thing.

19 Q And why did ARCO drop out?

20 A The reason given to us was that the data was not  
21 complete and would not be appropriate to be  
22 included in this study.

23 Q And what did you understand that to mean or what did  
24 they tell you that meant; why was it not  
25 appropriate; why was it not complete? In what

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1 respects?

2 A If I remember correctly, the main reason they gave to  
3 us was that the cohort or their employment records  
4 were not complete to identify the cohorts that we  
5 wanted.

6 Q Did you ever worry about this creating some sort of  
7 public relations problem for your company, the  
8 fact that they dropped out?

9 A I don't know exactly what you mean by public relations.

10 It does make a study smaller than if we'd used the  
11 statistical power of the study. I mean, it's not  
12 something that we like to happen, but on the other  
13 hand, we have no control over the participants and  
14 we make it very clear that, you know, one of the  
15 companies dropped out from the study in our  
16 report; we stated that fact in the report.

17 Q How many leukemias did you find in the cases?

18 A I don't understand the question.

19 Q How many leukemias did you find in that study?

20 A In that study, not the cases, I believe there was  
21 seven.

22 Q And in the unexposed -- now, you were -- let me go back  
23 now and start all over. Sir, you helped segregate  
24 the exposed from the unexposed workers; that was  
25 part of your work on that job, correct?

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1 A Yes.

2 Q And you did a good job on that, didn't you?

3 A I don't know.

4 Q These workers -- it was your intention that the workers  
5 should be identical, ideally, in every respect but  
6 for their exposure to benzene, correct?

7 A Yes.

8 Q And how many leukemias did you find in the group that  
9 was identical to the cases but for the fact that  
10 they were not exposed to benzene?

11 A Let me clarify one point in the question. You keep  
12 referring to leukemias in the cases. I don't  
13 understand what that is--.

14 Q I'm sorry. You had seven cases. How many did you have  
15 in your matched controls?

16 A They're not matched controls.

17 Q Okay.

18 A I think we're getting a number of concepts confused.

19 Q Controls. How many did you find in your controls which  
20 you had selected as being an appropriate control  
21 group?

22 A Let me try to answer your question. We have two  
23 control groups in our study.

24 Q Is that the original protocol?

25 A Yes. We have the external, the U.S. general

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1 population. That's the comparison group most  
2 studies use. Then in our protocol, we also  
3 specify what we call an internal comparison group  
4 and that's the group of workers at the same  
5 location with no direct exposure to benzene; at  
6 least the exposure to benzene would be much, much  
7 lower.

8 Q And it's because of the healthy worker effect, that  
9 would be the group that would be more directly  
10 comparable to the benzene-exposed workers than the  
11 general population, correct?

12 A To some extent, they would be more comparable to the  
13 workers here because they work for the same  
14 company. one of the problems that we have in  
15 using the internal control group is, that group  
16 came out to be much smaller than we thought. We  
17 anticipated a much larger group, but at the end,  
18 from the analysis, that group was less than half  
19 of what we anticipated.

20 Q How many leukemias in the controls?

21 A We did not see any leukemias in the comparison group.

22 Q Did that trouble you? Did you feel that was a problem  
23 with the study?

24 A That was a problem in the study in the sense that we  
25 failed to use that group properly because that

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1 group was not large enough. It was not as large  
2 as we anticipated in our protocol.

3 Q Sir, this thing about the group not being small when  
4 you did your pre -

5 A Not being large enough.

6 Q Not being large enough. When you did your -- you did a  
7 preliminary study before you went and submitted  
8 the protocol, correct?

9 A Yes. .

10 Q So you had an idea of what the size ought to be and  
11 what it was, didn't you?

12 A Yes.

13 Q So how come you find out after the fact that it's too  
14 small?

15 A Because as we discussed, as you pointed out, one  
16 company dropped out of the study. We lost quite a  
17 few people there.

18 Q ARCO wasn't dissatisfied with anything about the way  
19 you were conducting the study at all; that wasn't  
20 part of the reason, was it?

21 A I do not know whether they were satisfied, or not  
22 satisfied with what we did.

23 Q And this thing about the cohort being too small, that's  
24 not just some kind of plausible explanation that  
25 you've come up with to explain the no numbers you

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1 found in the controls, correct?

2 MR. SPEARS:

3 Object to the form of that question.

4 THE WITNESS:

5 It's a simple thing. If the group is very

6 small, you may or may not see any leukemia:

7 BY MR. BAGGETT:

8 Q I'm asking you, once you found that there was no

9 leukemias in the controls, did you set out to find

10 a plausible explanation for why, to explain the

11 seven to one discrepancy away?

12 A I don't understand what you're referring to when you

13 say seven to one.

14 Q There were seven leukemias in the exposed group; there

15 were zero in the unexposed group. You found a

16 statistically significant increase in acute

17 myelogenous leukemia like Mr. Hebert had, correct?,

18 A No.

19 MR. SPEARS:

20 Let me object to the question. Billy, do you

21 have the study there you want to show him.

22 MR. BAGGETT:

23 He brought that study with him --

24 BY MR. BAGGETT:

25 Q -- didn't you? You rely on that study, don't you? You

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1 rely on that study in your opinions in this case,  
2 don't you?

3 A No, I did not.

4 Q You don't rely on the CMA study?

5 A No.

6 Q And why is that?

7 A Because in that study, I make it very specific in the  
8 report -- I said -- in the publication, I said the  
9 study was too small for us to do any cell type  
10 specific analysis. And in fact, one of the  
11 statements that you just made earlier, just a  
12 couple of minutes ago, is incorrect. I did not  
13 find a significant increase of AML.

14 Q Sir, in any of the studies you've conducted listed on  
15 your c.v., in which benzene-exposed persons were  
16 part of the cohort, have you ever found a  
17 statistically significant increase in AML?

18 A No.

19 Q Are you aware of any study conducted in the entire  
20 world literature which, in your mind, demonstrate  
21 a statistically significant increased risk of AML  
22 in benzene-exposed populations?

23 A Well, we do have the study done by Rinsky, R-I-N-S-K-Y.

24 Q And Infante? You consider those to be one study,  
25 correct? That's spelled like infant with an E.

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1 A Infante was the lead author of the earlier reports  
2 based on the same study.

3 Q So we've got one; we've got one study in the entire  
4 world literature that you believe demonstrates a  
5 statistically significant increased risk of AML in  
6 benzene-exposed populations. Can you name me one  
7 other?

8 A That's the one that's based on the -- at least based on  
9 the traditional design, that you do have a cohort  
10 of workers exposed to benzene. Some people may or  
11 may not agree with the studies or the reports  
12 written up by Aksoy -- whether those would be  
13 proper studies or not, and the reason I said that  
14 is, Dr. Aksoy reported a number of leukemias or  
15 AML that he saw at his clinic and he estimated  
16 what the population would be in that area exposed  
17 to benzene and came up with some estimates, but  
18 that's not the traditional cohort study. So that  
19 kind of investigation most likely would, I would  
20 say, fit into the gray area. It's not a proper  
21 study, per se, but he did find more than you would  
22 expect to see in a general population in terms of  
23 AML.

24 Q Well, in order for you to attribute a disease in a  
25 particular cohort to benzene, you, as I understand

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1 your criteria for attributability, would require  
2 statistically significant showings of increased  
3 risk among that cohort, is that not correct?

4 A That's one of the criteria.

5 Q So you named me on, Rinsky. So is Aksoy another one or  
6 is it -- I'm not asking you about whether some  
7 people believe it or whether it can be argued.

8 I'm asking what your belief is. Is there any  
9 other study besides Rinsky's study that  
10 demonstrates an increased risk of AML in the  
11 entire world literature?

12 A I believe there is a case report. I don't remember the  
13 name now of the report. There is a case report  
14 demonstrating a significant increase in risk of  
15 AML among people exposed to benzene or benzene  
16 related chemicals.

17 Q That would be Aksoy?

18 A No. I just don't remember the name of the author. I  
19 believe it's a case-controlled study done in  
20 England or in Europe someplace.

21 Q And that was a case-controlled study?

22 A Yes. It's a case-controlled study.

23 Q A mortality study -- I mean, it was not a -

24 A It's not a cohort study.

25 Q There's no cohort study you're aware of except Rinsky's

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1 that demonstrates an increased risk of AML?

2 A With benzene.

3 Q Right. With benzene.

4 A There are -- well, there is one study based on refinery  
5 workers that report an increased AML. Whether you  
6 make the connection between refinery and  
7 benzene --

8 Q Well, you don't, do you? You don't equate the two?

9 A I would say refinery workers, a high percentage of  
10 them, would be exposed to low level benzene.

11 Certainly not as high as the study subjects in the  
12 Rinsky study, and at the same time, refinery  
13 workers are also exposed to other substances as  
14 well.

15 Q Sir, back to my original question or one of the  
16 questions I asked earlier, anyway, once you found  
17 that there were zero cancers in your industry-wide  
18 survey among the control group, the unexposed  
19 control group, and you found that there were seven  
20 leukemias in the exposed group, did you take it  
21 upon yourself to try and come up with a plausible  
22 explanation for this?

23 A The explanation is the most --

24 Q I'm not asking you what the explanation is.- I'm asking  
25 you, did you set out to try to find some way to

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1 explain the fact that there was none in the  
2 unexposed cohort and that there were seven  
3 leukemias in the exposed cohort?

4 A Yes, I did and that would be part of the discussion of  
5 any report. Once you come up with the result,  
6 then you would discuss the results. What you  
7 think of the results, that would be in the  
8 discussion chapter of any report.

9 Q So you're there and you've got zero in the controls and  
10 you've got seven in the exposed group. Why did  
11 that give you a problem?

12 A Because if you take it -- if you take that statement or  
13 take that result out of context, that will say for  
14 anybody with no exposure to benzene, there would  
15 be no leukemia, period, and that's just not true.  
16 I can guarantee you that if you take away leukemia  
17 from the society, you will still see leukemia.

18 Q So your concern was that the findings might be  
19 misinterpreted?

20 A Yes.

21 Q By whom?

22 A By anyone who reads the report.

23 Q You just had some sort of intuitive knowledge that it  
24 was wrong?

25 A Because that group was too small and we --

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1 Q Wait. I'm sorry. Complete your answer.

2 A Because that group is too small and we may have  
3 observed that finding purely due to chance.

4 Q What I'm asking you, sir, is before you came to the  
5 conclusion that the control group is too small,  
6 did you set about the task of trying to find  
7 something wrong with the study before you came up  
8 with that explanation? In other words, did you  
9 try to come up with a plausible explanation for  
10 the discrepancy between the incidence of leukemia  
11 among the unexposed and the exposed cohort?

12 MR. SPEARS:

13 Let me object. I know he's answered that  
14 question at least three times.

15 MR. BAGGETT:

16 I don't believe he's answered it at all.

17 MR. SPEARS:

18 Well, I think he has. You're beating a dead  
19 horse here.

20 MR. BAGGETT:

21 Well, I won't beat it much more if I get an  
22 answer.

23 MR. SPEARS:

24 Well, I object in that he has answered it.

25 BY MR. BAGGETT:

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1 Q Before you decided that the cohort was too small -- I  
2 imagine that you didn't go into the study knowing  
3 that, correct?

4 A In fact, as I said, you know, protocol we expect -  
5 we anticipate a larger control group.

6 Q So you thought all the ARCO people had a lot of,  
7 unexposed, basically, is what you're saying?

8 A Well, ARCO was a major participant.

9 Q But their -- the ratio of exposed to unexposed among  
10 their workers, you had reason to believe was  
11 somehow greater?

12 A It could be, yes.

13 Q Could be or you knew that?

14 A I don't remember all the details now. I don't remember  
15 all the specifics. But one of the reasons why we  
16 ended this -- in fact, the whole study was much  
17 smaller than we thought and in particular, the  
18 control group turned out to be much smaller. And  
19 let me just tell you how we -

20 Q I'm sorry, but I'm going to be met with objections that  
21 I'm repetitive and I still haven't got an answer  
22 to my question. I know your conclusion today is  
23 that the cohort was too small. I'm asking you,  
24 before you came to that conclusion, was there ever  
25 a time when you didn't have an answer, when you

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1 set about to find a plausible explanation for the  
2 discrepancies that you found between the exposed  
3 and the unexposed cohorts?

4 MR. SPEARS:

5 I'll enter the same objection, that that  
6 question has been asked and answered numerous  
7 times. He's tried to explain it as best he could.

