

CONFIDENTIAL

COPY

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

TRANSWESTERN PIPELINE COMPANY,)

PLAINTIFF,)

VS.)

NO. B C 026959)

MONSANTO COMPANY AND)
DOES 1-200, INCLUSIVE,)

DEFENDANT.)

DEPOSITION OF ROGER E. HATTON, PH.D.
JANUARY 21, 1992

VOLUME I

G O R E R E P O R T I N G C O M P A N Y
100 NORTH BROADWAY
ST. LOUIS, MISSOURI 63102
241-6750

HARTOLDMON0040904

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

TRANSWESTERN PIPELINE COMPANY,)

)

PLAINTIFF,)

)

VS.)

NO. B C 026959

)

MONSANTO COMPANY AND)

DOES 1-200, INCLUSIVE,)

)

DEFENDANT.)

)

Deposition of Roger E. Hatton, taken on
behalf of the Plaintiff, at the law offices of Bryan,
Cave, McPheeters and McRoberts, 500 North Broadway,
in the City of St. Louis, State of Missouri, on the
21st day of January, 1992 before Sandra L. Ragsdale,
Registered Professional Reporter and Notary Public.

APPEARANCES OF COUNSEL:

FOR THE PLAINTIFF

Ms. Dana K. Welch
Shearman & Sterling
555 California Street
San Francisco, California 94194

Ms. Christie A. Patrick
Enron Interstate Pipeline Company
1400 Smith Street
P.O. Box 1188
Houston, Texas 77251

FOR THE DEFENDANT

Mr. Donald F. Zimmer, Jr.
Bronson, Bronson & McKinnon
505 Montgomery Street
San Francisco, California 94111

INDEX TO TESTIMONY

Examination by Ms. Welch

Page 6

INDEX TO EXHIBITS

1	P. 10	Subpoena
2	P. 43	Letter, 12-26-56, Davis to Wheeler
3	P. 48	Memo, 4-19-66
4	P. 53	Letter, 2-20-81, Riall to Colvin
5	P. 56	Letter, 11-7-61, Hatton to Woods
6	P. 62	Letter, 11-17-61, Hatton to Fletcher
7	P. 64	Texas Eastern memo, 8-21-58, Edmondson to Worley
8	P. 68	Sales summary, 1969-1971
9	P. 69	Letter, 8-22-68, Smith to Stephens
10	P. 71	Reappraisal: Fire-Resistant Turbine Lubricants, 6-25-64
11	P. 79	Memo, 2-12-54, Kelly to Newman
12	P. 83	Letter, 9-20-55, Kelly to Barrett
13	P. 86	10-23-59 letter by Wheeler
14	P. 90	6-6-60 memo re product questionnaires
15	P. 92	Memo, 9-30-63, Wheeler to Nemits
16	P. 96	Memo, 5-27-64, Wheeler to Nemits
17	P. 97	Memo, 9-10-65, Early to Davis
18	P. 98	Statement from Monsanto Co., 10-17-69
19	P. 102	Functional Fluids report, 6-69
20	P. 105	U.S. Department of the Interior letter to Monsanto, 1-16-68
21	P. 108	Letter, 3-6-69, Richard to Wheeler
22	P. 113	Letter, 3-7-69, Wheeler to Kelly
23	P. 116	Reported Aroclor customer incidents
24	P. 118	Memo, 9-9-69, Richard to Wheeler
25	P. 120	Report of Aroclor ad hoc committee, 10-2-69
26	P. 133	PCB Environmental Pollution Abatement Plan
27	P. 138	Memo, 11-6-69, Munch to Richard
28	P. 140	Organic Division report
29	P. 143	Schedule for Discontinuing Aroclor Applications
30	P. 146	handwritten "The PCB Issue"
31	P. 150	Management Plan, PCB Environmental Problem
32	P. 152	"What Could We Expect From This

33	P. 157	Program?" Memo, 5-15-70, Ehlers to Minckler, et al.
34	P. 161	Draft Letter to U.K. Aroclor Customers
35	P. 162	Memo, 2-19-70, Garrett to Papageorge

1 1
2
3 IT IS HEREBY STIPULATED AND AGREED by
4 and between counsel for the parties that this
5 deposition may be taken in shorthand by Sandra L.
6 Ragsdale, a Registered Professional Reporter and
7 Notary Public within and for the State of Missouri,
8 and afterwards transcribed into typewriting.

9 ROGER E. HATTON,
10 of lawful age, being duly sworn, testified as
11 follows:

12 EXAMINATION

13 QUESTIONS BY MS. WELCH:

14 Q. Good morning, Dr. Hatton. Could you
15 please state your name for the record?

16 A. Roger E. Hatton, and I do use the middle
17 initial.

18 Q. And could you please state your present
19 address for the record?

20 A. 406 Claybrook Lane, Kirkwood, Missouri.
21 63122.

22 Q. And your phone number please?

23 A. Area code 314 822-0215.

24 Q. Dr. Hatton, my name is Dana Welch and
25 I'm from the law firm of Shearman & Sterling. I

1 represent plaintiff in this action, Transwestern
2 Pipeline Company, and I have with me here this
3 morning Christie Patrick who is in-house counsel for
4 Transwestern Pipeline Company as well. Are you
5 represented by counsel here this morning?

6 A. Yes, Fritz Zimmer.

7 Q. Dr. Hatton, have you been deposed
8 before?

9 A. Yes.

10 Q. Probably what I'm going to tell you you
11 know by rote but let me just go through some of the
12 rules and guidelines for depositions. First of all,
13 as you know you're under oath so that means as you
14 know that you're to tell the truth just as if you
15 were at trial even though the setting is very
16 informal. I'm not going to purposely obfuscate any
17 questions or try to be unclear but if any question I
18 ask you is unclear please ask me to rephrase it again
19 and I will attempt to be more clear. Any time you
20 need a break please tell us, we're flexible, we'll
21 take a lunch break. Please to help the court
22 reporter we need audible responses, yes's and no's.
23 I'm sure you're familiar with that?

24 A. Yes.

25 Q. After the deposition is finished there

1 will be a transcript produced, you will have a chance
2 to review the transcript and make any changes that
3 you deem necessary. However, I should tell you that
4 if there are any changes made we may ask you about
5 those changes at the time of trial or we may attempt
6 to show that there are inconsistencies.

7 Q. Dr. Hatton, have you seen and signed a
8 confidentiality stipulation in this case?

9 A. Yes, I have.

10 Q. Before you said that you have been
11 deposed before. Do you recall any of the names of
12 those litigations?

13 A. Yes, the most recent or the one that I
14 remember the most has to do with a Texas Eastern
15 litigation and I can't give you the names of all the
16 lawyers and the insurance companies that were
17 involved but I was deposed through Monsanto.

18 Q. And do you recall approximately what was
19 the time period of that deposition?

20 A. About two years ago.

21 Q. And if you can recall the next most
22 recent deposition?

23 A. I think back almost the time that I was
24 still working for the company.

25 Q. And when was that?

1 A. I retired in November of '82.

2 Q. So the next most recent was in November
3 1982. And did that litigation have anything to do
4 with PCB's?

5 A. No, it did not.

6 Q. What did that litigation have to do
7 with?

8 A. It was with regard to heat transfer
9 fluids which Monsanto also produced.

10 Q. What about heat transfer fluids?

11 A. This involved an accident.

12 Q. And were any of the allegations in that
13 litigation that there was any damage due to the
14 composition of the heat transfer fluids?

15 A. No, the damage was fire.

16 Q. Let's try and narrow it to depositions
17 that had to do with allegations of PCB damage. Have
18 you ever been deposed besides the Texas Eastern
19 deposition in litigation that had to do with
20 allegations of PCB damage?

21 A. No.

22 Q. Never before?

23 A. No.

24 Q. Do you have copies of the transcripts of
25 any of those depositions?

1 A. No.

2 MR. ZIMMER: You mean of the non-PCB
3 ones?

4 Q. Any of the depositions that you've been
5 deposed on.

6 A. Yes, I do have one for another company
7 that I am working with in Atlanta. The case has not
8 yet been settled and I will maintain the depositions
9 in my files until it is and then I'll throw them
10 away.

11 Q. And does that case have anything to do
12 with PCB's?

13 A. This is strictly a heat transfer case
14 and primarily involves the function of equipment.

15 Q. Were you deposed in that litigation as a
16 former employee of Monsanto or as a consultant?

17 A. No, as a private consultant.

18 Q. I'd like to introduce as Exhibit 1 a
19 Subpoena Duces Tecum for Dr. Hatton. Exhibit 1 is a
20 subpoena for Dr. Hatton's deposition with about a
21 twelve-page document request. Dr. Hatton, have you
22 seen this document before?

23 A. Yes, I have.

24 Q. And how long ago did you see this
25 document?

1 A. It's been a matter of weeks. I don't
2 remember exactly when I obtained it.

3 Q. Dr. Hatton, did you bring any documents
4 with you pursuant to the subpoena?

5 A. No, I did not.

6 Q. Do you have any documents in your
7 possession that related to any of these responses?

8 A. No, I do not. Any documents that were
9 or are in my possession are the same as in the
10 attachments to the Texas Eastern deposition.

11 MR. ZIMMER: Let me make that clear for
12 the record because he does have a set of the exhibits
13 to his Texas Eastern litigation deposition. But we
14 told him they'd be produced here and so we didn't
15 have him lug those along.

16 Q. Do you have any other documents besides
17 those exhibits to that deposition?

18 A. No, I do not.

19 Q. Dr. Hatton, prior to this deposition did
20 you meet with counsel in preparation for the
21 deposition?

22 A. Yes.

23 Q. Did you review documents in preparation
24 for the deposition?

25 A. Yes.

1 Q. I don't want to inquire into any
2 attorney-client privileged areas and I'm not going to
3 ask you about the substance of that. I just want to
4 know if you did.

5 MR. ZIMMER: Yes, we showed him some
6 documents but whatever we showed him I'm going to
7 instruct him not to respond to.

8 Q. Were you shown documents other than the
9 following categories of documents: Texas Eastern
10 documents, Transwestern documents or Monsanto
11 documents, were you shown documents other than from
12 those three companies?

13 MR. ZIMMER: I'll object that it
14 violates the privilege but it's not important because
15 no, he wasn't. So you can answer.

16 A. I was mentally going through them and
17 no, there weren't any.

18 Q. Did you talk to anyone else besides Mr.
19 Zimmer before this deposition about this deposition?

20 MR. ZIMMER: She means other than other
21 counsel.

22 A. I had other counsel I talked to, yes.

23 Q. Other counsel from Monsanto?

24 A. Yes, supplied by Monsanto.

25 Q. Anybody else besides Monsanto counsel?

1 A. No.

2 Q. Dr. Hatton, if you could I'd like to
3 talk to you about your educational background. If
4 you could start with your undergraduate education up
5 through any graduate or post-graduate degrees.

6 A. I have trouble with dates so I'm going
7 to lay a piece of paper out here to be sure I get the
8 right dates if I may. AB from the University of
9 Omaha in 1940. I attended there from 1936 to 1940.
10 It's now known as the University of Omaha or
11 University of Nebraska Omaha branch or some such
12 thing, they've changed the name on it but my degree
13 came from the University of Omaha at the time. And I
14 went directly from there to Purdue University to the
15 graduate program and I obtained a Master of Science
16 in 1942 and a Ph.D. in organic chemistry in 1944.

17 Q. Any post-graduate degrees?

18 A. I have no post-graduate degrees but I
19 did work for Purdue Research Foundation for two
20 years. The work was primarily connected with the
21 Manhattan District and chemistry matters relating to
22 that project. Which takes us to '46, two years right
23 after my Ph.D.

24 Q. And where did you go to work in 1946?

25 A. Monsanto Company.

Q. In St. Louis?

A. Yes. Monsanto Chemical Company, excuse me.

Q. And what was the first position you had in 1946?

A. I joined the research department and was a research chemist.

Q. Were you working on any particular kinds of products or chemicals?

A. I started out working in the general materials that Monsanto was interested in, that ranged from drugs to organic chemicals of various types, and then got over into the area of looking at liquids and plasticizers and joined the -- what we called the functional fluids activity.

Q. Let's back up. What is a plasticizer?

A. Plasticizer is a material that you mix with a resin to make a commercial plastic. For example, a shower curtain contains a fair amount of plasticizer to make it pliable, so that otherwise if you had the plastic sheet up there it would be solid and wouldn't conform to the shape. So these were materials that Monsanto was making at the time. I did process work on them. I also looked for some new ones.

1 Q. And what's the function -- what was the
2 functional fluids group?

3 A. Functional fluids group, we defined a
4 functional fluid as a fluid without which a machine
5 cannot function. This sounds like gobbledygook.

6 Q. Doubletalk, circular?

7 A. More or less, but it really was when you
8 think about it a bit, it was a very useful term to do
9 research under because it was a broad umbrella. But
10 you couldn't run your engine in your car if you
11 didn't have a lubricant in it, therefore that
12 lubricant is a functional fluid, your engine won't
13 run without the lubricant. You can't have a
14 hydraulic system unless you have a hydraulic fluid or
15 a hydraulic gas it could be, but something in the
16 system to make it work. So that was a general
17 definition that we used to cover -- to allow us to do
18 a wide range of chemical types. It did not limit us
19 to say something like a phosphate ester or whatever,
20 we were able to expand it then. It also allowed us
21 to look at many different fields where these products
22 might be used instead of limiting to something --
23 when I said plasticizers we're talking about
24 something very narrow, when we're talking about this
25 we've got the world to work in.

1 Q. Were gas compressor fluids considered
2 part of the functional fluids group?

3 A. Yes.

4 Q. And did you begin working on gas
5 compressor fluids in about 1946?

6 A. No, not that early. The first work we
7 did was related to aircraft hydraulic fluids and from
8 that somewhere in the early fifties we became more
9 interested in industrial applications and had
10 eventually -- I cannot give you an exact date that we
11 started but we became interested in turbine
12 lubricants, gas compressor lubricants, this type of
13 thing.

14 Q. So 1946 until when were you a research
15 chemist?

16 A. I stayed as a research chemist from --
17 until 1952.

18 Q. Who did you report to during this time
19 as your boss?

20 A. Started working for Mike Devornikoff.

21 Q. Could you spell that for the record
22 please?

23 A. No. D-e-v-o-r-n-i-k-o-f-f I think but
24 don't hold me to that because I am not sure of how
25 Mike spelled his name.

1 Q. I don't mean to be depressing for the
2 record but to the extent that you know whether any of
3 these people are still alive could you state that?

4 A. No, he passed away a number of years
5 ago, in fact before I left research I think.

6 Q. Is there anyone else who --

7 A. And then I worked for H. R. Gamrath,
8 G-a-m-r-a-t-h.

9 Q. Do you know if he's still alive?

10 A. Last I'd heard he was but I do not know
11 where.

12 Q. And do you recall any individuals that
13 you worked with or who reported to you during that
14 period?

15 A. You asked when I was a research chemist?

16 Q. Yes.

17 A. As a research chemist you would not have
18 anybody reporting to you.

19 Q. You were the bottom of the bottom?

20 A. Yes, I started there. Our research
21 organization was very thin. We had a research
22 director and maybe he had an assistant and maybe he
23 didn't. And then a group leader and then a research
24 chemist. So we had three levels. We had some
25 research chemists that had twenty years of

1 experience. So we didn't go for titles. I don't
2 know how else to say it but that's what it amounted
3 to.

4 Q. And you left the position of research
5 chemist in 1952?

6 A. Yes, and from then in 1960 I was
7 group -- held the group leader position.

8 Q. What was the group leader?

9 A. That meant that I had a group of
10 research chemists and maybe a technician or two who
11 worked at my direction or worked with me depending on
12 the amount of experience they had. But I was the one
13 who was charged with keeping the records straight and
14 seeing that work was done and actually guided many of
15 the projects.

16 Q. Were you at this time primarily working
17 in functional fluids or were you working --

18 A. I still had -- when I became group
19 leader I inherited a few plasticizer projects too but
20 it was mostly in functional fluids.

21 Q. And who did you report to during this
22 period?

23 A. We had a series of research directors.
24 This is very difficult because -- let's see, I know
25 Throdahl was there for a while. I know I worked for

1 Patrick for a while. That level was -- is the level
2 that did most of the reporting to management and it
3 was a fluid level in that people came in and out of
4 the research director level rather frequently.

5 Q. In other words, you reported to the
6 research director who then reported to management?

7 A. Yes.

8 Q. Did you have any direct or dotted line
9 relationship with management at this point?

10 MR. ZIMMER: This point being '52 to
11 '60?

12 Q. That's correct.

13 A. In those days even the top management of
14 the company was within walking distance of the
15 research labs and the fellows who were running the
16 company at that time liked research and they'd walk
17 over and we'd talk to them directly, report to them
18 directly and very informally.

19 Q. So it was a fairly informal, small
20 atmosphere at Monsanto during this period?

21 A. That's what I was trying to determine,
22 it was a group of people who got along very well and
23 who were, if I can say so, quite creative but they
24 were not bound in by a huge superstructure of
25 management. So it probably -- I shouldn't add this

1 but I will -- it was probably one of the most
2 pleasant types of organization that I ever worked for
3 anywhere because it was so free and open.

4 Q. Okay. And do you recall any names of
5 the management that you had contact with, either on
6 an informal or formal basis?

7 MR. ZIMMER: Again between '52 and '60?

8 Q. Yes. Until we change the time period
9 we're talking about '52 to '60.

10 A. Now I'm really -- I know that Charles
11 Allen Thomas used to wander in now and then. A
12 fellow who worked for him as a V. P. I just don't
13 have a lot of names that I can -- I haven't thought
14 about -- remember, I haven't thought about these for
15 thirty years in this connection.

16 Q. I understand. Maybe when we get to
17 documents we can jog some memory. Did you have any
18 contact again during '52 to '60 at Monsanto with
19 someone named Tucker, a medical researcher?

20 A. Tucker, oh, Scott Tucker.

21 Q. I believe so.

22 A. I thought he came with the company later
23 than '60.

24 Q. I'm not sure what his time period was.

25 A. And the answer is no direct contact. I

1 just know who he is.

2 Q. Did you ever have any informal contact
3 with him after 1960?

4 A. I can't say I didn't.

5 Q. How about a Dr. Wheeler, did you have
6 informal or formal contact with him?

7 A. I don't know a Dr. Wheeler. I know an
8 Elmer Wheeler.

9 Q. Elmer, did you have any contact with
10 him?

11 A. Yes, I did.

12 Q. Was it informal contact or formal
13 contact?

14 A. Elmer worked for what we at that time
15 called the medical department and one of the
16 functions of a group leader was to be sure that
17 necessary data were collected and this included
18 medical type statements. And they were always
19 cleared by the medical department and Elmer Wheeler
20 would have done some of this as well as the other
21 people that worked there. So, yes.