8 THE WITNESS:

9 With all due respect, I don't even understand  
10 your question. You keep saying -- okay, before  
11 the result comes out, have you tried to reconcile  
12 the discrepancy. If I don't know the result, how  
13 do I know there was a discrepancy? I just don't  
14 follow your question at all.

15 BY MR. BAGGETT:

16 Q Your opinion today is that the cohort was too small,  
17 correct?

18 A Yes.

19 Q Now, when the company dropped out, when ARCO dropped  
20 out, was your conclusion then that the cohort was  
21 too small, that the unexposed cohort was too  
22 small?

23 A At that time, we didn't know yet because -- and I was  
24 trying to explain to you until you cut me off --  
25 and that was the way that we classify workers is,

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1 we have employment records of all the people from  
2 a particular plant. We looked at their job  
3 description. We entered the information in a  
4 computer. At that time, we did not have an  
5 exposure classification yet. What we did was, we  
6 came up with all the job titles, all the  
7 departments, and we talked with the industrial  
8 hygienists from the industry to classify all those  
9 jobs and departments into exposed, not exposed and  
10 so on. Only after we had finished that, did we  
11 find out how many people fall into each category.  
12 Q So when ARCO dropped out, the exposure classifications  
13 had not been made?  
14 A It was most -- we were in the process of doing that.  
15 Q So it had not been made?  
16 A Not completed.  
17 Q And you're quite sure of that?  
18 A Yes, I'm quite sure of that.  
19 Q You're saying that you had not already identified, for  
20 example, trends that were occurring -- for  
21 example, dose response relationships among the  
22 exposed cohort -- you hadn't already identified  
23 that when ARCO dropped out?  
24 A At that time, we had not completed the exposure  
25 classification. We had not completed our --

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1 Q No, sir, I'm not asking about --

2 A We had not -- death certificates -- you are implying  
3 that we had done some analysis at that point and

4 I'm trying to tell you at that time --

5 Q Sir, I mean -

6 A -- we have not --

7 Q -- you're answering a question I didn't ask.

8 MR. SPEARS:

9 Well, let him finish the answer. You can

10 strike --

11 BY MR. BAGGETT:

12 Q I believe I had asked if you had already recognized  
13 trends. I didn't ask about computers being -- I

14 asked you, had you already recognized trends which

15 indicated a dose response relationship between

16 exposure to benzene and development of leukemia

17 when ARCO dropped out; that's very simple.

18 A Sir --

19 MR. VERON:

20 Excuse me, Doctor. The problem is that if

21 you cut the witness off, we won't have a record to

22 show whether or not he was responding to your

23 question. Some of us may feel that the answer is

24 responsive, so I think probably the best procedure

25 would be to let him answer --

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1 MR. BAGGETT:

2 I got it.

3 MR. VERON:

4 -- and then object -- just hear me out, Bill.

5 I'm not trying to obstruct anything.

6 MR. BAGGETT:

7 I'm agreeing with you.

8 MR. VERON:

9 But if I just object that it's not

10 responsive, and then re-ask it in a better way and

11 that way, we'll all know what the answer was. We

12 can argue about it later if we have to.

13 MR. BAGGETT:

14 Okay.

15 THE WITNESS:

16 Is it my turn now?

17 MR. BAGGETT:

18 Yes, sir, please. And I really probably

19 should not have cut you off. Go ahead.

20 THE WITNESS:

21 I am trying to answer your question. In

22 order to answer your question, I sometimes have to

23 explain how we do things. When you referred to

24 dose response analysis or whether v4e are seeing a

25 trend at that time, I have to tell you that before

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1 we do that, we've got to have death certificates  
2 to start with. We've got to know what people died  
3 from in order to have some idea of what the trend  
4 would even look like. Without exposure  
5 classification completed at that time, without  
6 getting all the death certificates at that-time,  
7 there is no way we can even know what's going to  
8 happen.

9 BY MR. BAGGETT:

10 Q At that time, you wouldn't have been able to know  
11 whether there were clusters?

12 A No.

13 Q You wouldn't have been able to know if there were, you  
14 know -- since you didn't have the death  
15 certificates, you wouldn't know what plants they  
16 came from?

17 A No.

18 Q And in any event, it would have been improper to  
19 discuss such data with Carol Stagg while you're  
20 still collecting those data; you recognize that  
21 from the deposition of Herschel (phonetic). While  
22 you're still collecting data, you're not supposed  
23 to know or let the sponsor know what the response  
24 you found already is?

25 A That's right.

81

1 Q So you would never have done that?

2 A No.

3 THE WITNESS:

4 Can we take a break?

5 MR. BAGGETT:

6 Sure.

7 (A short break was taken.)

8 MR. BAGGETT:

9 Back on the record.

10 BY MR. BAGGETT:

11 Q Sir, how much of your time do you estimate you spent in  
12 litigation-related matters, say, in 1993?

13 A I'd say probably about 30 percent.

14 Q Okay. And the rest of the time would be involved i  
15 other -- your research and other -- well, maybe I  
16 should just ask you. The rest of your time would  
17 be involved in what?

18 A The rest would be mainly on research projects,  
19 conferences, talks.

20 Q Okay, sir. As a percentage of your income, how does  
21 the litigation-related activities -- is it 30  
22 percent or is it a greater percentage than that?

23 A Maybe slightly higher than 30 percent, because some of  
24 the work that I do in the remaining 70 percent of  
25 time may or may not pay.

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1 Q Yes, sir. Have you an idea of -- I don't think there  
2 was any documents in there -- I'm not even sure I  
3 requested it in the subpoena -- well, I asked for  
4 communications with the attorneys. Do you know  
5 what your -- before we came here today, what your  
6 outstanding bills are in this case? ,

7 A I don't remember the exact number. I think I started  
8 working on this case maybe like two months ago and  
9 I probably spent a day or so the first month,  
10 looking through some documents that were provided  
11 to me and then maybe a couple of days doing some  
12 research, going through some articles.

13 Q okay, sir. The documents you reviewed would be the  
14 depositions and nothing else, correct?

15 A That's correct.

16 Q I mean, for example, as far as exposure levels at any  
17 of the -- well, and nothing else, that would be  
18 correct?

19 A Well, there were some articles attached to some of the  
20 depositions, but there was no exposure data.

21 Q For example, Mr. Parker's deposition?

22 A There were a couple of articles attached to that.

23 Q Yes, sir.

24 A I looked at those articles, as well.

25 Q Well, what I'm getting at is, you haven't been provided

83

1 any information by the various facilities where  
2 Mr. Hebert may have worked with regard to working  
3 conditions or estimated levels of exposure, et  
4 cetera?

5 A No.

6 Q Looking at your curriculum vitae, I wanted to ask you  
7 about -- I've seen that you've done a number of  
8 studies of different chemicals and some of these  
9 chemicals, I guess, could be -- well, are  
10 considered to be dangerous. That's not my  
11 question. Let me see if I can start over again.

12 Sir, what do you believe are proven carcinogens in  
13 humans?

14 A You mean give you a list of all the chemicals?

15 Q Yes, sir. If there's -- yes, sir. Please tell me what  
16 chemicals you believe are carcinogens for humans.

17 A Well, benzene is a human carcinogen if the exposure is  
18 high enough and long enough. That would be one  
19 example.

20 Q What's another carcinogen?

21 A Arsenic would be another example of human carcinogen.

22 Again, if the exposure is high enough. Asbestos  
23 would be another human carcinogen.

24 Q Are there any others?

25 A Vinyl chloride would be a human carcinogen. I mean,

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1 whenever I saw human carcinogen, I mean if the  
2 exposure is high enough and long enough.

3 Q Sure. That goes without saying. Are there any others?

4 A Cigarette smoking.

5 Q Sure.

6 A Ionizing radiation. Sunlight. Now I'm drawing 'a  
7 blank.

8 Q Okay, sir. Do you know how many chemicals are  
9 considered to be proven carcinogens by IARC?

10 That's I-A-R-C.

11 A I know some of the ones that I mentioned -

12 Q Yes, sir.

13 A -- a couple of minutes ago. -

14 Q Are there others that are -- I believe, would that be a  
15 2-A carcinogen? Well, whatever the -

16 A 2-A is -

17 Q Proven?

18 A No. I think one is proven.

19 Q Okay.

20 A 2-A is probable human carcinogen. I'm sure the ones  
21 that I mentioned would fall into either 1 or 2-A  
22 category.

23 Q Sure. Asbestos is one of the substances you've  
24 mentioned and I think your masters thesis was on  
25 asbestos, so you've been involved with that for a

85

1 while; is that correct? You've testified in  
2 asbestos cases as well?

3 A Yes, sometimes.

4 Q What types of cancer are caused by asbestos?

5 A Lung cancer and also mesothelioma, M-E-S-O-T-H-E-L.

6 Q So you do agree that asbestos causes lung cancer?

7 Well, the case has been proven that asbestos is a  
8 cause of lung cancer?

9 A Again, if you're given the right exposure -

10 Q Sure.

11 A -- and so on, yes.

12 Q Okay, sir. Ethyl dibromide, is that a carcinogen?

13 A Well, the work I did on ethylene dibromide was actually  
14 on reproduction. I did not look into whether it  
15 was a carcinogen or not. I really have not kept  
16 up with the literature on that.

17 Q Yes, sir. Is work in the petroleum refining and  
18 petrochemical industry in the United States  
19 something that would put a person at increased  
20 risk of cancer, to your understanding?

21 A I did a very comprehensive literature review on that  
22 and basically, we do not find evidence, based on  
23 epidemiologic studies, that working in petroleum  
24 refining industry would increase one's risk of  
25 cancer significantly.

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1 Q And I know your answer was framed in terms of your  
2 study, but my question really was a little bit  
3 more general in that -- that is your opinion?

4 A Right.

5 Q Thank you. I'm probably going to mispronounced this,  
6 brominated, B-R-O-M-I-N-A-T-E-D -- ,

7 A Right.

8 Q -- chemicals. Are those carcinogens

9 A On some of these chemicals -

10 Q Yes, sir.

11 A -- there's no definitive answer to your question yet.

12 Based on my study, I did find -- if I remember  
13 correctly, I did find an increased incidence of  
14 lung cancer. We could not pin it to a certain  
15 chemical. To answer your question, we should  
16 really look at all other studies on the same  
17 category; shouldn't just base on one study,  
18 whether it was done-by me or by somebody else.

19 Q Okay, sir. Have you ever testified in a case involving  
20 alleged injury arising from exposure to brominated  
21 chemicals?

22 A No.

23 Q Okay, sir. Was the industry which manufactured -- was  
24 an industry or a company which manufactured  
25 brominated chemicals the sponsor of your paper

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1 with regard to the quantification of occupational  
2 cancer?

3 A Can I take a look at it?

4 Q Yes, sir. No. 17.

5 A That study was sponsored by a company.

6 Q In fact, sir, have you ever participated in any study

7 of any workers in any industrial setting which was

8 not sponsored by the industry in question or the

9 company in the industry?

10 A There was a study that I did that was funded jointly by

11 the union and the management.

12 Q And that would have been the study of diesel?

13 A Very good.

14 Q And you found what about diesel fumes?

15 A We found an increased risk of lung cancer in a group of

16 people we don't know have any work history -- in

17 that study, we had a group of people -- the

18 records were not complete for them and we did not

19 know what exposure they had, but we did find an

20 increased risk of lung cancer.

21 Q Do you know whether IR considers diesel fumes to be a

22 cause of cancer in humans?

23 A I don't know.

24 Q Formaldehyde; is that a carcinogen?

25 A I don't know whether the scientific community has

88

1 arrived at a conclusion on that question or not.

2 In my study, I did not find an increased risk of  
3 cancer.

4 Q And who sponsored that study?

5 A That was sponsored by a company.

6 Q Involved in the manufacture and distribution of,  
7 formaldehyde?

8 A Manufacture. '

9 Q In the study, No. 23, with Dr. Wen, of refinery workers

10 -- now I've handed it to you -- the solvent

11 exposed workers; did you find any increased

12 incidence of cancer among these refinery workers

13 with solvent-related exposures?

14 A I think we found an increase of prostate cancer in that  
15 study.

16 Q I've been looking for a cause for that for a long time.

17 Do you believe that solvents are a cause of

18 prostate cancer?

19 A The problem with that is there are not too many studies

20 on that issue, so right now, there's not enough

21 data to really make a firm conclusion.

22 Q Okay, sir. You studied PCB's. Do you believe PCB's

23 are a cause of cancer in humans? I think No. 24.