22 Q. So what kind of contact did you have
23 with him, were you in meetings with him?

24 A. Walked over to his office and sat down
25 and talked to him. Or if we were having a group

1 meeting of some sort that he was involved he'd
2 attend.

3 Q. Did he taken group meetings frequently?

4 A. No, because ordinarily such meetings
5 discussed chemistry and the application data and not
6 the toxicity, medical data.

7 Q. Were you ever invited to any of his
8 group meetings as a chemist?

9 A. I don't remember.

10 Q. Again this is the period '52 to '60 that
11 we're talking about. I don't know if he's a Dr. or a
12 Mr. but how about a Mr. or Dr. Kelly?

13 A. He's an M.D.

14 Q. Okay, Dr. Kelly?

15 A. Right.

16 Q. Did you know Dr. Kelly?

17 A. Yes, Emmet Kelly and he was Elmer's boss
18 and as such sometimes we dealt directly with him and
19 other times we dealt with Elmer.

20 A. How much contact did you have with Dr.
21 Kelly?

22 A. It was always on an as-needed basis. If
23 we thought that we needed an opinion on a product or
24 we wanted some toxicity testing or an opinion given,
25 it was up to -- as the head of the medical department

1 it was up to Kelly to decide what gets done by --
2 he'd often allow that to be done by Emmett -- I mean
3 by Elmer -- and it didn't really bother us who did it
4 because it was official from that department.

5 Q. Okay. How about a Mr. Richards, W. R.
6 Richards I believe?

7 A. Bill Richards.

8 Q. Do you recall who he was or what his
9 position was?

10 A. Yes, I don't think I ever worked for
11 Bill. I think we're now getting into the years
12 beyond 1960. When I became -- we were talking about
13 as a group leader in 1960, I cannot remember the
14 dates well enough to say when I knew Bill Richards
15 but I did know Bill Richards very well either in this
16 time period or in the succeeding time period when I
17 was working in the development department.

18 Q. Who was Bill Richards, what was his
19 position?

20 A. Started out as a -- I think he
21 transferred from our facility in Dayton at a group
22 leader level and became an assistant research
23 director rather quickly. He may have come in at
24 that, I don't remember which way it was. But the
25 position in which I was dealing with him, he was a

1 level above a group leader.

2 Q. As part of the functional fluids group
3 did you normally examine toxicity data?

4 A. No, we did not. We relied completely
5 upon the medical department to provide the
6 information.

7 Q. Did you examine data from the medical
8 department?

9 A. Whatever they gave us as a final
10 statement was what we used and if they said --
11 whatever that opinion was, we followed. If they gave
12 us instructions to be careful in handling it we were
13 careful in handling it.

14 Q. What do you mean whatever instructions
15 they gave us we followed, did that relate to how you
16 dealt with the chemical or did it relate to how you
17 would advise that a product be used?

18 A. We would not have advised how the
19 product would have been used. As a group leader I
20 would never have advised anybody as to that type of
21 thing. We would have put their department in contact
22 with our medical department and let them talk about
23 it. We did not make statements publicly or privately
24 concerning the toxicity of Monsanto's products. This
25 was done by company edict.

1 Q. So during this time period 1952 to 1960
2 how would you use toxicity analyses, of what use to
3 you would they be?

4 MR. ZIMMER: Let me just object. It's
5 vague and ambiguous as to type of products.

6 Q. I'm speaking in general. If you know
7 you can answer.

8 A. It was also a company edict or rule --
9 I'm not sure what they called it, one or the other --
10 that we never took a new chemical anywhere without
11 having had the approval of the medical department.
12 So if we had a new plasticizer that we wanted to get
13 a potential customer to test or a new product, we
14 would go to the medical department and get their
15 clearance basically is what it amounted to, to take
16 it out to a customer. And whatever they told us, if
17 somebody would tell me that I was handling a poison I
18 sure would tell my fellows that were working for me
19 hey, this is worse than we thought, we better be
20 careful with it so.

21 Q. So in other words, they did the toxicity
22 analysis, you did the chemical composition?

23 A. Yes, that's right, that's a good way to
24 state it.

25 Q. It's accurate then?

1 A. Yes.

2 Q. Thank you. And did they say anything
3 more specific than this is poison or this is toxic in
4 general, again if you remember?

5 MR. ZIMMER: Same objection again
6 because in general we're talking about eight years
7 but multiple products so it's difficult.

8 Q. We'll get into documents. I just want
9 to know what the general atmosphere was at Monsanto
10 and the relationship between the departments?

11 A. We ended up with a summary statement
12 type of thing usually. In other words, we didn't get
13 a thick stack of documents telling us, we got the
14 summary that was prepared by the medical department.
15 And then that summary could be taken outside the
16 company.

17 Q. I see, okay.

18 A. If we had further questions -- the
19 medical department in those years was very open, they
20 not only talked to group leaders, they talked to
21 chemists, and if anybody had any problems they went
22 over and talked to them. We didn't write a lot of
23 letters and so on back and forth. But eventually
24 before anything went to the customer that dealt with
25 medical aspects of the products, effects on people

1 and so on, it was produced by the medical department
2 and we knew that. We may have signed letters in
3 which we included that but the medical department had
4 seen it and had written it actually in most cases.

5 Q. But there was generally an informal
6 atmosphere so that you felt you could walk into the
7 medical department or the lab and ask them questions
8 and the same back and forth reciprocally?

9 A. And we did.

10 Q. What happened in 1960 in terms of your
11 job responsibilities?

12 A. In 1960 I decided that I didn't want to
13 be a group leader anymore so I transferred to what we
14 called the development department. The development
15 department was a group of technical people who were
16 interested in basically new products and our charter
17 was to find new uses for materials, to find new
18 materials that would satisfy existing uses, and then
19 to introduce them to potential customers so that the
20 development function -- this is somewhat different
21 than in many other chemical companies at the time who
22 called development different things -- but this was
23 almost a commercial -- in fact I think we eventually
24 put the name commercial development department
25 because we were looking at markets and needs of

1 materials, trying to get research to supply products
2 or if research came up with a new idea we were the
3 ones who were responsible for taking it out to the
4 field.

5 Q. So you switched from your primarily lab
6 role into more of a marketing role at this point?

7 A. Well, yes and no except I couldn't write
8 a sales order so therefore I wasn't in the marketing
9 department if I may correct your -- I don't know what
10 term to use but the one I can think of isn't nice --
11 but it was a department between research and
12 marketing.

13 Q. Let me ask this --

14 A. And it was a level through which
15 products went before they came commercial.

16 Q. Did you during this period in the
17 development department have contact with customers?

18 A. Yes, very definitely.

19 Q. Was Texas Eastern one of your customers
20 during this period?

21 A. They were definitely one of my contacts.
22 I'm not sure of the dates exactly. I have to think a
23 minute. And yes, I'd been in contact with Texas
24 Eastern during some period.

25 Q. How about Transwestern?

1 A. The name was new to me when I heard it
2 very recently, within the past few months.

3 Q. In other words, you only heard about
4 Transwestern in connection with this case?

5 A. That is correct.

6 Q. Who did you report to in the development
7 department?

8 A. A fellow by the name of T. P. Sands,
9 just like it sounds. And he reported then to the
10 director of the department. Again it was a short
11 management scale we had.

12 Q. During this time period did the same
13 openness and informality pervade Monsanto?

14 A. Yes.

15 Q. Any other responsibilities as part of
16 the development department?

17 A. What I have given you is a very broad
18 charter if you think about all the various things it
19 could do. I guess the only other thing that I would
20 mention is that generally the development department
21 would be the one who would initiate the product
22 literature. You were asking about how information
23 got back and forth a little bit ago from the medical
24 department to the group leaders. Well, ordinarily if
25 there was going to be a document put together about a

1 potential product it would have been the
2 responsibility of somebody in the commercial
3 development department. And in that case then you
4 can see where the medical statement that was made
5 would be used by the development department much more
6 than it would be by the research department.

7 Q. So, for instance, you would put together
8 a brochure for the customer; is that correct?

9 A. Yes.

10 Q. And you would get a statement from the
11 medical department about the toxicity of that product
12 that would then go to the customer?

13 A. Yes, and that was included in the
14 literature per se as it came from medical.

15 Q. Did you primarily concentrate on
16 functional fluids during this period?

17 A. Yes.

18 Q. And how long did you stay in the
19 development department?

20 A. 'til 1968 and at that point the
21 functional fluids group created a new concept which
22 was called a technical service and basically our
23 function was to provide technical information and
24 other types of technical service to customers who
25 were using our products or misusing our products I

1 guess is a better thing to say because we didn't get
2 called when things worked well, we only got called
3 when they didn't work well.

4 Q. What did the technical information
5 include, for example?

6 MR. ZIMMER: Same objections as before,
7 vague and ambiguous, not product specific
8 particularly in such a broad time frame.

9 Q. To the extent that you can answer.

10 MR. ZIMMER: If you're asking for an
11 example.

12 A. Well, a good example would be a customer
13 was using the product and he was running some routine
14 analysis on the sample to see where it stood in
15 service, he would obtain his data and it didn't look
16 right so he'd call me up and say here are the data
17 that we obtained, will you run a sample for us. And
18 then we'd compare test methods and so on. I would
19 have done that type of thing. Or I could often get a
20 call and the fellow on the other end would say your
21 fluid is no damn good, it's not working in my system,
22 why. And I would have to try to figure out why it
23 wasn't working and what his system was to begin with
24 and try to help him in one way or the other. But I
25 was limited in this function to technical product

1 type of information.