24 A In that study, I did not look at cancer.

25 Q Okay.

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1 A And I really have not paid much attention to the  
2 literature, so I would not be able to answer your  
3 question.

4 Q Okay, sir. So you don't have an opinion on that one?

5 A No.

6 Q Among workers exposed to benzene, do you believe that  
7 benzene has been shown to be a cause of acute  
8 myelogenous leukemia?

9 A When the exposure is high enough, yes,

10 Q Okay. Have you ever testified in a case where it was  
11 high enough?

12 A I don't recall that.

13 Q Have you ever testified for a plaintiff in any type of  
14 case whatsoever?

15 A I have not, but I'd love to.

16 Q Okay. Inorganic brominated chemicals; that's the same  
17 thing I asked you about before, or is it  
18 different? DBCP, TRIS, PBB and DDT.

19 A I think that's a separate study; it's a different  
20 study.

21 Q It is a separate study. I just didn't know whether the  
22 "inorganic" added anything to it. So let me ask  
23 you about those. Are those particular chemicals  
24 that I just named, No. 34, are any of those  
25 carcinogens in your opinion?

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1 A Well, again, based on our study, we did not find an  
2 increase of cancer, but in order to answer your  
3 question properly, one has to go out and look up  
4 all the studies on those chemicals to make an  
5 assessment and I have not done that.

6 Q And who funded that study, if you can recall?

7 A Velsico, V-E-L-S-I-C-O.

8 Q Okay, sir. The paper that you wrote with Dr. Morgan on  
9 asbestos and GI cancer; it was a meta-analysis, I  
10 believe; is that correct?

11 A Yes.

12 Q Who sponsored that or how did you come to publish that;  
13 was there a sponsor for that study?

14 A I don't know who sponsored that. Dr. Morgan was the  
15 lead author of that and they were working on the  
16 literature review of GI cancer, the asbestos  
17 studies, and they asked me to provide some input  
18 because of statistical analysis, so I really don't  
19 know who sponsored the study or was it something  
20 that he did just to write an article.

21 Q In the "Mortality Study of the Paint and Coatings  
22 Industry," No. 40, or -- I mean, there may be more  
23 than one. I'm skipping when I come to the same  
24 chemical twice -- I'm asking this the wrong way.  
25 Do you believe that work in the pain and coating

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1 industry puts one at an increased risk of cancer?

2 A No.

3 Q Did you find an increase, a significant increase, in  
4 any mortality in that industry?

5 A We did not find any increased cancer risk associated  
6 with employment in that industry.

7 Q And who sponsored that study?

8 A That was sponsored by the industrial association. I  
9 think it's called the National -

10 Q Paint and coating?

11 A -- Paint and Coating Association.

12 Q In the study or review of the studies, was that  
13 artificial sweeteners and bladder cancer that you  
14 did with Dr. Morgan; was that a meta-analysis?

15 A M-E-T-A, analysis. That was a critical literature  
16 review. I think we did a meta-analysis as part of  
17 the review.

18 Q And did you find that there was a relationship between  
19 artificial sweeteners and bladder cancer?

20 A I don't think we found an association between the two.

21 Q And who sponsored that study, sir?

22 A An industrial association. I don't remember the name.

23 Q Okay. I may have skipped this, and if I have already  
24 asked this, I apologize, but with regard to the  
25 chemical, specifically DDT, you don't believe that

92

1 to be a human carcinogen?

2 A I didn't say that. I said we didn't find any cancer  
3 risk, increased cancer risk, in my study, but in  
4 order to question properly, one has to go out and  
5 look at all the studies on the chemical -

6 Q I see.

7 A -- and I have not done that.

8 Q And you've never testified in a case involving exposure  
9 or alleged exposure to those chemicals?\_

10 A DDT -

11 Q Yes, sir.

12 A -- or those chemicals? No.

13 Q In your study of the "Mortality of Employees in Lead  
14 Battery Plants and Lead Producing Plants," did you  
15 find an increase in any mortality among those  
16 employees?

17 A I remember we had some positive findings. I just don't  
18 remember what it was.

19 Q So as we sit here today, you don't know whether you  
20 found anything statistically significant or -

21 A No. I said we did.

22 Q Oh, you did?

23 A I remember we did find something positive, significant,  
24 but I just don't remember the specific finding.

25 Q All right. With regard to -- are you -- what

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1 reproductive hazards can you think of that are  
2 present in industrial settings or medical settings  
3 as -- I've seen you've published a number of  
4 papers on the subject.

5 A My papers were really on how to set up a program to  
6 monitor reproductive effects. I don't think we  
7 really get into a specific chemical. We might  
8 have used one or two chemicals as an example.

9 Q Okay. For example, No. 44, the "Evaluation of  
10 Occupational Reproductive Hazards," that would be  
11 more of a how-to type -- set of paper rather than  
12 an actual study?

13 A Right. That would be a paper on the method of doing  
14 such a study.

15 Q Can you name for me a reproductive hazard in -- or are  
16 there too many to name?

17 A Well, one that comes into mind is DBCP.

18 Q Have you performed epidemiologic studies on persons  
19 exposed to that substance?

20 A Yes.

21 Q And did it show a reproductive hazard?

22 A Let's go back one step. I did a study to look at the  
23 cancer patterns among workers exposed to DBCP. I  
24 did not look at the reproductive facts.

25 Q I see. A paper, "Birth Outcomes in Relationship to

94

1 DBCP," didn't have to do with that?

2 A That was a study done in Fresno County. The reason we

3 did a study in Fresno County was that some of the

4 drinking water in that county was contaminated

5 with DBCP. The use of DBCP in -- I guess in the

6 farmland, and we looked at the birth rate, -male to

7 female ratios, birth weights and so on by

8 different areas and linked that to the

9 contamination level of DBCP in drinking water. So

10 it's not the reproductive effect of workers, but

11 rather whether there is any, in a very general

12 sense, reproductive effect in the community as a

13 result of the environmental contamination.

14 Q And what was your conclusion?

15 A We didn't find any difference between areas with high

16 levels of DBCP and areas with low DBCP

17 contamination.

18 Q All right. In your "Industry-wide Study of Chemical

19 Workers Occupationally Exposed to Benzene," did

20 you find any ill health effects among those

21 workers?

22 A Sir, can I look -

23 Q Yes, sir. I was referring to No. 47 there. I think

24 there might be -

25 A That's the CMA study --

95

1 Q The CMA, yes.

2 A -- that we've been talking about this morning?

3 Q Yes, sir. And you corrected me when I misspoke about

4 the statistical significance and so -- let me just

5 ask you again. Sir, did you find any ill health

6 effects among the workers which were the subject

7 of your study, "Industry-wide Mortality Study of

8 Chemical Workers Occupationally Exposed to

9 Benzene"?

10 A Unfortunately, I cannot answer your question with a yes

11 or no, -because as you know, we have two control

12 groups, two comparison groups in the study. When

13 we compared to the general population, there was

14 no increase. We had seven leukemia and we

15 expected about five-something, so there was no

16 statistically significant increase. But when we

17 compared to the internal comparison group, as you

18 pointed out this morning, we did not see any

19 leukemia at all in that group, so with that, we do

20 see -- have a finding, positive finding, using the

21 internal comparison group. And the question has

22 not been resolved to everybody's satisfaction and

23 that is, how believable is the comparison group

24 within. Is it -- is the group just too small or

25 are we saying that if we take benzene away, there

96

1 would not be leukemia at all?

2 Q Okay, sir. As this internal control group -- it's fair  
3 to say, then -- retract that. In your mind, the  
4 study that you performed of chemical workers  
5 occupationally exposed to benzene was inconclusive  
6 as to any ill health effects that might result  
7 from exposure to benzene?

8 A I think the result based on the internal comparison  
9 group is not reliable, because that group was just  
10 too small. On the other hand, the comparison to  
11 the external population, there is a very standard  
12 method of comparison; everybody does that. Mr.  
13 Rinsky and Niosh, N-I-O-S-H, the Niosh study, he  
14 used the external comparison group also. And I  
15 would like to point out, if you don't know  
16 already, in the Niosh study, they also started  
17 with an internal comparison group and they didn't  
18 find any leukemia in that group either.

19 Subsequently, they dropped the use of that group.  
20 So it's not unusual that when you have a very  
21 small comparison group that it just does not  
22 provide you with stable numbers to compare to.

23 Q Other than small number of workers in the study, did  
24 you ever entertain other possibilities as to the  
25 explanation for the low cancer incidence in the

97

1 unexposed group?

2 A The only likely explanation I can come up with is, that  
3 finding was due to chance because of the small  
4 sample size. I cannot believe, as I said this  
5 morning, that if you take benzene away, you can  
6 eliminate leukemia; it just won't happen. -

7 Q Okay, sir. What about the healthy worker effect?

8 A The healthy worker effect -- when we talk about that,  
9 we are really talking about, most of the time,  
10 cardiovascular diseases. The things that you can  
11 detect, things that stop you from getting employed  
12 when you were young -- certainly, leukemia is not  
13 one of them or cancer is rarely one of them.

14 Q So it's your opinion in this case that there is no  
15 healthy worker effect with regard to leukemia?

16 A I would say by and large, there's no healthy worker  
17 effect for leukemia.

18 Q And specifically with regard to that study, you never  
19 thought that that was the explanation for the low  
20 incidence of leukemia in your control group, did  
21 you?

22 A When you put things in perspective, I would say I  
23 cannot rule it out 100 percent, but when you  
24 compare that explanation to the explanation of  
25 small sample size, I would say the small sample

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1 size will be a much more likely explanation.

2 Q You've testified on many occasions that there's no --

3 well, at least on more than one occasion, anyway,

4 that there is no latent -- that there is no

5 healthy worker effect for leukemia, isn't that

6 true?

7 A Practically none.

8 Q Were you ever in a position -- this is what I was

9 trying to get at earlier -- were you ever in a

10 position where, faced with zero leukemias in the

11 unexposed group and seven leukemias in the exposed

12 group, that you were seeking a plausible

13 explanation for that and actually wanted to not

14 publish the study? Did you ever indicate that you

15 were inclined not to even publish the study

16 because there were seven cancers in the control -

17 in the exposed group and zero cancers in the

18 unexposed group?

19 A No. I would never -- how should I say it -- that would

20 not be a reason of not publishing something. I

21 just cannot imagine that.

22 Q Do you think that there is evidence from other

23 epidemiology studies that indicate that there is,

24 in fact, a healthy worker effect for leukemia?

25 A I don't know whether people have made that statement or

99

1 not. At that time, when I was doing my study,  
2 there was not much that we know about the  
3 relationship between, for example, leukemia and  
4 smoking. Now, smoking is somehow related to the  
5 healthy worker effect, so there may be an indirect  
6 link there, but studies on smoking and leukemia  
7 really got published within the last few years.

8 Q But you're not going to say it's the benzene and the  
9 cigarettes that causes the increased -risk in  
10 leukemia, are you?

11 A I don't think we know what's in tobacco or tobacco  
12 smoke that caused an increased leukemia among  
13 smokers.

14 Q Are you aware of any leukemission (phonetic) in  
15 cigarette smoke?

16 A I don't think they have identified any.

17 Q This is the last time, I promise, I'll ask you about  
18 this. When -

19 A I never trust a lawyer's promise.

20 Q Yes, I know. I don't blame you. I don't blame you.

21 But -

22 MR. SPEARS:

23 Don't make promises you can't keep.

24 BY MR. BAGGETT:

25 Q Do you recall feeling that ARCO's withdrawal from the

100

1 CMA study, if it had to be explained, would create  
2 public relations problems for your business?

3 A No. I was disappointed mainly from the fact, you know

4 -- the fact that the study's power, the

5 statistical power of the study, would be reduced,

6 but I really did not think of public relations.

7 Q When you studied mortality, this was a surprising

8 combination -- "Population of Nickel Miners and

9 Refinery Workers." How would -- oh, -okay.

10 A Refined nickel.

11 Q Oh, okay. I was thinking maybe they were using it as a

12 catalyst or something. Okay. But these were

13 workers in a nickel -refinery?

14 A Yes.

15 Q When you studied their mortality, did you find any

16 significant increase in mortality?

17 A You're asking me about studies that I have done a long

18 time ago.

19 Q This is in, well, '88.

20 A I think, basically, you asked me to write my obituary

21 this afternoon. I'm trying my best to do that. I

22 don't remember exactly what the result was. In

23 general, nickel is associated with an increased

24 risk of nasal cancer. Nasal cancer is very rare

25 and I do remember that our study was very small,

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1 so I don't know whether our study was large enough  
2 to pick up that risk or not. I won't be able to  
3 answer your question.