2 Q. Does that mean that, for instance, if a
3 product injured somebody would the customer call you?

4 MR. ZIMMER: Once again --

5 Q. Or did a customer ever call you?

6 MR. ZIMMER: That calls for speculation.

7 Q. That doesn't call for speculation.

8 A. If it did I didn't answer his question.

9 I immediately gave him Dr. Kelly's number and said
10 call -- this is Emmet Kelly, he is very capable in
11 this area, he'll take care of your questions.

12 Q. So you were restricted to technical
13 information, product information?

14 A. Yes.

15 Q. What percentage of your time was spent
16 dealing with customers during this period?

17 A. You mean between '68 and '82 when I
18 retired?

19 Q. Yes.

20 A. This is total customers?

21 Q. Yes, did you spend most of your day
22 talking to customers and traveling to see customers?

23 A. I would say probably three quarters of
24 it was in contact with customers and the other
25 quarter was in product data, things such as that. As

1 the technical service manager I had ability to or I
2 should say the privilege of going to research and
3 talking to them about problems directly and also in
4 being contacted by research to help use my expertise.
5 So even though I was not in research I still spent a
6 fair amount of time with research over this period.

7 Q. Technical research?

8 A. Yes.

9 Q. Okay. How would you characterize the
10 atmosphere at Monsanto, was it still an informal,
11 open society?

12 MR. ZIMMER: Can we define those terms?
13 Those are not his words.

14 Q. They are his words.

15 MR. ZIMMER: No, they're not. We can
16 have it read back actually if you like. Object to it
17 as vague, ambiguous and undefined. He described an
18 atmosphere of openness that prevailed and the
19 pleasure that he derived from working there when he
20 first arrived. I don't think it's gone quite as far
21 as you're suggesting.

22 Q. Why don't you describe in your own words
23 what the corporate atmosphere was like from 1968 to
24 1982?

25 A. By 1968 the company had gotten much

1 larger and we had many more rules and regulations
2 than we had before, we were much more
3 departmentalized. The functional fluids group as
4 such even became more structured. My personal
5 relationships with the people that I worked with was
6 very good, no matter what their department was. And
7 I think that came because of the way in which I
8 normally operated. If it was at all possible I went
9 to somebody's office to talk to him rather than use
10 the phone. Because if I could sit down face-to-face
11 with somebody we could be very cooperative. And as
12 the technical service manager I was able to go
13 anywhere within the functional fluids group on my
14 own, I didn't have to get somebody's permission. So
15 my personal function was quite open but the company
16 as a whole was beginning to be very structured.

17 Q. Who did you report to during this
18 period, '68 to '82?

19 A. I think it was mostly T. P. Sands.

20 Q. And who reported to you?

21 A. No one.

22 Q. Did you have a dotted line relationship
23 with anyone else in management, did you report to
24 anybody else on an informal basis?

25 A. No, I did not report to anyone else but

1 I kept many people informed as to what I was doing.

2 Q. To the extent that you can remember
3 could you tell me who those people were?

4 A. No. I can give an example of the type
5 of relation. I dealt directly with the salespeople
6 who handled the customers' accounts. Gave technical
7 presentations at sales meetings with the field sales
8 group. I was accepted by -- I talked with people
9 like Bill Richards and others in research on the
10 problems and the progress and what was needed in the
11 way of new products. In many ways the technical
12 service manager function and the commercial
13 development function overlapped. Even though they
14 were in different departments at least part of the
15 activity was the same. We were always looking for
16 new products, we were always looking for places where
17 new things -- where the company could become involved
18 in new things. And that's how Monsanto lived, by
19 getting new things. So that activity went on no
20 matter where I worked.

21 Q. Do you recall who the salespeople were
22 for Texas Eastern during this period, '68 to '82?

23 A. Yes, John Frederickson was involved.
24 Don 'Steegan'. Jim 'Alley'. Those are the ones that
25 come to mind.

1 Q. Do you know if he was John
2 Frederickson's predecessor?

3 A. I think he followed him, I'm not sure.

4 Q. Do you know who preceded John
5 Frederickson?

6 A. I don't remember.

7 Q. Anybody else that you recall that was a
8 salesperson for Texas Eastern?

9 A. No.

10 Q. Again you weren't aware whether there
11 were any salespeople for Transwestern?

12 A. No.

13 Q. You retired from Monsanto in 1982?

14 A. Yes.

15 Q. Have you worked as a consultant since
16 then for Monsanto?

17 A. Very seldom but yes.

18 Q. In what capacity?

19 A. Primarily supplying information.

20 Q. What kind of information?

21 A. Technical information.

22 Q. With respect to what products or fluids?

23 A. The complete range of functional fluids
24 that I've worked on. I've had calls on almost every
25 one I ever worked on.

1 Q. Have you supplied technical information
2 on PCB related products?

3 A. Yes, and I would add that this is
4 information from my mind and not from documents. And
5 this is true of even the other functional fluids.

6 Q. We're here to get the information from
7 your mind.

8 A. Well, most of these -- many of these
9 questions are historical questions. When did you
10 bring OS-45 to market, who were you working with when
11 you developed the polyphenyl ether fluids. This type
12 of thing was what I would get asked.

13 Q. You mean in your consultant role for
14 Monsanto?

15 A. In my consultant role, yes.

16 Q. Is Monsanto paying you to appear at this
17 deposition by any chance?

18 A. Certainly.

19 Q. Can I ask you what the hourly rate is
20 that you're being paid?

21 A. 150.

22 Q. And did they pay you for the preparation
23 time as well?

24 A. Yes. They will.

25 Q. Is that your arrangement with all

1 depositions that you appear as a Monsanto witness?

2 A. Yes.

3 Q. A brief digression into your membership
4 in professional groups. Can you tell me what
5 professional groups you were a member of irrespective
6 of time period and tell me the time period if you
7 can?

8 A. I think I can answer your question
9 except to the time period which is very vague.

10 Q. Okay.

11 A. I belong to the Society of Automotive
12 Engineers primarily in order to do technical
13 committee work. And I must have joined prior to 1950
14 or thereabouts. And dropped the membership when it
15 became too expensive after I retired. So somewhere
16 in the eighties, I don't remember the year. American
17 Society for Testing and Materials. I think they have
18 a new name but this is the name I remember. And that
19 goes about the same period except I think I
20 maintained that membership somewhat longer, maybe a
21 year or two.

22 Q. And what kinds of things does that --

23 A. The American Society for Testing and
24 Materials is often called ASTM and if you see
25 technical literature you will see ASTM and a series

1 of numbers. Those numbers refer to a test method
2 that was developed by ASTM and is commonly accepted
3 across the industries. And so if you say a viscosity
4 was run by an ASTM method you know that if somebody
5 else runs it by that same method they're going to get
6 the same answer. So it served the function of
7 standardizing test methods and getting these out that
8 could be used. It also served as an information
9 transmittal system of technical information on
10 products and test methods.

11 Q. Did you serve on any committees on that?

12 A. Yes.

13 Q. What were the committees?

14 A. I worked primarily in what is known as
15 Technical Committee N under Committee D2.

16 Q. Could you explain for us what that was?

17 A. Committee D2 was the committee which
18 handled petroleum products. And they had subsections
19 for things like gasoline and grease and jet fuel and
20 diesel lubricants and so on. And one of those
21 subcommittees under them was Technical Committee N
22 which handled hydraulic fluids. And I served in the
23 formation of that committee and then on some of the
24 working subcommittees under Technical N.

25 Q. What other professional groups were you

1 a member of?

2 A. I belonged to the Fluid Power Society
3 which was a group put together to promote education
4 in hydraulics and hydraulic fluids primarily. It was
5 made up of people who were interested in spreading
6 the knowledge.

7 Q. Okay. Any other groups?

8 A. Belonged to the American Chemical
9 Society before I got to Monsanto and dropped that I
10 think somewhere about 1970.

11 Q. How about the American Society of
12 Lubrication Engineers?

13 A. That's the next one on my list. ASLE
14 which is now ASTL or whatever it is. But anyway at
15 the time I belonged to it, it was American Society of
16 Lubrication Engineers, ASLE.

17 Q. And what was that organization?

18 A. That was an interdisciplinary group made
19 up of chemists and engineers and plant people,
20 anybody who was concerned with the lubrication of
21 materials. And we had a very, very broad range of
22 people. It was a terrific organization for somebody
23 like myself to belong to because we had contact with
24 other people who might be using our fluids or who
25 knew what a hydraulic system looked like, could sit

9
1 down and tell us things about it or knew how things
2 worked. The actual day-to-day mechanic type people
3 were the engineers that designed these systems. We
4 had contact with that as well as people who were
5 experts in lubrication or in properties of fluids
6 that were required for these things. As far as I'm
7 concerned of the organizations I have told you about
8 this was the most useful to me.

9 Q. Did you have any contact with anybody
10 from Texas Eastern through this organization?

11 A. Yes.

12 Q. And who was that?

13 A. I'm sure I attended a number of their
14 meetings. I know that Ollie Fletcher attended some
15 and I also know that Earl Farmer was involved.
16 Beyond that I don't remember any other names but I do
17 know that people attended meetings. There were two
18 annual meetings a year and so consequently to
19 remember who was where at all of these I don't really
20 know.