4 Q As far as lung cancer, that's not one that you would  
5 attribute to nickel? I'm not going to ask you  
6 that.

7 A Good. Then I'm not going to answer.

8 Q Thank you. Sir, your cohort study of employees exposed  
9 to chlorinated chemicals, that's No. 53, did you  
10 find any increased mortality in that group?

11 A I think we found an increase of lung cancer, but we  
12 could not attribute it to any specific chemical.

13 Q You couldn't attribute it to chlorinated chemicals?

14 A No.

15 Q And who sponsored the study?

16 A Velsico, V-E-L-S-I-C-O.

17 Q Do they manufacture chlorinated chemicals?

18 A They did, at least.

19 Q And who sponsored the nickel study?

20 A It was a small mining company called Hanna, H-A-N-N-A  
21 Nickel Mining Company.

22 Q Your study of the mortality of workers in Taconite -  
23 I'm probably mispronouncing that -- Mining and  
24 Milling, was that sponsored by Taconite Mines or  
25 their association?

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1 A It was sponsored by an industrial association, AIOA -  
2 I'm trying to remember what it stands for.

3 Q That will do. What did you find with regard to the  
4 mortality of workers in those mines?

5 A I think we found an increased incidence of stomach  
6 cancer.

7 Q Was it attributable to the taconite?

8 A No.

9 Q When you studied workers exposed to benzotrichloride in  
10 '88, did you find any increased mortality among  
11 that cohort which was attributive to that chemical  
12 or related chemicals?

13 A I don't remember the study at all.

14 Q Really? Okay. We'll skip that one. I guess looking  
15 at the title wouldn't refresh your memory. When  
16 you studied -- we've already talked about DBCP.  
17 Is it a fact that none of your studies have shown  
18 the -- either reproductive effects that we've  
19 discussed earlier or any form of cancer as being  
20 related to that substance?

21 A That's right.

22 Q In No. 57, there is a study referred to as "An  
23 Epidemiologic Study of Workers Exposed to Vinyl  
24 Chloride" to appear in the American Journal of  
25 Industrial Medicine. Which -- is that the '93 I

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1 study or this is -- I'm looking at an older c.v.

2 Maybe your new one has the publication date.

3 A That paper was published in 1991.

4 Q Yes, sir. Okay. I'm sorry if I said '93. I don't

5 know what I was thinking about. That was an

6 industry-sponsored study as well; is that right?

7 A Yes.

8 Q When did you start working on that?

9 A Probably in the mid-'80's. .

10 Q Why did it take from the mid-'80's to 1991 to finish if

11 it was just an analysis of -- well, you had

12 collected -- when did you issue your first final

13 report in that case, in that study?

14 A Well, number one, I don't want the title to mislead

15 you. It was not just an analysis. Actually, it

16 was an update.

17 Q It was an update?

18 A Update of a previous study.

19 Q Yes, sir.

20 A An update involves a lot of tasks that were very time

21 consuming. For example, you had to go into

22 different states to get death certificates and so

23 on. It's very time consuming. I think that study

24 took about three or four years to complete and

25 after we finished, we did not prepare a manuscript

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1 right away. We put it off for some reason. Maybe  
2 we were busy doing something else. And then later  
3 one, we prepared a manuscript to submit to the  
4 journal and the normal time it takes between when  
5 you submit something to a journal and the time it  
6 actually appears in the journal usually is about  
7 three years.

8 Q My original question -- maybe I probably threw in more  
9 than -- let me try again. When did you. issue your  
10 first final report in that study?

11 A I don't remember the date.

12 Q How many final reports did you issue in that case, in  
13 that study?

14 A There would be -- if you're talking final report, there  
15 would be one final report and as I said, in most  
16 projects, the sponsors would be given one chance  
17 to review a draft report. Okay. Now, internally,  
18 there may be some working documents when the  
19 report was being prepared. I don't know whether  
20 you call those different versions of the draft  
21 report. To me, that's just a working document  
22 that could change from day to day as we were in  
23 the process of writing.

24 Q Just so I'm clear as far as like a document that would  
25 be submitted to the sponsors as a final report,

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1 that occurred once and once only?

2 A No. I said they would be given one chance to make

3 comments. So therefore, there would be a draft

4 report and then hopefully, you know, within two

5 weeks or a month, we would get some comments back

6 from the sponsor and we would look at those

7 comments and if those comments helped to clarify

8 or make things easier to read and so on, we would

9 make those changes and submit the final report.

10 Q And once the final report was submitted, would there be

11 any further changes made at the suggestion of the

12 sponsors?

13 A No.

14 Q You're sure of that?

15 A I don't know what you're referring to. If you can give

16 me some specific examples, I can answer that.

17 Now, that doesn't mean that -- when the

18 publication appears in the journal, people can

19 write to the journal and make comments and we have

20 to respond to those comments whether they -

21 whether those comments came from the sponsor or

22 came from any other reader of the journal.

23 Q Oh, okay.

24 A That would be in the open forum. I mean, everybody can

25 do that. I mean, you can write to the journal and

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1 comment on my papers and I have to respond to  
2 those comments in the journal.

3 Q Yes, sir. I understand that. Well, I mean, I think I  
4 understand. Let me ask you this: since you -  
5 I'm going to try to come back to my previous  
6 question. I wasn't considering a response to a  
7 letter to the editor as being a final report, but  
8 now, since you've brought that up -

9 A I just want to make it clear. I don't know how you  
10 consider --

11 Q - Sure.

12 A -- revision of different things.

13 Q My question is with regard to -- now that you've  
14 mentioned that, is that the way it occurred; that  
15 you received a letter from the editor that could  
16 have been from the sponsors or it could have been  
17 from me or somebody qualified to write a letter  
18 like that and you responded to it?

19 A We always respond to people who raise questions on our  
20 work whether it's analysis or interpretation.

21 Q Did you agree with anyone what your response was going  
22 to be to that letter to the editor before they  
23 read it?

24 A No.

25 Q Shaw didn't tell you that he wanted you to write, to

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1 disavow, any implication -

2 A He never, never asked me or tell (sic) me how to  
3 respond.

4 Q Did you express any dissatisfaction with your report?

5 I've asked you -- I think I asked you this before,  
6 but I'll ask you again. Did they ever tell you,  
7 "Hey, you didn't let us change this report, you  
8 didn't let us revise this report like you were  
9 supposed to?"

10 A No, they never said anything like that.

11 Q Were you ever made aware that there was litigation  
12 involving brain cancer in the vinyl industry?

13 A Make aware?

14 Q Yes, sir. Do you -- in fact, as we sit here today, do  
15 you know that there are any particular cases  
16 involving brain cancer in the vinyl industry?

17 A Oh, I'm sure there are litigations on that, on that  
18 subject.

19 Q But as far as anything specific, like whether I  
20 represent somebody in such a case or not, you  
21 don't know that?

22 A Most likely, you are representing somebody.

23 Q Well, have you been told that I did?

24 A I'm working with Ken Spears on one case. There's not a  
25 whole lot of work. I mean, we're paid to do work.

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1 So far I haven't done any work yet.

2 Q It's your understanding you're going to testify in that  
3 case?

4 A I don't know what the understanding is. I' think Ken  
5 has made a couple of phone calls to me and asked  
6 me whether I'm interested and whether he can  
7 disclose me or use me as a consultant and I agreed  
8 to that. I really have not gotten much  
9 information.

10 Q Sir, in your study of -- your "Epidemiologic Study of  
11 Workers in the Silicones Industry," did you find  
12 any hazard associated with work in that industry?

13 A ,Again, I just don't remember the result of that study.  
14 It was a very small study. We didn't spend that  
15 much time on it.

16 Q Okay, sir. Do you remember who sponsored it?

17 A It was an industrial association.

18 Q I can't imagine who would have sponsored the study to  
19 determine the effects of ingestion of dirt by  
20 children.

21 MR. VERON:

22 Probably Congress.

23 MR. BAGGETT:

24 Yes, sir.

25 BY MR. BAGGETT:

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1 Q I'm just curious. Was there a hazard associated, in  
2 your opinion, based on your review of available  
3 information, on the ingestion of dirt by children?

4 A Well, actually, nobody sponsored us, that project.

5 Your guess was right. The reason we wrote an  
6 article was that in the process of reviewing some  
7 EPA risk assessment, we came across a number of  
8 articles on the behavior of eating dirt among  
9 children and that was a very interesting subject  
10 and since we spent a lot of time on that, we felt  
11 that we would write something up.

12 Q Is it dangerous?

13 A It depends on what's in the dirt.

14 Q Okay.

15 A You don't need a scientist to tell you that.

16 Q Touché'. All right. Okay, sir. Among paper mill  
17 workers, your mortality and morbidity study, did  
18 you find any increased mortality among those  
19 workers?

20 A No.

21 Q Was that sponsored by the API, American Paper Industry?

22 A No. It was sponsored by -- can I see that?

23 Q For once, I was trying -

24 A No, that was sponsored by one company.

25 Q "Studies of Petroleum Industry Employees," the meta-

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1 analysis by cancer site. That was sponsored by  
2 Gulf; is that correct?

3 A Is that the one that I wrote with Dr. Raabe?

4 Q Raabe?

5 A R-A-A-B-E. No. That was sponsored by Mobile.

6 Q Mobile. You and Keith went round and round about that  
7 one. Do you have anything more to add? No?

8 Never mind. I'm sorry. I just remembered I read  
9 Keith's deposition.

10 A That was his deposition; not mine.

11 Q Yes, Sir. Your study of cancer in Louisiana, a review  
12 of the epidemiologic literature; did that have a  
13 sponsor?

14 A Yes.

15 Q And who was that, sir?

16 A The Louisiana Chemical Association.

17 Q Do you know whether, for example -- well, what did you  
18 find; did you find -- other than tobacco, what  
19 could be attributed to tobacco, did you find any  
20 increased risk of cancer among persons living in  
21 Louisiana, based on your review of the literature?

22 A Well, we looked at occupational studies. We looked at  
23 community studies. We found that tobacco smoke is  
24 one of the major risk factors of lung cancer. The  
25 diet is also a problem in this area. Asbestos was

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1 a problem in the shipbuilding industry. I  
2 remember there was one finding on a small group of  
3 chemical workers. They had an increased risk of  
4 cancer of the upper respiratory tract.

5 Q Was that attributed to any chemical manufactured by the  
6 sponsors? '

7 A I think it was one of the companies who is a member of  
8 the Louisiana Chemical Association.

9 Q And can you recall the chemical or the company?

10 A I think the chemical was sulfuric acid and the company  
11 may be -- I don't know for sure. I think it was  
12 Exxon. I don't know for sure.

13 Q Where do you expect that that will be published?

14 A It has been published.

15 Q Oh, it has been. I'm looking at this old one again.

16 I'll just get it from your -

17 A The new one -- you have the citation?

18 Q Yes, sir.

19 A It's published in -

20 MR. SPEARS:

21 What's the number you have, Billy?

22 MR. BAGGETT:

23 I have it as No. 69. I can get it for  
24 myself.

25 THE WITNESS:

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1 It's published in the Journal of  
2 Environmental Pathology, Toxicology and Oncology.

3 BY MR. BAGGETT:

4 Q In the course of your review of the epidemiologic  
5 literature, did you ever -- or can you recall  
6 reviewing a study called "Cancer by County;  
7 Etiologic Implications," by Dr. Blot (phonetic)?

8 A Is that Phil Blot at the National Cancer Institute?

9 Q I wouldn't know. In fact, I'm just curious as to  
10 whether you were familiar with that study and  
11 whether you felt it had any relevance to cancer in  
12 Louisiana.

13 A I looked at -- if we're talking about the same guy, I.  
14 looked at his county-by-county statistics.

15 Q Yes, sir, that would be the same one.

16 A That would be the NCI study. I looked at that study.

17 Q The Louisiana Chemical Association or -- the proper  
18 name of it I may not be using'-- includes a number  
19 of vinyl chloride manufacturers; is that correct?

20 A Yes.

21 Q Isn't it true that -- or did you check to see if it was  
22 true, as to whether in any year, you checked, for  
23 example, Blot or any of these other references  
24 you've reviewed, Calcasieu Parish of East Baton  
25 Rouge or West Baton Rouge or had had the highest

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1 rate of brain cancer in the entire country in any  
2 given year?

3 A We did look at brain cancer in our study and the only  
4 occupational risk factor we could find was  
5 occupations with exposure to certain kinds of  
6 radiation related to electrical -- or  
7 electrically-related occupations.