21 Q. Okay. Do you have any recollection of
22 what time period you first met people from Texas
23 Eastern, either Ollie Fletcher or Earl Farmer?

24 A. And I have feeling that it was in the
25 early sixties. But I would have to refer to papers

1 that were presented at that time to find those dates.

2 (A brief recess was taken.)

3 Q. Back on the record. I'd like to talk a
4 little bit about the products that you were involved
5 with during the time you were at Monsanto and start
6 in particular with a product named Skydraul. Is that
7 a product whose name you recognize?

8 A. Skydraul, the answer is yes, in various
9 different versions of Skydraul, yes.

10 Q. Can you tell me what was the application
11 of Skydraul?

12 A. Skydraul was and still is used as an
13 aircraft hydraulic fluid which is used in all the
14 commercial jets in the world.

15 Q. Is it a lubricant?

16 A. No, it is a hydraulic fluid and goes
17 only in the hydraulic system.

18 Q. And when did you begin working on
19 Skydraul?

20 A. That was the first product that I became
21 involved in as a research chemist and the year was
22 1947 or 8.

23 Q. Did Skydraul contain PCB's during this
24 period?

25 A. Never.

1 Q. I'd like to turn to OS-81. Do you
2 recall that product?

3 A. Yes.

4 Q. When did you begin working on OS-81?

5 A. I don't remember an exact time that we
6 started the work.

7 Q. If I could introduce as Exhibit 2 this
8 document and could you please take a minute or two to
9 look at the document. Dr. Hatton, up in the right
10 hand corner I notice that you were cc'd on this
11 document. Would that have indicated that you -- I
12 know this document is very old and you probably don't
13 recall it specifically but does that mean that you
14 would have gotten this document normally?

15 A. My name was up under a carbon copy. Our
16 mail system was quite good. Yes.

17 Q. And you told me before that Sands was
18 the person who you reported to. Who is Litzinger?

19 A. May I point out that 1956 falls in the
20 time period when I was a group leader before I went
21 to work and reported to Sands. Sands was still the
22 person in commercial development who was handling the
23 functional fluids projects and Litzinger worked for
24 Sands.

25 Q. And who was Langenfeld?

1 A. Langenfeld was in the what we called
2 product group in marketing. He was a marketing man
3 and worked out of St. Louis.

4 Q. And who is J. B. Davis?

5 A. Jim Davis was a member of the commercial
6 development department and reported to Sands.

7 Q. And E. P. Wheeler is the Elmer Wheeler
8 that you referred to before?

9 A. That is correct.

10 Q. In the medical department?

11 A. That's correct.

12 Q. If you could just examine this and tell
13 me by reference to this or from your own knowledge
14 what was the composition of OS-81?

15 MR. ZIMMER: I'm unclear as to whether
16 you want him to confirm what's on the document or
17 from his own recollection tell you.

18 Q. Confirm what's on the document. Is this
19 document correct in term of the composition of OS-81?

20 A. To the best of my memory, yes.

21 Q. And does Aroclor-- what is Aroclor?

22 A. What is now known as a PCB. It's a
23 series of polychlorinated biphenyls which were sold
24 by Monsanto in various grades. As you notice under
25 the OS-81 various compositions were used in the

1 various products sold.

2 Q. What does the 1248 -- what do those
3 numbers refer to, the 12 and the 48?

4 A. The first two numbers, the 12 refers to
5 the number of carbon atoms in the molecule, and the
6 48 refers to the percent chlorine, average percent
7 chlorine in the material.

8 Q. Of what significance is the percent
9 chlorine?

10 MR. ZIMMER: I just need to object that
11 it's vague and ambiguous. It could have different
12 significance for one person or for another or for an
13 application versus another. I'm just not clear what
14 you mean.

15 Q. For instance, does the 48 percent
16 chlorine mean that -- let's talk about the time
17 period of 1956, was there some perception that the
18 higher chlorination the more toxicity or the more
19 danger?

20 A. No.

21 MR. ZIMMER: Hang on a second. Some
22 perception by whom?

23 Q. By Dr. Hatton. I'm only speaking about
24 his personal knowledge.

25 A. The amount of chlorine in the material,

1 as far as my concern was, related to things like
2 viscosity and density and fire resistance, the
3 physical properties of the material.

4 Q. Was OS-81 sold to Texas Eastern as far
5 as you know?

6 A. To the best of my knowledge, yes.

7 Q. Do you have any recollection of what
8 time period it was sold to Texas Eastern?

9 A. Early fifties which is incidentally
10 confirmed by this date here because we were arranging
11 for information of a type that would be required to
12 put it on the market or to take it to a customer.

13 Q. Are you referring to the fact that it's
14 directed to Mr. Wheeler?

15 A. Yes.

16 Q. So in other words, why would you send it
17 to Mr. Wheeler, why did you need that information?

18 MR. ZIMMER: He didn't send this to Mr.
19 Wheeler but you're talking about this type of request
20 in general?

21 Q. That's correct.

22 A. This was to determine the handling and
23 the toxicity information on a proposed product.

24 Q. To your knowledge were there any other
25 customers for OS-81?

1 MR. ZIMMER: Other than Texas Eastern?

2 Q. Yes.

3 A. I don't remember any others that we
4 would call customers. The product bulletins were
5 widely distributed to potential customers. But when
6 you ask for sales, I don't remember. I just can't.

7 Q. Okay. Could you explain to me what the
8 difference between the Pydraul's or an OS-81 was, is
9 an OS-81 a type of Pydraul or were they different
10 products?

11 A. Several questions there.

12 MR. ZIMMER: I agree.

13 A. So I'll answer them in some order.
14 First, OS-81 was not a Pydraul. It's Pydraul, it
15 means fire and hydraulic.

16 MR. ZIMMER: Why don't we let her ask
17 the next question. You've answered that one.

18 Q. What was the difference between a
19 Pydraul and OS-81?

20 A. The primary difference was in
21 application of the material.

22 Q. What was the application for the
23 Pydraul?

24 A. Hydraulic fluid.

25 Q. Was it ever used in gas compressors?

1 MR. ZIMMER: Calls for speculation as to
2 what customers or even users might have done with it.

3 Q. To the extent you can answer.

4 A. I don't think so.

5 Q. Okay. So OS-81 was used as far as you
6 know in gas compressors?

7 A. Yes.

8 Q. I'd like to introduce as Exhibit 3 this
9 document. This is a document dated April 19th, 1966.
10 Dr. Hatton, you're not noted on here and the only
11 reason I'm showing this to you is to refresh your
12 recollection about the composition of MCS -- it says
13 1531 but I think it means 153. Is there any
14 difference between MCS-1531 or do you think that's a
15 misprint?

16 A. MCS-153-1 actually refers you to the
17 MCS-153 dash rust inhibitor. There was one additive
18 put into 153 to make it 153-1 which was the rust
19 inhibitor.

20 Q. Okay. And is this composition correct
21 in terms of -- to the best of your recollection -- in
22 terms of what MCS-153 contained?

23 A. With the addition that this did contain
24 the rust inhibitor.

25 Q. Was this a product that was sold to

1 Texas Eastern?

2 A. To the best of my knowledge, yes.

3 Q. Do you have any recollection -- Strike
4 that. Was this sold concurrently with OS-81?

5 A. I don't know.

6 Q. Do you know if it was a substitute for
7 OS-81?

8 A. Yes.

9 Q. You do know?

10 A. It was, it was a follow-on product, the
11 next product in the line.

12 Q. Do you recall when it was substituted?

13 A. No.

14 Q. Do you know why there was a follow-up?

15 A. Yes.

16 Q. Could you explain to us why?

17 A. One of the problems with OS-81 was the
18 fact that at low temperatures it became too viscous
19 and by too viscous I mean didn't flow. It was
20 requested, since the application was outdoors, that
21 we develop a product which would flow at lower
22 temperatures than OS-81. And on that basis MCS-153
23 was developed. And it met the requirements.

24 Q. I note by comparing the previous
25 exhibit, the composition of OS-81 with the

1 composition of MCS-1531, that Aroclor 1248 is
2 substituted for Aroclor 1232 -- I don't know if it's
3 substituted but it disappears and 1232 appears. Was
4 that solely done because of the viscosity question?

5 A. Yes.

6 Q. I note up here in the right hand corner
7 that it says revised as Turbinol 153 8-31-70. Do you
8 recall that?

9 A. I do not recall that exact event but it
10 would have been our normal practice to trademark
11 products after they had been used by customers under
12 MCS numbers or OS numbers or some such code numbers
13 and as the product became large enough and important
14 enough to give it a commercial name then it would
15 have been given one and in this case Turbinol was
16 used.

17 Q. So to the best of your recollection was
18 Turbinol 153, the composition, the same as MCS-153?

19 A. Yes.

20 Q. The only change was that it was -- was
21 the trademark name?

22 A. Yes.

23 Q. By the way do you recall explaining to
24 Texas Eastern first of all why there had been a
25 change from OS-81 to 153?

1 A. Yes. It was at their request that this
2 work was done.

3 Q. What was their request?

4 A. They were the ones who pointed out to us
5 that the pour point or the viscosity of OS-81 at low
6 temperatures was too high and this was a product
7 improvement that they requested.