8 Q Okay. When you reviewed the epidemiologic literature  
9 for -- on TODD, did you find that it was a  
10 carcinogen?

11 A Can I look at what --

12 Q I'm sorry. No. 70.

13 A That was a review article. In other words, we didn't  
14 do any study on the chemical.

15 Q Yes, sir.

16 A We looked at the studies done by other people and I  
17 think our conclusion was there was some indication  
18 of an increased risk of non-Hodgkins lymphoma, but  
19 the findings from different studies were not  
20 consistent.

21 Q So your conclusion was that because of the  
22 inconsistency in the findings, that there was  
23 insufficient evidence to support an etiologic  
24 association between exposure from TCDD and that  
25 form of cancer?

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1 A I don't believe that's the exact wording we used, but  
2 most likely, we would say that we just don't have  
3 sufficient data to make a conclusive statement at  
4 this time.

5 Q And who sponsored that study?

6 A I don't think anybody sponsored that study. Itfs just  
7 something that -- we wanted to go to the  
8 conference and present it.

9 Q What manufacturing process -- what is its proper name  
10 or can you tell me what TCDD is?

11 A It's a contaminant in some of the pesticides/  
12 herbicides.

13 Q When you studied cancer incidences and community  
14 exposure to air emissions from petroleum and  
15 chemical plants in Contra Costa County,  
16 California, did you find any relationship between  
17 those emissions and cancer incidences?

18 A No.

19 Q And who sponsored that study?

20 A I don't think anybody sponsored that study.

21 Q That was the American Institute of Chemical Engineers  
22 paper you presented.

23 A I mean, I have done a number of studies in Contra Costa  
24 County. That's one of the counties in the Bay  
25 area and I have also looked at all the studies

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1 and, you know, from time to time, I do present  
2 papers, prepare talks and so on, on my own.

3 Q Do you find, based upon your work over the years, that  
4 you believe there is sufficient evidence that any  
5 form of environmental pollution, that is,  
6 pollution at environmental levels as opposed to  
7 occupational levels, is the cause of any form of  
8 cancer?

9 A It really depends on how much you're exposed to. There  
10 is no -- I mean, there is a fine line between  
11 occupational exposure and community exposure. If  
12 you're close enough, the exposure may be as high  
13 as occupational exposure. In fact, in South  
14 Africa, there has been -- well, back in the '60's,  
15 there was a study, linking mesothelioma to  
16 community contamination of asbestos.

17 Q Other than the mesothelioma, are you aware of any  
18 incidents in which it's your opinion -- well, do  
19 you have an opinion that environmental exposures  
20 have resulted in neighborhood or community  
21 environmental cancers? You mentioned asbestos -  
22 that probably was poorly phrased. Sir, apart from  
23 the incidents of mesothelioma in South Africa, do  
24 you believe there's any convincing evidence that  
25 environmental pollution causes cancer?

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1 A I can't think of any off the top of my head now.

2 Q Ethylene oxide is something that you've studied. Do  
3 you find any relationship between that and any  
4 form of cancer?

5 A No.

6 Q And have your studies of EO been sponsored by EO  
7 manufacturers or suppliers or their trade  
8 association?

9 A It was sponsored by a trade association; not an  
10 association of manufacturers, but ethylene oxide  
11 users.

12 Q So it would be someone in the medical -- having to do  
13 with sterilization?

14 A Yes, sir.

15 Q Do you believe EO causes birth defects?

16 A I didn't study that.

17 Q You've studied styrene in a number of studies. Do you  
18 find any association between exposure to styrene  
19 to any form of cancer?

20 A No.

21 Q Any ill health, adverse health effects, at all  
22 discovered in your study of styrene workers?

23 Not in our study.

24 Mastic asphalt workers. Did you find any increased  
25 cancer mortality or incidents of cancer among such

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1 workers?

2 A May I take a look at that?

3 Q Yes, sir. That was '79.

4 A Well, '79 is actually questions or comments on the

5 study published in the Scandinavian Journal of

6 Work, Environment and Health. -

7 Q And did you find any increased incidents of cancer in

8 that study?

9 A I didn't do the study. We commented on somebody else's

10 studies.

11 Q Oh, I see. I'm sorry. And your comment was to what

12 effect; that there was -- you agreed with or

13 disagreed with some findings that had been

14 published there?

15 A We disagreed with a number of conclusions reached in

16 that study and we point out some of the

17 limitations of the data in their study.

18 Q This is probably -- almost certainly an ignorant

19 question, but are responses to publications

20 normally the type of thing that are sponsored or

21 is that something that you just do as

22 professionals? For example, this one. Did you

23 have a sponsor to reply or a letter to the editor

24 or whatever?

25 A No. There was no response for that.

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1 Q Have you ever been sponsored to write letters to the  
2 editor or hired by anyone or any company to write  
3 letters to the editor?

4 A No. Maybe I should start thinking about it.

5 Q I just didn't know. Carcinogenicity of insulation  
6 wools. Did you find or do you believe that  
7 insulation wools are carcinogenic?

8 A We're talking about manmade fibers, right?

9 Q Yes, sir. That was -- I was assuming from the date and  
10 everything. It was published this year -- last  
11 year, I'm sorry.

12 A Right. We report some of the findings we have in  
13 another study in that publication and we also  
14 comment on a review article written by another  
15 group, published in the same journal, and the  
16 bottom line was there was no evidence of  
17 carcinogenicity in insulation work.

18 Q No. 91 is "Diagnostic Bias in Occupational Studies; An  
19 Example Based on the Vinyl Chloride Literature."  
20 That would have been the reply to the letter to  
21 the editor that Dr. Shaw wrote?

22 A Yes.

23 Q The bias, as I take it, is you believe that maybe vinyl  
24 chloride workers have better health programs than  
25 the normal population and therefore, they have

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1 more -- they have better treatment and as a result  
2 of having better treatment, they have more  
3 accurate diagnoses of brain cancer?

4 A Yes.

5 Q And what evidence do you have for that?

6 A That's really based on a number of publications that I  
7 read and I make reference to those publications.

8 Q You said Eastman Kodak had a good program. What do you  
9 know about the vinyl industry and what a wonderful  
10 medical program they have? I didn't notice any  
11 citations to that.

12 A I don't know of any publication in the vinyl chloride  
13 industry. I'm saying there are some examples of  
14 overreporting or at least noncomparable reporting  
15 of certain diseases or certain cancers in  
16 occupational groups.

17 Q How do you get from Eastman Kodak to the vinyl  
18 industry? That's what I'd like to know.

19 A They are employed in -- employable people as opposed to  
20 people who don't have any health insurance, who  
21 don't have medical care.

22 Q So if you found brain cancer in any occupational group,  
23 you could have written that article, that reply?

24 A That would be one of the things we have to consider.

25 Q CMA didn't accuse you of violating your contract and

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1 that didn't lead to you writing that letter;

2 you're telling me that?

3 A No; absolutely not.

4 Q No. 93 is another one on "Epidemiological Factors of  
5 Cancer in Louisiana." It's the same article?

6 A I think that's the -- -

7 Q Oh, I see. It just made it into publication. I see.

8 A Sometimes I have to move the number a little bit

9 because, you know, some journals respond very

10 slowly and between the time you submit and between

11 the time you get it is like a couple of years.

12 Q Man-Made Mineral Fibers -- when you studied them, did  
13 you find any evidence of carcinogenicity?

14 A No.

15 Q And did Pneuma (phonetic) or some similar group sponsor  
16 that study?

17 A No. It was sponsored by a single company.

18 Q And which company was that?

19 A USG

20 Q United States Gypsum and they make manmade mineral  
21 fiber, correct?

22 A What did you say?

23 Q Did U.S. Gypsum or U.S.G., I'm sorry --

24 A That's the name of the company. I don't know what they  
25 were called before I worked for them.

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1 Q Sure. And they make mineral fiber?

2 A The facilities that I studied used manmade mineral  
3 fiber to make products. I don't know whether they  
4 made fiber or not.

5 Q I see. When you reviewed cancer and silica and you did  
6 a critical assessment of the epi. (sic) and  
7 toxicological data, what did you conclude?

8 A It's a working document. We're still working on it and  
9 we have, you know, contacted some journals to see  
10 whether they're interested and some have  
11 indicated, you know, an interest in that, so it's  
12 not completely done yet.

13 Q Okay, sir. Do you have an opinion, as we sit here  
14 today, as to whether there is any relationship  
15 between cancer and silica?

16 A I think a preliminary assessment is, you know, there is  
17 no strong evidence for that.

18 Q IR classifies that; silica, as a carcinogen, correct?

19 A I don't know.

20 Q Who sponsored that study?

21 A Nobody.

22 THE WITNESS:

23 Is this a good time to take a five minute  
24 break?

25 MR. BAGGETT:

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1 I was thinking that exact thing.

2 (A short break was taken.)

3 MR. BAGGETT:

4 Back on the record.

5 BY MR. BAGGETT:

6 Q Sir, who participated in the gasoline studies? -I'm

7 referring to -- I don't think -- is there any

8 difference between the two studies insofar as the

9 participants go, which companies?

10 A You mean Part I and Part II?

11 Q Yes, sir.

12 A Basically, it's the same -- it was the same group,

13 because Part I deals with exposure. Part II deals

14 with mortality.

15 Q Now, the companies, though, that actually participated,

16 I see there was 18,135 employees with potential

17 exposure that were involved and I assume that's

18 not the entire industry. Was there less than the

19 -- how many companies actually contributed

20 employees to the study?

21 A Four companies participated in the study.

22 Q That would be Exxon and who else?

23 A Exxon, Chevron, Mobile, Shell.

24 Q Okay. How was it decided that those companies would be

25 the companies who would participate?

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1 A Before we did what we call the epidemiologic study, we  
2 had a Phase I or a feasibility study just to find  
3 whether it was feasible to do such a study and if  
4 it's feasible, which company should be included.  
5 I believe we looked at quite a few companies in  
6 the first phase and after we looked at their  
7 records, those were the four that we recommended  
8 to be included in the study.

9 Q So what factors would go into your decision as to which  
10 companies would be appropriate to include? You  
11 can answer that either way. Or what sort of bad  
12 qualities would make a company inappropriate to  
13 have been included in such a study?

14 A The most important decision is whether the company has  
15 maintained sufficient records for us to identify  
16 the exposed cohorts and the definition at that  
17 time, we had, was one year of exposure between  
18 1946 and 1983, I believe. But there are a lot of  
19 companies did not keep records going back to the  
20 '40's, so that was the main reason why a lot of  
21 companies were not included.

22 Q The definition of one year was arrived at just -- well,  
23 I guess what I'm getting at, that's pretty low  
24 when you consider -- strike that. Let me ask you  
25 this, sir: what rate of leukemia would you expect

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1 to find in a working population like the one that  
2 was the subject of the study here, considering the  
3 healthy worker effect?

4 A Number one, I don't think there is a tremendous healthy  
5 worker effect in leukemia. When you say -- ask me  
6 what rates, it's difficult for me to answer  
7 because we have a cohort with people with  
8 different ages, so it really depends on their age.

9 Q okay, sir. There were some 18,000 employees and yet I  
10 see there were 6,000 job classifications. How can  
11 that be? It seems to me like that's -- I mean,  
12 it's like every third person had a different job  
13 classification. I'm sure that's wrong. You can  
14 correct me.

15 A Yes. That may be misleading. When we say there was  
16 6,000 -- 6,000?

17 Q 6,000-something.

18 A -- 6,000 jobs, that means different companies may use  
19 slightly different terminology for the same job or  
20 the job -- the title itself might have changed  
21 over time.

22 Q When you look at these numbers, the SMR or landbased  
23 workers is 150-something and I'm wondering what  
24 would it have taken, if you can calculate it for  
25 me, to have reached statistical significance?

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1 MR. SPEARS:

2 For the landbased workers, you mean?

3 MR. BAGGETT:

4 Yes, for the landbased workers. That was my  
5 question.

6 THE WITNESS:

7 I'm sorry. Can you repeat that question?

8 MR. BAGGETT:

9 Yes, sir.

10 BY MR. BAGGETT:

11 Q Is it possible for you to tell me what number of  
12 leukemias it would have taken or what SMR it would  
13 have taken, and that's, I guess, my real question,  
14 for you to have reached statistical significance  
15 to which you could rule out chance with 95 percent  
16 confidence?

17 A Well, it depends on two factors. One is how high the  
18 SMR is and how many observed deaths were involved  
19 in that calculation.