8 Q. Now could you digress a little bit and
9 tell us lay people what pour point means?

10 A. Yes. I'll tell you -- I think the
11 easiest way to explain it is to tell you how you
12 determine it and then it I think will become clear.
13 Take a glass tube about so big around, an inch, and
14 maybe six inches high and fill it halfway full of the
15 fluid you want to test, put a thermometer down in it
16 so you can measure the temperature of the fluid down
17 inside the tubing, and then start cooling this down,
18 start at room temperature and cool it down, and every
19 5 degrees Farhenheit you lift the tube up from the
20 cooling bath, you tilt it and if the surface of the
21 fluid moves you're not to the pour point yet. And
22 you keep doing this in 5 degrees increments all the
23 way down and you will get to a point at which when
24 you tilt the tube the surface won't move. That is
25 called the solid point. If you add 5 degrees to that

1 that's the last temperature at which it moved and
2 that's the pour point. Does that indicate what you
3 needed?

4 Q. It does. And I guess my next question
5 is why was this important for the customer?

6 A. Because the lubricant as such must be
7 moved through the system in order to lubricate and if
8 it is below the pour point it is then a solid
9 material which you cannot move from point to point.

10 Q. So Texas Eastern reported to you that
11 they were having problems with the pour point?

12 A. They requested or they reported -- yes,
13 they reported that it was a problem and that they'd
14 like us to do something about it which I think is the
15 same thing you said.

16 Q. And who at Texas Eastern do you recall
17 reported this to you?

18 A. I believe it was primarily Ollie
19 Fletcher at that point.

20 Q. Were you the person who he would have
21 gotten in contact with?

22 A. Yes.

23 Q. Did you ever tell anybody at Texas
24 Eastern what the composition as reflected in these
25 documents -- for instance, what the composition of

1 MCS-153 was?

2 A. I don't remember.

3 Q. Would it have been considered a trade
4 secret or do you remember if it was considered a
5 trade secret?

6 A. It would have been considered
7 proprietary information.

8 Q. Referring back to Exhibit No. 2 where it
9 says the composition of OS-81 -- it says confidential
10 composition data. That's what you mean, that it
11 would be considered confidential to the company, you
12 wouldn't want to disclose that to customers?

13 A. It would be considered confidential,
14 yes.

15 Q. Dr. Hatton, I'd like to show you Exhibit
16 4. In the scale of things this is a fairly recent
17 document, 1981; previous to your retirement, however.
18 Will you please take a minute to review this. Now
19 this is a very complimentary letter. You're not
20 reflected as having been cc'd on this but I just
21 wanted to confirm with you that this is accurate that
22 you did work with Texas Eastern during the entire
23 time that Monsanto was supplying Texas Eastern with
24 the chlorinated phosphate esters; is that correct?

25 MR. ZIMMER: Before you answer, Doctor,

1 let me note that the date of this letter, February
2 20, 1981, is long after Monsanto was supplying Texas
3 Eastern with PCB-containing lubricants and it doesn't
4 say that Dr. Hatton is continuing to work with them
5 about the supply of any lubricants. It just makes
6 comments about his experience and competence in this
7 area and questions that were apparently posed to him.

8 Q. That's all I'm asking. I'm not asking
9 beyond the scope of the letter. I read exactly from
10 the letter. I wanted to know if this was accurate,
11 the second paragraph. Did you work with Texas
12 Eastern during the entire time that Monsanto was
13 supplying Texas Eastern. That's all I asked.

14 A. Yes.

15 MR. ZIMMER: I'm sorry.

16 Q. By chlorinated phosphate esters, is that
17 another way of saying the three products we talked
18 about, the OS-81, the MCS-153 and Turbinol 153?

19 MR. ZIMMER: You're asking what that
20 means to him rather than what the author of this
21 Texas Eastern document meant?

22 Q. That's correct.

23 MR. ZIMMER: What does that term mean to
24 you?

25 Q. Does it include OS-81?

1 A. That term, yes. In the time period in
2 which that was being used that would include both
3 products.

4 Q. Okay. Would you say for your group that
5 you were the person who was primarily responsible for
6 contacts with Texas Eastern?

7 MR. ZIMMER: In what time frame?

8 A. Oh, no, because -- when?

9 Q. Let's first talk about from '52 to '60.
10 Let's talk about all the time frames that you talked
11 about in development.

12 A. Let's see, that was during the group
13 leader period. There would have been a development
14 person who would have also contacted and I believe at
15 that time it was either Jim Davis or Stu Litzinger
16 and I'm not sure which but it would have been
17 somebody in Sands group.

18 Q. Jim Davis or Stu Litzinger, do you know
19 if either of those people are alive?

20 A. No, Jim is gone and the last information
21 I had Stu is still alive.

22 Q. How about from 1960 to 1968, were you
23 the primary person responsible for contacting Texas
24 Eastern about the products?

25 A. I would say primarily, yes.

1 Q. Anyone else you can think of from
2 Monsanto besides the salespeople that you've already
3 talked about who did contact Texas Eastern about the
4 products?

5 MR. ZIMMER: During what time frame?

6 Q. '60 to '68?

7 A. At one time at one period I know that
8 Dale Smith had some contacts.

9 Q. What was his responsibility?

10 A. He was at this time I think mostly
11 product support type of activity in marketing.

12 Q. What was a product support activity?

13 A. An activity which was done which
14 actually became a technical service manager type of
15 activity but it also had a little more to do with
16 actual supply of product.

17 Q. Do you know if Dale Smith is still
18 alive?

19 A. To the best of my knowledge, yes.

20 Q. Do you have any idea when he retired or
21 if he retired from Monsanto?

22 A. He is retired now. I do not remember
23 the date.

24 Q. I'd like to introduce as Exhibit 5 this
25 letter. Dr. Hatton, if you could just take a minute

1 to review that, dated November 7th, 1961, a letter
2 written by you to Walter Woods at Texas Eastern.
3 First just some identification. Who is Mr. L. J.
4 Sunski; do you recall? He's cc'd on the last page.

5 A. Danville, Kentucky. It does not ring a
6 bell at the moment.

7 Q. And Walter Woods was one of the
8 individuals at Texas Eastern that you had frequent
9 contact with?

10 A. Yes.

11 Q. Do you recall what his position was?

12 A. He was in the engineering department. I
13 do not remember his exact title.

14 Q. And what was the purpose of this letter
15 if you remember or you can surmise from reading it?

16 A. I would surmise from reading this that
17 it involves some used samples of MCS-153 which came
18 from a turbine that had just been started up by Texas
19 Eastern and they asked us to take a look and
20 determine how -- apparently the unit was delivered
21 with petroleum oil in it and they wanted to know how
22 much was in there. I would also surmise from this
23 that there was a foaming problem because I talk about
24 how you determine foaming and what could cure it. So
25 there must have been a slight foaming problem at that

1 point.

2 Q. What is a foaming problem?

3 A. Well, the simplest example is like a
4 head on a beer. In other words, it is the foam which
5 is on the top of a fluid which can occur under some
6 circulating conditions.

7 Q. And what happens to the foam after it
8 foams, where does it go?

9 A. It eventually will build up to a level
10 and maintain itself and this can be rather high, it
11 can be high enough to fill the reservoir full of
12 foam. It can be controlled by the use of an additive
13 such as I've indicated here.

14 Q. Without getting into an engineering
15 study of a compressor, by reservoir do you mean that
16 there is a portion off of the compressor which
17 contains the extra fluid -- what do you mean by
18 reservoir?

19 A. In any circulating system you must have
20 more fluid than will fill the lubricating system,
21 otherwise you cannot circulate it around if you don't
22 have that much. And reservoir is simply where it is
23 held and it is part of the circulating system.

24 Q. So it's within the compressor itself?

25 A. Yes. It's actually beneath the

1 compressor but it is piped into the compressor and
2 into -- well, may I backtrack because that isn't
3 quite correct. It was most often put near the gas
4 turbine, the actual power-producing part of the unit.

5 Q. Are you familiar with the term open and
6 closed systems?

7 A. Yes.

8 Q. Could you tell me what an open system
9 versus a closed system means?

10 MR. ZIMMER: In natural gas compressor
11 terminology if those terms are used?

12 Q. Yes.

13 MR. ZIMMER: If you know.

14 Q. Let me backtrack. An open system versus
15 a closed system for the use of fluids generally, not
16 just in gas compressors.

17 MR. ZIMMER: Any fluid?

18 Q. Yes, as you would use it in the
19 functional fluids group.

20 A. An open system would be one in which the
21 fluid actually passed through the system and was
22 discarded. A closed system would be one in which it
23 was circulated and reused.

24 Q. How is a fluid discarded in an open
25 system? Could you give me an example, for instance?

1 MR. ZIMMER: Once again it's incredibly
2 vague and ambiguous.

3 Q. I'm specifically referring to your
4 experience with PCB fluids.

5 A. Then I can't give you an example.

6 Q. That were no open systems that used PCB
7 fluids?

8 MR. ZIMMER: Doctor, let me object.
9 That isn't what the prior question asked. The prior
10 question inquired generally as to his knowledge of
11 the terms open and closed systems. So let's try
12 another question.

13 Q. I'm just trying to understand what an
14 open system is by an example of an open system.

15 MR. ZIMMER: Which he has already given
16 you so.

17 Q. That's a question because you told me
18 the theory and I would like an example.

19 MR. ZIMMER: Now there's a question.

20 A. Small air compressor would normally
21 discard the fluid to the air or to the gas that was
22 being compressed. Larger systems could be an example
23 of a closed system in which the fluid was circulated
24 back again.