20 Q Okay, sir. So is there a way to know -- say if -- what  
21 if the SMR had been 200; would that have been  
22 statistically significant?

23 A Based on 13-deaths?

24 Q Well, okay.

25 A There are two unknowns in that equation.

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1 Q Yes, sir.

2 A You need to specify one -- for me to give you some  
3 idea.

4 Q Yes, I understand. The larger the group. Okay. With  
5 the same number, then.

6 A Based on 13, I would say most likely, it's about 200,  
7 something like that. I don't know for sure.

8 Q Sir, the numbers themselves, the 150; does that not  
9 indicate a level over twice the levels that you  
10 found among the healthy workers in the chemical  
11 industry that were exposed to actual benzene? I  
12 mean that were not exposed to benzene. Excuse me.

13 A Based on what study?

14 Q Your CMA industry-wide study.

15 A Well, in that one, we went over that over and over  
16 again and we didn't find any in that group.

17 Q Okay, sir. As far as the -- did you have controls in,  
18 I guess -- how many controls did you have in this  
19 group?

20 A Well, there are a number of things that we looked at  
21 that we can label as control. One is, we used the  
22 general population as the outside comparison, but  
23 we're also using internal comparisons to compare  
24 people with longer duration of exposure to people  
25 with shorter duration of exposure. We look at

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1 people with more cumulative exposure to people  
2 with less cumulative exposure. We compare people  
3 with more peak exposure to people with less number  
4 of peak exposure. So we do have internal  
5 comparisons.

6 Q Yes, sir. And the SMR is based upon your comparison  
7 with the general population in the U.S. or the  
8 internal -- did you have any internal controls  
9 like you did in the CMA study?

10 A The number that you looked at in the abstract, 150, is  
11 the number based on the external comparison.

12 Q Okay, sir. And is it possible for you to look at the  
13 study and tell us what the SMR would have been had  
14 you used the controls, the internal controls?

15 A One way to answer your question would be if we look at  
16 Table 4 -- just go to the back of that.

17 Q Yes, sir. I only got this the night before last and I  
18 apologize. I'm not overly familiar with this and  
19 I'll also say I'm not at all familiar with these  
20 other documents. So -

21 A Table 4.

22 Q Okay. Yes. I've got you.

23 A That's the analysis -- we compared people with  
24 different length of exposure, so one way we can do  
25 internal comparison is use the group with the

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1 shortest duration of exposure as the basis for  
2 comparison. That would be the group exposed  
3 between one to four years. And the SMR for  
4 leukemia for that group, the lowest exposure  
5 group, was 78. Then you go to the other extreme.  
6 The group with 30 or more years of exposure, the  
7 SMR for leukemia was 81.4. So when you compare  
8 those two, basically they're the same.

9 Q Yes, sir. As far as controls which included workers  
10 that were otherwise similar except for the  
11 gasoline exposure, it was decided not to take that  
12 route? For example, in the CMA study, you  
13 compared comparable workers who shared certain  
14 characteristics but for their exposure to benzene.  
15 Was there a decision made not to compare  
16 comparable workers but for their exposure to  
17 gasoline?

18 A I think whether somebody is exposed or not exposed is  
19 really a relative question. Nobody is not exposed  
20 in the absolute sense. I think we've been using  
21 the term "nonexposed" very loosely in the CMA  
22 study. In fact, if you'll go back and read some  
23 of the reports, you will find out that that group  
24 was actually exposed to the background level  
25 because they were working at the same facility, so

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1 to some extent, they would have background  
2 exposure.

3 Q Yes, sir.

4 A And in this comparison, Table 4, we are doing more or  
5 less the same thing; we are comparing people with  
6 30 years of exposure to people with only one to  
7 four years of exposure.

8 Q So the one to four year group might overlap with just  
9 people pumping gas in their car or background or  
10 people who were administrative workers at the -  
11 at various refineries?

12 A The main points that we need to emphasize is, number  
13 one, when you make a comparison between those two  
14 groups, there was a difference of at least 25  
15 years of exposure difference -- 30 was one to  
16 four. The second thing is, they all work at the  
17 same place, so they are comparable in terms of  
18 lifestyle or whatever. So that's really a proper  
19 comparison. There is no non-exposed group at the  
20 terminal. Everybody was exposed to some extent.

21 Q Do you believe that Mr. Hebert would have been falling  
22 into any of these job classifications, any of the  
23 3,000 or what it was, 6,000 job classifications  
24 that were included in here?

25 A Well, in our study, basically we have two groups: the

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1 landbased terminal employees and also what we call  
2 the marine or seagoing or inland waterway  
3 employees.

4 Q Yes, sir.

5 A Mr. Hebert would fit into the second category, the  
6 marine transportation workers. .

7 Q Okay. And among those two general classifications,  
8 there were some 6,000 job classifications?

9 A Yes.

10 Q Can you give me just -- you don't have to list 6,000 of  
11 them, but I mean, how many different type of dock j  
12 workers are there?

13 A First mate, second mate, third mate; that would be  
14 different job titles.

15 Q Okay.

16 A Cook would be another job title. Assistant cook would  
17 be another title. Chef would be a title. There  
18 was something that seemed to be funny to us -  
19 able bodied seaman; that would be one title. There  
20 are just different versions, different variations  
21 of the same thing sometimes.

22 Q And the landbased would be what, like -- just for a few  
23 examples like you gave me, pumper loader --

24 A Pumper loader, driver, mechanic, maybe even pipefitter,  
25 assistant mechanic. You know, different names.

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1 Sometimes it's because of the union contract that  
2 they have to modify the names and sometimes it  
3 depends on the region; they use different names,  
4 the company. And over the years, they use  
5 different abbreviations and so forth. In fact,  
6 that's the reason why, if you read our study  
7 carefully, you will see that we collapse, we  
8 combine, those 6,000 job titles into only a few  
9 what we call generic job titles, job  
10 classifications.

11 Q Okay. Now, these companies, because they were chose,  
12 these four, one of the reasons they were chosen  
13 was because they had adequate records, correct?

14 A Adequate employment records allow us to identify  
15 employees who would meet the cohort definition.

16 Q And would it likely be expected that companies which  
17 would meet that criteria would also likely have a  
18 better idea of what the mortality experience of  
19 those workers were?

20 A No.

21 Q For example, Exxon doesn't keep up with the deaths  
22 among its former workers as far as you know?

23 A Some companies do have tracking systems on their active  
24 employees and also on their annuitants.

25 Q Does Exxon?

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1 A I think Exxon has such a system.

2 Q Does Mobile?

3 A Mobile has one.

4 Q Does Chevron?

5 A Chevron has one. Shell has one.

6 Q Every one of these companies, when they were collecting  
7 exposure data, could very easily have known what  
8 the mortality experience of these people were?

9 A Not on everybody. They would have information on a  
10 small group of people in the cohorts for two  
11 reasons. Number one, all those companies started  
12 the tracking system probably sometime in the  
13 '80's, so any deaths that occurred even among  
14 active employees or annuitants before that time  
15 would not be in that system. And number two, no  
16 company has information in terms of mortality on  
17 terminated employees who were not vested, who were  
18 not annuitants: Once they left the company, they  
19 left the company, so they would not know that.  
20 And the large portion of our study, of our  
21 cohorts, were terminated employees.

22 Q If you wanted to eliminate -- I mean, you're relying  
23 almost entirely upon exposure classifications  
24 based upon job classifications; is that correct?

25 I mean, it may be the other way around. In other

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1 words, you have no real controls; everyone is  
2 exposed to some extent.

3 A Right.

4 Q And you're looking, I guess, for dose response; is that

5 -- I mean -

6 A Well, there were a number of steps. We were not  
7 looking for dose response. We did dose response  
8 analysis at the very last stage.

9 Q Uh-huh.

10 A But in order to get there, we need exposure  
11 classification and the best way to do it is to  
12 classify people according to their jobs. So the  
13 first thing to do is to look at the jobs and work  
14 with Professor Smith at the University of  
15 Massachusetts to classify those jobs in terms of  
16 exposure and we quantified exposure.

17 Q Well, Professor Smith worked with the member companies'  
18 people, didn't he?

19 A He worked with different groups. He went to different  
20 companies, obtained historical information, he  
21 knows their exposure, engineering controls and so  
22 on. He also talked to long-term employees  
23 themselves in terms of what the job involved,  
24 described to him what kind of tasks were involved  
25 in different jobs. He also conducted some

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1 measurements himself. He also looked at the  
2 literature to see whether the results that he has  
3 are consistent with what's published in the  
4 literature.

5 Q And these companies obviously have the data for him to  
6 use?

7 A For part of the study period.

8 Q So if we have outstanding requests for admissions that  
9 -- I mean, excuse me, requests for production  
10 which would cover exposure of such workers, I  
11 imagine they would be as -- you all didn't get the  
12 only copies, did you?

13 MR. SPEARS:

14 I'm going to object to the question, because  
15 you're asking for Dr. Wong to give a legal opinion  
16 about whether the companies are complying.

17 MR. BAGGETT:

18 No. I mean -- well, I take it back.

19 BY MR. BAGGETT:

20 Q Sir, where do you -- do you have any information about  
21 Joseph Hebert's exposure?

22 A No other than what he described in his deposition.

23 Q Were any of these companies doing -- I mean, I think  
24 there's a statement in there that the majority of  
25 the information dated after the mid-'70's,

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1 monitoring information.

2 A The measurements themselves -

3 Q Yes, sir.

4 A -- most of them took place after the mid-'70's, but

5 there was information on historical changes, such

6 as the history of the facility, when you switch

7 from top loading to bottom loading, when did you

8 put in the vapor recovery system. That -- you do

9 have information back to the '50's and '60's even.

10 But we did not have quantitative gasoline

11 concentration measurements before the mid-'70's.

12 Q The people who were doing the collection of this data

13 for Dr. Smith -- I know it was Dr. Smith -- am

14 I -

15 A Dr. Smith. Professor Smith.

16 Q Well, Professor Smith -- were they informed of the

17 results that either overestimation or

18 underestimation of employee exposures would have

19 on the outcome of your study?

20 A I don't think those people provided estimates to Dr.

21 Smith. Whatever actual measurement results -

22 records they had, they provided that to Dr. Smith.

23 They also gave -- the company, industrial

24 hygienist or the local people gave Dr. Smith a

25 history of the facility, what happened, what kind

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1 of engineering changes had been put in place over  
2 the last decade or whatever.

3 Q Uh-huh.

4 A And he also talked to a number of long-term employees  
5 to get some idea of what different jobs were  
6 involved.

7 Q And a related question: have you ever, when you did  
8 use estimates to come to some conclusions as to  
9 employee exposure, did you ever inform the persons  
10 providing such estimates of the effects on the  
11 outcome of the study of either overestimating or  
12 underestimating exposures to a substance under  
13 study?

14 A No. Because we received the raw data from them and  
15 basically, more -- Dr. Smith and my involvement,  
16 in coming up with model to fill in the gaps -- the  
17 time period that we don't have real data, we come  
18 up with models to extrapolate back to the '50's  
19 and '60's.

20 Q Why do you use 19 -- you use 1948 as the cutoff date  
21 because that's when the PDL dropped, correct, or  
22 the TLV -- you have a 1948 date -- in most of your  
23 studies, it has some importance because the TLV  
24 changed in that year; is that the reason?

25 A I think we may be -- we may be confused with two

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1 different dates and two different reasons.

2 Q I'm sorry. Right here it says "1948."

3 A Right.

4 Q I've noticed in other reports that you've written that

5 that date is a date that you used because at that

6 time, the TLV's changed; is that not the reason?

7 A I just want to make it clear. I think -- you seem to

8 imply that we stopped the study in 1948.

9 Q Oh, no. No, no, no.

10 A Oh, I'm sorry.

11 Q I didn't understand -- what I meant was, there's a -

12 '48 is when the TLV went from 50 to 35?

13 A A lot of times, we would like to -- especially on the

14 benzene issue, we like to analyze all -- to use

15 the technical term, we like to stratify or

16 classify people by their hire date, their first

17 exposure date. Those people who were hired before

18 1948 or just around that time were exposed first,

19 for the first time, before that time. Compare

20 them to the people hired or exposed after that.

21 And the reason we picked that day is because in

22 1947, the ACTIN recommended standard for benzene

23 was reduced from 100 p.p.m. to 50 p.p.m., in 1947.

24 And in the following year, 1948, the recommended

25 standard was further reduced from 50 to 35. So

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1 when you look at the entire history over a period  
2 of two years, the ACTIH standard dropped from 100  
3 to 35.

4 Q Uh-huh.

5 A And when I talked to some people in the industry, they  
6 said that to some extent, the exposure actually  
7 reflected that reduction of standards during those  
8 years.

9 Q That's what I was interested in. When you see that  
10 there was no testing or little testing prior to  
11 the mid-'70's, how do you figure they were  
12 complying with any standard prior to that time?

13 A There may not be some systematic industrial hygiene  
14 surveys. There may be some ad hoc data. I'm sure  
15 there are some measurements before the mid-'70's.  
16 It's just that that data may not be adequate or  
17 sufficient for epidemiologic research.

18 Q Are you aware of any flurry of activity that took place  
19 in industrial hygiene programs of these various  
20 companies prior to the 1977 ETS?

21 MR. SPEARS:

22 Which companies are we speaking about?

23 MR. BAGGETT:

24 The ones that are involved in the study or in  
25 general.

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1 THE WITNESS:

2 I don't know.

3 BY MR. BAGGETT:

4 Q For example, at City Service, the vast majority of the  
5 job classifications I'll represent to you that  
6 have been tested were tested in anticipation of  
7 the promulgation of the one part per million  
8 standard. Do you believe that that would create  
9 any kind of opportunity for -- or motivation on  
10 the part of your clients to underestimate exposure  
11 so as to limit the number of person who would be  
12 subject to the ETS; has that ever even crossed  
13 your mind?

14 MR. SPEARS:

15 I'm going to object to the form of the  
16 question to the extent that I understand that  
17 you're asking him to speculate about what may have  
18 been behind the motives of the various companies.

19 MR. BAGGETT:

20 I'm asking him if he ever considered it.

21 THE WITNESS:

22 I don't understand the question at all.

23 BY MR. BAGGETT:

24 Q The relationship between the testing of these people  
25 which you say began in the mid -- the majority

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1 after the mid-'70's, that that might conceivably  
2 be related to the ETS, and once you do that, being  
3 an epidemiologist, you can think of confounding  
4 factors like an inclination to minimize the number  
5 of individuals which would be subject to a one  
6 part per million standard.

7 A I don't know how you can do that. When you take a  
8 sample, you take a sample. You-send it to the lab  
9 and they give you a reading back. I'm not -

10 Q So you're not -

11 A I don't understand what you're trying to say.

12 Q So the possibility of bias in the sampling is not  
13 something that, you know -- rightly, you just have  
14 to accept what data there is?

15 A Yes.

16 Q Is there any possibility that Mr. Hebert's AML was  
17 caused by benzene?

18 A No.

19 Q Not even a possibility?

20 A Not based on the scientific evidence.

21 Q And your scientific evidence is the only group that has  
22 ever been demonstrated to have a statistically  
23 significant increased risk of contracting AML is  
24 some Plio-film workers, right?

25 A You're talking about the Rinsky study?

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1 Q Yes.

2 A Yes.

3 Q So that leaves the rest of the world except for the  
4 Plio-film workers and perhaps some shoemakers in  
5 Turkey with no evidence that leukemia of any type  
6 is caused by benzene according to your criteria,  
7 correct?

8 MR. SPEARS:

9 Object. You've asked him two different  
10 questions now. Now you went from AML to leukemia  
11 of any type. You were asking him about --

12 BY MR. BAGGETT:

13 Q Well, okay. You're not going to give me AML -  
14 anything besides AML, right? I mean, so -- okay.

15 MR. BAGGETT:

16 I think the two terms are synonymous in this  
17 doctor's view. But whatever.

18 THE WITNESS:

19 No, they are not synonymous in my view.

20 That's exactly --

21 BY MR. BAGGETT:

22 Q When I say related to leukemia, you mean AML, right?

23 A Right.

24 Q Okay. So let's talk about AML and I'm going to ask  
25 you, is there any person anywhere, who has ever

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1 been studied, except for some shoemakers in Italy  
2 and some Plio-film workers who meet the  
3 criteria -

4 A You mean Turkey.

5 Q Turkey. I'm sorry -- who would meet your criteria for  
6 epidemiologic proof of attributability?

7 A I don't think the jobs or the products or the industry  
8 has to be the same. I think the important thing  
9 is, if we have found a relationship between  
10 benzene exposure and AML in the Rinsky study, what  
11 we need to do is look at what level does Mr.  
12 Rinsky observe an increased risk of AML.

13 Q Uh-huh.

14 A And anybody with exposure above that level and who  
15 subsequently develops AML, then we can attribute  
16 that to exposure.

17 Q And that would be similar to saying, you know, if  
18 you're exposed, like an insulator; you're going to  
19 have the risk of cancer like an insulator? I  
20 mean, if you breathe as much secondhand smoke as a  
21 lot of people do firsthand, you'd have the same  
22 risk as the firsthand?

23 A well -

24 Q I'm getting off the subject. My question is easier  
25 than I may have made it sound. Your entire

1 opinion is based upon job classification, correct?

2 You're not worried about anything Mr. Hebert said

3 in his deposition except insofar as it allows you

4 to put him in one of your categories?

5 A I worry a lot about what he said. I want to. be able to

6 say that what he described, what he did, in his

7 deposition, as well as what his co-worker said he

8 did, was similar to the people that I study in my

9 investigation so that I can rely on my study.

10 Q Right. Yes, sir. I'm not -- I still think -- my

11 question is, sir, to the extent you considered

12 this, it was so you could put him into a category

13 that you could deal with, a category that was the

14 subject of your study or analogize him to

15 individuals subject to the study; is that right?

16 A Yes. I mean, I can give you an example. If you tell

17 me that you have lung cancer and you smoke, nobody

18 has done a study on you before because, you know,

19 a sample of one is not going to tell you anything,

20 anyway. So we have to rely on all the studies

21 being done on smoking and lung cancer and the very

22 first thing I would like to know -- I would like

23 to ask you is, "Sir, how long or how much did you

24 smoke," and if you tell me that your whole

25 lifetime, you smoked only one pack of cigarettes,

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I would tell you that your lung cancer is not related to that one pack of cigarettes. On the other hand, if you tell me that you smoked two packs a day for the last 40 years, I'd say, "Sir, you kill yourself by smoking."

Q And getting back to my question, though, I understand your point about the cigarettes. My question -

A My point is, you really have to look at the exposure.

Q What job classifications in this world would you say have been demonstrated to have an excess leukemia risk as a result of benzene exposure other than the Plio-film workers and the shoemakers?

A I guess I'm not getting the point across. It's not the job title that's important. In a specific industry, it's the job title that put the person into the proper exposure classification, but when you talk about the relationship between a chemical and a disease, you don't need the job title.- You need to know -- you may need the job title to get to the exposure estimates. You don't need the job title at the end.

Q What job title is Mr. Hebert most analogous to in your opinion?

A Well, he started as a tankerman. Then he ended up as a captain for most of his career. And it really

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1 doesn't matter if he was a tankerman or a captain  
2 because in our study, we classify both tankerman  
3 and captain as deck personnel, people who work on  
4 deck. And indeed, when I read his deposition, he  
5 was a hands-on kind of captain and worked on deck.

6 Q So you have a category of workers with similar exposure  
7 periods in your study that he can be analogized  
8 to -

9 A Yes, sir.

10 Q -- is that correct?

11 A Yes, sir.

12 Q And that category of workers did not show an increased  
13 risk of AML in your study?

14 A Yes, sir.

15 Q Now, that's why I asked you, are there any job  
16 classifications in the world besides that of a  
17 Plio-film worker or a shoemaker in Turkey, that  
18 has been demonstrated to have a substantially  
19 increased risk of contracting AML?

20 A No, because I don't know of any other cohort study  
21 based on subjects with exposure as high as the  
22 exposure in Mr. Rinsky's study or Dr. Aksoy's  
23 study.

24 Q Now, in 1948, I know you -- have you taken time to -  
25 or has anyone shown you -- let me start again. I

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1 must be getting tired. There were references to  
2 the '48 API document in some of your earlier  
3 depositions and I wonder, have you had occasion to  
4 see it since that time?

5 A I'm sorry. What document are you talking about?

6 Q The 1948 API Toxicological Profile.

7 A I have not read it.

8 Q You are aware that there has been an opinion, if not a  
9 consensus, that the only safe level of exposure to  
10 benzene is zero and that that has been the  
11 position of the American Petroleum Institute at  
12 least as early as 1948, whether it's been modified  
13 since that time or not; you are aware of  
14 statements like that out there?

15 A No, I'm not aware and if that's the case, I think they  
16 were wrong.

17 Q Do you know who Dr. Philip Drinker (phonetic) is?

18 A No.

19 Q Sir, you will concede that he was exposed to some level  
20 of benzene, correct?

21 A Dr. Drinker?

22 Q No, no, no. Mr. Hebert.

23 A Yes, he was exposed.

24 Q And he was exposed to it over a greater-than-a-30-year  
25 period of time?

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1 A Thirty-five years.

2 Q And benzene causes AML?

3 A What's the question on that?

4 Q Benzene does cause -- we've established that benzene  
5 does cause AML?

6 A You left something out very important. At high enough  
7 level.

8 Q Yes, sir. Yes, sir. Benzene causes-AML at a high  
9 enough level, which level is subject to dispute,  
10 correct?

11 A To you, maybe; not to me.

12 Q Now, do you have any other cause you want to attribute  
13 his AML to? Do you know of -- well, what sources  
14 of exposure would Mr. -- to benzene would Mr.  
15 Hebert have?

16 A What sources?

17 Q Yes.

18 A From his occupation. obviously, that's one that we've  
19 been talking about.

20 Q Does the type of barge that Higman has have any effect  
21 on your opinion as to the extent of his exposure?

22 A To some extent, yes. It depends on what kind of cargo  
23 it carried.

24 Q Make any difference to you whether he had -- was  
25 hauling condensate, crude or benzene -- excuse me,

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1 or gasoline?

2 A Well, obviously, if the cargo was pure benzene, then  
3 the exposure would be higher.

4 Q No. I misspoke. With regard to Mr. Hebert, does it  
5 make any difference to you or your study whether  
6 he was hauling crude gas or condensate?

7 A Well, gasoline would produce more benzene in the air  
8 than crude oil.

9 Q And what about condensate?

10 A Condensate? It depends on what the benzene  
11 concentration is.

12 Q You said the type of barges might have an effect on  
13 your assessment of the exposure. How? What  
14 effect would it have on your assessment of  
15 exposure?

16 A When I say the type of barge, I really mean the type of  
17 cargo, what type of product.

18 Q What's your understanding of how these-barges are  
19 loaded or unloaded?

20 A Well, during loading, basically, pipes, hose are  
21 connected and whatever product we're talking about  
22 being loaded into the tank of the barge. And  
23 there are some people who have got to watch out  
24 for the level and when it is full, disconnect the  
25 pipes and hose and so on.

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1 Q Did you exclude workers from your study or how did you  
2 deal with the confounding factor of workers who  
3 either hauled or loaded benzene in its pure form,  
4 if you did?

5 A We don't have anybody in our study who carried pure  
6 benzene. We have people who -- the main focus of  
7 our study is gasoline, but we do have people who  
8 carried crude oil.

9 Q So you're saying that the companies, Exxon, Chevron,  
10 Mobile and Shell were able to tell you which dock  
11 workers to exclude who had loaded pure benzene?

12 A We were able to go back and look at the name of each  
13 ship or vessel and find out what products were  
14 carried.

15 Q Maybe you inferred an answer, but I didn't understand  
16 that to be an answer. I was asking you, did the  
17 records enable you to exclude from your study dock  
18 workers or marine workers who had either loaded or  
19 transported pure benzene?

20 A Yes.

21 Q So there's -- for example, if a given Exxon dock loaded  
22 both benzene and crude oil and gasoline, and dock  
23 workers, every single one of them, had experience  
24 loading both types of substances, that whole plant  
25 would have been excluded?

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1 A We did not have dock workers.

2 Q Shore-based workers. What do you call them?

3 A Landbased.

4 Q Landbased workers.

5 A Landbased -- those are the people -- we are talking

6 about people who worked at what we call terminals.

7 Q Yes, sir. Okay. They have terminals -

8 A Gasoline.

9 Q Have you read Frank Parker's deposition?

10 A Yes.

11 Q Anything wrong with his methodology as far as you're

12 aware of?

13 A There's no methodology. He just pulled some number out

14 of the thin air.