25 Q. Was a compressor in a pipeline

1 considered an open or a closed system?

2 A. Closed system.

3 Q. Are there any shades of gray in between
4 partially open and partially closed?

5 A. Yes, of course.

6 Q. Where would a compressor in a pipeline
7 system fit within those?

8 A. In a closed.

9 Q. One hundred percent closed?

10 A. That would depend on the specific design
11 of the compressor and I don't really know how to
12 answer your question. But --

13 MR. ZIMMER: I think you have answered.
14 That sounds like it's in the eye of the beholder.

15 Q. Is there any system that's more closed
16 that you worked with than a gas compressor system?

17 MR. ZIMMER: Object, calls for
18 speculation and vague. If you understand the
19 question you can answer.

20 A. You're asking for any system that is
21 more closed?

22 Q. Yes, because you told me there were
23 shades, gradations. I'm wondering what the most
24 closed system that you had experienced would be or
25 was?

1 A. All right. Use of polyphenyl ethers in
2 a vacuum pump.

3 Q. What is a polyphenyl ether?

4 A. Polyphenyl ether is a --

5 Q. I just want to know if it's a PCB
6 material?

7 A. Absolutely not.

8 Q. Is there any more closed systems that
9 use PCB materials than a gas compressor in a
10 pipeline?

11 A. PCB's were used as vacuum pump fluids.

12 Q. Okay. I believe we're up to Exhibit 6.
13 I just want to show this to you to confirm that Mr.
14 Fletcher was a person at Texas Eastern who you had
15 contact with in 1961?

16 A. Yes.

17 Q. Do you recall what his position was?

18 A. In the engineering department. I do not
19 know his title the various times I contacted him.

20 Q. Do you know what Texas Eastern used
21 before it used PCB materials for lubricants?

22 MR. ZIMMER: Object to the question as
23 it's vague as to both time, place and any specificity
24 as far as where or for what application.

25 Q. To the extent that you know you can

1 answer the question if you understand it. If not
2 I'll be glad to rephrase it.

3 A. They used motor oils for engines and,
4 you know, there were greases around the place. I
5 don't know, I cannot give you a list of all the
6 products that they used if the question is broadly
7 what did they use totally because I don't know.

8 Q. Did you have any conversations with
9 anybody at Texas Eastern about switching to PCB
10 lubricants or was that before you were involved?

11 A. No, the contacts that I had with Ollie
12 Fletcher were the ones that first discussed it.

13 Q. Do you recall the time frame? Did it
14 predate this letter, 1961?

15 A. Yes.

16 MR. ZIMMER: The question was do you
17 recall the time frame of when you first --

18 A. It's some time in the late fifties, in
19 that period somewhere in there. I cannot give you an
20 exact date or place.

21 Q. Do you recall how it came about, did he
22 approach you and say I've got a problem or did you
23 approach him and say I've got a product, do you have
24 any recollection of the manner in which this idea for
25 PCB lubricants came about?

1 A. I don't know who was first.

2 Q. Do you have any recollection of any
3 discussions you had with Ollie Fletcher around this
4 period when they were thinking about using your
5 product?

6 A. Yes. I know that Ollie was assigned the
7 problem of looking for a fire resistant lubricant for
8 their turbines because he told me so and that he was
9 much interested in it. And I also know that I was
10 much interested in turbine lubrication at that point
11 too. So to say who first brought up the subject I
12 don't know but we certainly discussed it in detail.

13 Q. This is Exhibit 7. I'd like to have you
14 take a look at this, Dr. Hatton. You're not cc'd on
15 this so I know that you didn't see this or you might
16 have seen it. Let me ask, did you see it; do you
17 recall seeing this?

18 MR. ZIMMER: Seen which? There are two
19 pages to Exhibit 7.

20 A. Emmet's letter or the Texas Eastern
21 letter?

22 Q. Emmet's letter because this is a
23 Monsanto Chemical Corporation letter.

24 A. I do not remember seeing it.

25 Q. Let me direct your attention to the last

1 full paragraph of that letter which begins with:

2 Let me repeat that it is certainly my opinion
3 that the use of this material in the
4 application you describe will not afford any
5 toxic hazard provided the above simple
6 recommendations are carried out.

7 Do you recall any other discussions with
8 Mr. Fletcher or Mr. Woods about toxicity other than
9 this communication?

10 MR. ZIMMER: Before you answer, the
11 Doctor didn't write this letter so he doesn't recall
12 this communication.

13 Q. That's phrased poorly. Do you recall
14 any discussions at all with either Mr. Woods or Mr.
15 Fletcher regarding the issue of toxicity of OS-81?

16 A. I can't remember specific instances. If
17 they would have come up I would have referred them to
18 Emmet or Elmer and they would have talked either
19 directly to my contacts or to the medical department
20 at Texas Eastern.

21 Q. So you didn't tell them anything
22 different than what is reflected in this letter?

23 A. No. I'm not even sure I told them that.

24 MR. ZIMMER: Thank you for pointing that
25 out. I was just about to observe that.

1 Q. You don't recall ever talking to them
2 about it?

3 A. If I talked to them I either made the
4 reference I indicated or I gave them the technical
5 bulletin which they already had and referred them to
6 the statement there.

7 MR. ZIMMER: Do you recall ever
8 discussing this issue with anyone at Texas Eastern,
9 that's the question. Let's stick to the question.

10 A. No.

11 Q. As you testified your normal course
12 would have been to refer them to the medical
13 department?

14 A. Yes.

15 Q. By the way, does this date on this,
16 1958, help refresh your recollection about the date
17 which it was first introduced to Texas Eastern?

18 A. Yes, this indicates a little earlier
19 than I had said when I said early sixties or late
20 fifties although this is late fifties so I'm not
21 completely off.

22 Q. During this time period do you remember
23 whether there were any field tests at Texas Eastern
24 of any of the lubricants that were ultimately used?

25 MR. ZIMMER: Could you be more specific

1 as to any of the lubricants eventually used?

2 Q. OS-81, MCS-153 Turbinol 153?

3 A. I was aware that it was going to be used
4 in a turbine compressor combination in full scale and
5 I do not remember when or where but these were part
6 of the discussions, that it was going to be full
7 scale trial, not a small one, a full one.

8 Q. And what do you mean by a full trial?

9 A. A piece of equipment that was in normal
10 use on a pipeline.

11 Q. For what period of time?

12 A. For whatever the Texas Eastern felt they
13 need to get a good answer.

14 Q. Do you recall what that period was?

15 A. No.

16 Q. Were you ever present at any of these
17 field tests?

18 A. Yes, although I should point out
19 immediately that a field test involves a period of
20 time of months or maybe a year and I obviously would
21 not have been present at the entire time. I was
22 present at one start-up.

23 Q. And that brings me to my next question
24 which is through your contacts with Texas Eastern did
25 you gain knowledge of how a gas compressor works?

1 A. Superficial.

2 Q. I'm sure that mine's a lot worse. Let
3 me ask this about the use of a gas compressor, and
4 maybe I can refer to this document which I'll
5 introduce this as document 8, Exhibit 8. These are
6 sales summaries that have been produced to us by
7 Monsanto of sales to Transwestern Pipeline. And,
8 Doctor, I know that you testified you never heard of
9 Transwestern. I'm not asking you whether you know
10 specifically about this sale but what I'm curious
11 about is the fact that this shows that there are
12 sales in 1968, 1969 and 1970. My question relates to
13 this, what do the incremental sales beyond the first
14 fill of a compressor represent? To your knowledge
15 why would a pipeline company want more fluid after
16 the first fill, where does the fluid go?

17 MR. ZIMMER: The question is compound.
18 Doctor, always let me finish my objection first if
19 you would please. Compound, vague, ambiguous, calls
20 for speculation as to why or what a natural gas
21 company would do with the fluid. But if you know you
22 can answer.

23 A. I can think of two answers. One is they
24 may be starting up a new piece of equipment,
25 therefore they'd buy more fluid. The second is that

1 it may have been spilled in transfer. Or they may
2 have broken a line.

3 Q. To your knowledge was any of the PCB
4 material just carried through with the gas in normal
5 usage? And therefore used up?

6 A. I do not have that kind of information.

7 Q. You don't know from your knowledge of
8 gas compressors whether that's the case?

9 A. No.

10 Q. Any other thoughts about why a pipeline
11 company would need more fluid beyond the first fill?

12 MR. ZIMMER: Any other speculation you
13 mean?

14 A. Those two are the only things.

15 Q. To the extent that he knows.

16 MR. ZIMMER: He's already offered you
17 what might have as his answer said occurred.

18 Q. I'm giving a follow-up question. If he
19 doesn't know.

20 MR. ZIMMER: The question begs for
21 speculation so that's what it's going to get. If you
22 have any other --

23 A. No, those are the two reasons that I
24 would think of.

25 Q. I'll mark this as Exhibit 9. Take a

1 look at this letter for a minute. I'd just like to
2 direct your attention on the second page to the
3 second paragraph:

4 As to the fluid itself, we do not claim it to
5 be unchangeable or indestructible, just the
6 next thing to it.

7 Did you ever hear in any of your
8 conversations or in your work that the product -- I
9 guess they're referring to MCS-153 -- was the next
10 thing to unchangeable or indestructible?

11 A. I do not remember any time that those
12 two particular words were used.

13 Q. Do you think that's a fair
14 characterization?

15 MR. ZIMMER: That it's either
16 unchangeable or indestructible or that it's the next
17 thing to it as this letter by Mr. Smith states?