15 Q What number did he pull out of thin air?

16 A In his report to you or to someone.

17 Q Oh, you mean his estimated levels of exposure?

18 A Right.

19 Q Did you understand that that was based upon his

20 education, training and experience, including his

21 experience in monitoring similar operations?

22 A I don't understand what that means. To me, a

23 scientific estimate would require more than that.

24 Q You've got a better way to estimate the exposures of

25 loading operations other than doing industrial

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1 hygiene sampling?

2 A Doing what we went through. Doing what Dr. Smith and I  
3 went through for the last four or five years.

4 Q Do you agree that benzene affects different individuals  
5 differently; some people are relatively  
6 insensitive to it and exposed to similar levels,  
7 there are people who will go on to develop a  
8 disease and others may not?

9 A What disease?

10 Q AML.

11 A I have never seen any scientific evidence for that.

12 Q Have you ever heard that?

13 A I've been asked the same question several times by  
14 plaintiff lawyers, but other than that, I haven't  
15 heard.

16 Q So if the API says that they're -

17 A If API says that what?

18 Q That there's a wide variety in individual  
19 susceptibility to the effects of benzene.

20 A I don't know whether they have said that or not.

21 Q You disagree with that?

22 A I don't know whether I would disagree or agree. I'm  
23 just telling you that there is no scientific  
24 evidence that I know of to support such a  
25 statement.

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1 Q Did your study take into account the effective use of  
2 increased protective measures employed after some  
3 point in time?

4 A Yes, we did.

5 Q And how was that accounted for?

6 A We put into the equation before a certain time, . when  
7 there were less concerns over spills and things  
8 like that. We increased the exposure by a certain  
9 factor.

10 Q Would you agree that when you did your feasibility  
11 study, by virtue of having gone with the companies  
12 with the best records, all four of which  
13 maintained records on -- I believe you referred to  
14 them as -- I'm not sure how you referred to them,  
15 but they were able to keep up with their  
16 annuitants and their causes of death, that that  
17 creates at least the opportunity for problems in  
18 the reliability of the exposure information you  
19 were provided?

20 MR. SPEARS:

21 Object to the form of the question as vague,  
22 but if you understand it, Dr. Wong -- I didn't  
23 understand it.

24 THE WITNESS:

25 No.

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1 BY MR. BAGGETT:

2 Q No, you didn't understand or no to the question?

3 A I think I understand.

4 MR. SPEARS:

5 I wanted the record to be clear.

6 BY MR. BAGGETT:

7 Q Well, you've recognized in the past that one of the

8 safeguards against a company or 'an industry which

9 wanted to minimize hazards associated with

10 substances they contracted you to study, one of

11 the safeguards was the fact that the company would

12 not know the response when they were gathering the

13 information as to the dose; you recognized that

14 before, correct?

15 A Right.

16 Q And in this case, all four companies would be in a

17 position to have such information?

18 A No, they did not, because when we collect the

19 information from them, the classification of

20 exposure had not been developed, so they have no

21 idea who is going to be in the high exposed group

22 or who will be in the low exposed group.

23 Q But they would know who is dead.

24 A So.

25 Q So if such a person were placed in a group with one

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1 year, you don't think they'd know what that means  
2 as opposed to putting them in a group with 30  
3 years; they couldn't figure that out?

4 A At that time, we didn't even identify which jobs were  
5 exposed. If you read the paper carefully, you  
6 will see that we have collected information on  
7 40,000 employees and after we finished the  
8 exposure classification, we ended up using about  
9 18,000.

10 Q And the rest -- there were 60-something thousand to  
11 begin with.

12 A Forty.

13 Q They were eliminated because of what, confounding  
14 exposures? what would the reasons include?

15 A Because they were either not exposed at all or they did  
16 not have enough exposure, the minimum exposure  
17 criteria of one year.

18 Q Why didn't you use those guys for controls?

19 A The reason being, that group is very transient, short  
20 term workers. They might have worked in different  
21 industries. They might have spent six months in  
22 this industry and another 40 years in asbestos  
23 industry. We really don't know what they are. In  
24 fact, we looked at their mortality, the overall  
25 mortality for that group, and it turns out that

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1 they have very, very high mortality simply because

2 they're transient workers; they don't have -

3 they're not stable.

4 Q Is that published, the result?

5 A That's in the discussion.

6 Q So in fact, the workers that had less gasoline exposure

7 had a greater incidence of disease?

8 A Overall mortality, not any specific disease.

9 Q Did you analyze it for specific diseases?

10 A No.

11 MR. VERON:

12 Gasoline is good for you.

13 THE WITNESS:

14 Now, seriously, long-term employment is good

15 for your health. That's what -- joking aside,

16 that's what --

17 BY MR. BAGGETT:

18 Q Well, Doctor, I mean, if I'm a conductor of an

19 orchestra, I might be 85 years old, but that

20 doesn't mean that that's the safest occupation in

21 the world. That may be the average occupation.

22 There's a problem there, isn't there? I mean --

23 A No, there is not.

24 Q So it isn't -

25 A I bet orchestra conductors probably have less stress.

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1 They live longer than lawyers. That is, you know  
2 -- certain sense of occupational stress.

3 Q Well, isn't it also a fact that you don't become a  
4 long-term worker unless you live a long time and  
5 you don't become a conductor of an orchestra  
6 unless you live to be a ripe old age?

7 A No. I think you're twisting what I said. We were  
8 talking about people who worked there for less  
9 than a year.

10 Q There have been a number of papers produced here. I  
11 have other questions. I believe we have an  
12 agreement that we can continue this deposition at  
13 some future date without the necessity of us re  
14 issuing a subpoena. I'm hoping that you can see  
15 if we can obtain some of these materials. It may  
16 not be possible for you to get all of them. And  
17 if you can just communicate with Mr. Spears as to  
18 whether that is possible and he will get back with  
19 me. We will try to -- I hope we get to go out to  
20 California, but we might have to do it over the  
21 telephone.

22 MR. SPEARS:

23 I can represent to you, Billy, that I talked  
24 to Dr. Wong during the break and I'm not at all  
25 optimistic that Dr. Wong is going to be able to

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1 get any documents, if any documents exist, from  
2 API or ENSR. ENSR is correct?

3 THE WITNESS:

4 E-N-S-R, yes.

5 MR. SPEARS:

6 And that I'll direct you -- I think if you  
7 want that information, if it exists, is to issue a  
8 subpoena to that company.

9 MR. BAGGETT:

10 Okay.

11 MR. SPEARS:

12 And have them officially respond, and if they  
13 have it, if it's there, then we can get it and Dr.  
14 Wong can -- to the extent he knows what's in it or  
15 you want to question him on it, but I don't want  
16 to represent to you that he has the ability -

17 MR. BAGGETT:

18 No. I understand that. I think. I don't need  
19 to ask you again, but I mean, I believe the record  
20 is that we haven't even asked yet. I mean, we  
21 established that we don't know because we haven't  
22 asked. But I will --

23 BY MR. BAGGETT:

24 Q -- just to follow up on this as to whether they still  
25 have them or not, I'd like to ask you -- I mean,

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1 looking down the line, the study may be updated,  
2 correct?

3 A In the future?

4 Q Yes. It's an important study.

5 A I don't know.

6 Q They're not going to throw away this data. It's not  
7 even published yet, right?

8 A I think a lot of people have the galley proof.

9 Q Okay. Let me see. I don't think there's anything I  
10 really have to ask today. I've got some other

11 questions to waste your time with, but sir, any of  
12 these studies that you conducted, do you have any  
13 information that any of the workers that were  
14 being studied ever knew that they were being  
15 studied?

16 A I'm sure the ones that Paul Smith and I talked to, they  
17 certainly know.

18 Q The ones that provided you exposure information and  
19 such?

20 A Right. And those people who told us what different  
21 jobs involved in terms of exposure.

22 Q For example, the CMA study; you believe that the member  
23 companies of the CMA, which assisted you in  
24 tracking down the deceased members of their  
25 industry --

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1 A Hold it for a minute. They did not help us to track  
2 down. I don't understand what you mean by that.

3 Q Let's talk about the vinyl industry. They didn't help  
4 you track them down?

5 A They did not help us to track down the people who died,  
6 no. -

7 Q Well, who did? You did it?

8 A We did it ourselves. We sent the records to the Social  
9 Security Administration. We sent the records to  
10 the National Death Index to find out who died.

11 Q Did they ever tell you to use indirect methods to  
12 ascertain this information?

13 A What indirect methods?

14 Q In other words, going through local contacts and law  
15 enforcement? You never wrote letters to local  
16 people, asking them how to do a follow-up on the  
17 people who were -- had -- should have been  
18 included in the first study but were not?

19 A Well, maybe I'll explain to you how we do our studies  
20 and you'll be -- that's skeptical -

21 Q We'll do that some other -- I haven't gotten into the  
22 vinyl stuff, and if we get into it at all, maybe  
23 it will be next time. It's 3:15 now. With our  
24 agreement -

25 A I'm not so sure I can go home and sleep, knowing that

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1 there's somebody out there who doesn't understand  
2 epidemiology.

3 Q Golly.

4 A And being so skeptical about all this.

5 Q Well, you may become an insomniac.

6 MR. SPEARS:

7 Let me ask you this, Billy, on the record for  
8 clarification. We're going to continue this  
9 deposition, but we're going to establish some  
10 guidelines about -- what I don't want to do is  
11 present Dr. Wong again and start all over with all  
12 of these questions.

13 MR. BAGGETT:

14 I'm not going to start all over, but I mean,  
15 I think that anybody can -- I have notes here in  
16 front of me that I haven't asked and whether they  
17 relate to, things that I could have asked, I mean,  
18 I haven't had an opportunity to review any of the  
19 documents which are very technical documents upon  
20 which the doctor bases his opinion. I don't know  
21 how I can tell you -- I mean, I'm not going to go  
22 into -- I hope I haven't -- there was one point  
23 where you said I was overly repetitive, but that's  
24 not my intention to go back into everything that I  
25 did before or tried to do or whatever. on the

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1 other hand, I'm not sure I know how to limit it  
2 without being just so vague as it could mean  
3 almost anything.

4 MR. SPEARS:

5 Well, I know the articles that he has  
6 produced, to the extent that you haven't asked him  
7 about those articles, certainly -

8 MR. BAGGETT:

9 Well, we can agree to come back here  
10 tomorrow. It's noticed and I've got more  
11 questions and I can -- I mean, I haven't even  
12 asked him if he's aware of other experts in the  
13 case, if he's talked with any of the experts.

14 MR. VERON:

15 Do you all want to keep going, then?

16 MR. BAGGETT:

17 I don't. But on the other hand, I'm not  
18 going to abuse this. I'm not going to go out and  
19 ask the same questions over and over again. On  
20 the other hand, I think you can all -- everybody  
21 has been sitting here. I haven't -- I've got  
22 questions here that I haven't asked. I've got  
23 documents all over the floor that I haven't asked  
24 and I can represent to you in good faith that I  
25 have more questions than anybody is going to want

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1 to sit here and listen to today.

2 MR. SPEARS:

3 Off the record.

4 tuff-the-record discussion.)

5 MR. BAGGETT:

6 Back on the record.

7 BY MR. BAGGETT:

8 Q Sir, EHA stands for Environmental Health Associates and

9 that was the old name for ENSR, correct?

10 A It's not 100 percent correct. Let me put it this way:

11 in 19 -- I believe 1988, EHA was combined with

12 another company, merged with another company, and

13 that entity became ENSR.

14 Q What is -- was ERA ever a subsidiary of Equitable Life

15 Insurance Company?

16 A No. You are probably referring to a consulting firm by

17 the name Equitable Environmental Health.

18 Q EEH.

19 A EEH. And that company existed only for a very short

20 period of time.

21 MR. BAGGETT:

22 **Thank you.**

23

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1 REPORTER'S CERTIFICATE

2 I, Peggy C. Stahls, Certified Shorthand Reporter,  
3 in and for the State of Louisiana, do hereby certify that  
4 the within witness, after being first duly sworn to testify  
5 to the truth, the whole truth, and nothing but the truth,  
6 did testify as hereinbefore set forth, in the foregoing  
7 pages;

8 That the testimony was reported by me in shorthand  
9 and transcribed under my personal direction and supervision,  
10 and is a true and correct transcript, to the best of my  
11 ability and understanding;

12 That I am not of counsel, not related to counsel,  
13 or the parties hereto, and in no way interested in the  
14 outcome of this event.

15 61

16 Zzx~

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17 CERTIFIED SHORTHAND REPORTER

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