18 A. I think the next thing to it would be
19 the expression I would use.

20 Q. Right. What does that mean to you?

21 MR. ZIMMER: Let me object that what it
22 means to Dr. Hatton -- I'm happy to have him tell you
23 but what it meant for Mr. Smith to Mr. Stephens in
24 this letter that Dr. Hatton neither authored nor was
25 copied on could be something else entirely.

1 Q. I agree and we may get to talk to Mr.
2 Smith. I just want to know what it means to Dr.
3 Hatton.

4 A. The product was developed because it was
5 quite stable in use and this just means that it would
6 have a long life in service as long as you kept it
7 clean and didn't contaminate it with other materials.

8 Q. As you use the term -- I'm not asking
9 you for Mr. Smith's opinion of the term -- does this
10 have anything to do with biodegradability?

11 A. No, my answer to your question has to do
12 with functionality in the system.

13 MR. ZIMMER: Let me object somewhat
14 belately that Dr. Hatton didn't use the term until
15 you referred him to the language in the letter as
16 well. So he's responding to that comparison question
17 but at any rate.

18 Q. I'm just asking him to respond to my
19 questions. Exhibit 10 -- and this will be the last
20 exhibit before lunch, Dr. Hatton -- I'm not asking
21 you to read this whole document which is a document
22 which indicates that it was written by you in June
23 1964. Do you recall issuing this document? I just
24 want you to tell me what this document generally is
25 and then I have one question about it.

1 A. Now that I have seen it again, yes.

2 MR. ZIMMER: Why don't you flip through
3 it briefly to familiarize yourself with it?

4 A. Periodically it became necessary to let
5 everybody know exactly what was going on on a
6 project. And we issued summary type of documents
7 such as this. The title of this is a 'reappraisal.'
8 And what that would mean to me, what the assignment
9 was, was to look at the fire resistant turbine
10 lubricant field again as of this date and determine
11 what our potentials of ever getting the whole market,
12 what the whole market would amount to, the various
13 types of questions that management would ask
14 concerning any given project. And I put together in
15 this particular document my best answers to those
16 questions.

17 Q. So was this an internal Monsanto
18 document?

19 A. This is completely an internal document.

20 Q. By everyone you mean everyone at
21 Monsanto or customers?

22 MR. ZIMMER: He said he wanted to let
23 everyone know what was going on with a product. It's
24 not customers, but Monsanto.

25 A. No, within the company.

1 MR. ZIMMER: Let me object first.
2 That's the order in which this normally occurs. I
3 don't think that per counsel's suggestion that the
4 Doctor implied nor did the prior answer suggest that
5 he meant everyone, meaning every single person at
6 Monsanto. There happens to be a distribution list of
7 this memo the second page in.

8 Q. I think he answered the question
9 adequately.

10 A. These are all people who had some
11 function in the functional fluids activity, not in
12 all the other products that Monsanto might have had
13 including research, development, management, sales,
14 marketing. These names all represent the various
15 activities that were done. And when I indicated that
16 these -- that all the people got it I meant all the
17 people who were in the functional fluids group.

18 Q. As of 1964?

19 A. Correct.

20 Q. There are some new names on here so if
21 we could take a minute if you can identify some of
22 them for me. Mr. Anagnostopoulos?

23 A. Anagnostopoulos, he at this point was
24 close to being the top man in the functional fluids
25 group.

1 Q. Do you know if he's still alive?

2 A. Last I heard he's in Greece.

3 Q. Mr. Buchanan?

4 A. Marketing.

5 Q. Is he still alive?

6 A. He left the company, went to work for
7 Ethel and I believe is still alive.

8 Q. Do you recall when he left the company?

9 A. Has to be early seventies.

10 Q. Mr. Davis?

11 A. Dick Davis was in marketing and I'm not
12 sure, I don't know where Dick is.

13 Q. Do you know if he had contact with Texas
14 Eastern in marketing?

15 A. I don't know.

16 Q. How about Mr. Gillis?

17 A. Gillis was in the marketing area, has
18 long since passed away.

19 Q. Mr. Harris?

20 A. Harris was in the development
21 department. Concerned about mostly with predicting
22 where fluid applications were. And I dealt with him
23 in terms of the numbers in here.

24 Q. Do you mean fluid applications in terms
25 of where the end use would be?

1 A. Yes, what the total world market would
2 be, that kind of question.

3 Q. Mr. Klein?

4 A. Klein would have been at that point -- I
5 don't see Sands's name on here but he would have been
6 a step above Sands in the development activities.

7 Q. Is he still alive?

8 A. I do not know.

9 Q. Mr. McEwen?

10 A. He and I would have been equivalents.
11 He was working in the same group as I was.

12 Q. Mr. Morris?

13 A. Mr. Morris was at that point general
14 manager of the organic division and got it as a
15 courtesy.

16 Q. Is he still alive?

17 A. I don't know.

18 Q. Mr. Robson?

19 A. Marketing, and I have -- I do not know
20 his location at this point.

21 Q. We know who Mr. Smith and Mr. Stark are.
22 How about Mr. Wobus?

23 A. Mr. Wobus was more concerned with the
24 manufacturing of fluids at that point.

25 Q. I just want to ask you one question

1 about this document and it's located on page 3 of the
2 document, the Bates stamp number is 001320. And I
3 want to direct your attention to paragraph 4. Will
4 you read that paragraph. I assume that these are
5 recommendations by you to Monsanto about the future
6 course of fire-resistant materials. Why did you
7 recommend that quote:

8 The possibility of developing
9 non-chlorine-containing fire-resistant
10 lubricants should be considered?

11 A. There was data available at the time
12 that indicated that chlorine in turbine lubricants
13 could cause bearing problems and therefore that if
14 this was true then we ought to be looking at
15 something that didn't contain it.

16 Q. What happened to this recommendation?

17 MR. ZIMMER: That calls for speculation
18 as to what each individual on the distribution list
19 and others in related departments did with the
20 recommendation.

21 Q. To the best of your knowledge was there
22 the development at that point in time, 1964, of
23 non-chlorine-containing fire-resistant lubricants?

24 MR. ZIMMER: You mean was the quote,
25 possibility of developing them, considered?

1 Q. No, no, no. I asked him a different
2 question.

3 A. They were not developed in 1964,
4 otherwise I wouldn't have written the statement
5 saying they should be considered.

6 Q. Okay. Was there a consideration given
7 to the best of your knowledge to the development of
8 these materials at that time?

9 A. Yes.

10 Q. What was the decision at that point in
11 time?

12 A. I do not know exactly that they took a
13 decision at this point in time but eventually such
14 products were developed.

15 Q. When were such products developed?

16 A. I don't have a date of when they were
17 developed. It has to be in the late sixties, early
18 seventies period.

19 Q. So it's later than this?

20 A. Yes.

21 Q. Do you know if there was work in the
22 labs that commenced starting in 1964 and 1965,
23 whatever, on the development of these products?

24 A. Not on the specific products but I do
25 know that the chemistry that had to be used was under

1 consideration at this time.

2 Q. And there was actual work in the labs on
3 the chemistry?

4 A. Yes.

5 (Luncheon recess was taken.)

6 Q. We're back after a lunch break. This
7 afternoon I'm going to be showing you documents that
8 there's no apparent reference to you in the
9 documents, you haven't been cc'd on, you're not the
10 author or recipient of. And I want to make clear
11 that I'm not asking you for what's in somebody else's
12 mind when they wrote it or to speculate about the
13 cause or effect of the document but just to see what
14 it triggers off in terms of your own knowledge of
15 relevant acts in the period, and particularly because
16 some of these people I believe are dead, are no
17 longer available to be deposed.

18 For instance, do you know if Dr. Kelly
19 is still alive.

20 A. Yes, he is.

21 Q. He is still alive. Do you know where he
22 is?

23 A. St. Louis area somewhere. I do not have
24 a phone number or an address.

25 Q. How about Mr. Wheeler, is he still

1 alive?

2 A. No, he is passed on.

3 Q. How about Mr. Tucker; do you know if
4 he's still alive?

5 A. I didn't know him that well and I have
6 no idea what he's doing these days.

7 Q. With that in mind I don't want to go
8 through every document to say that I didn't see this.
9 You're not apparently listed on these documents but
10 we'll proceed. And I believe that we're up to
11 Exhibit 11. Take a minute to study this document.
12 It's difficult reading.

13 MR. ZIMMER: Were you able to make out
14 all that, Doctor? It is indeed a very poor copy.

15 A. Yes, at least sufficiently.

16 Q. First of all, have you ever seen this
17 document before?

18 A. Not to the best of my knowledge.

19 Q. Do you know who Dr. Newman is?

20 A. He was or was -- I do not know which --
21 connected with the Monsanto Chemicals Limited
22 activity in London -- no, he was apparently stationed
23 out in Newport where Monsanto had a plant, Monsanto
24 Chemicals Limited, and they were I believe a
25 subsidiary of Monsanto at that time.

1 Q. Do you know if he was a medical doctor?

2 A. No, I do not.

3 Q. Did you -- I'm referring to this period
4 1954 -- did you ever hear of any concerns that
5 Aroclors or PCB's caused liver damage or might cause
6 liver damage?

7 MR. ZIMMER: Do you have a specific
8 Aroclor in mind, counsel or just general?

9 Q. This just says Aroclors so I'm just
10 referring to Aroclors in general.

11 MR. ZIMMER: It says Aroclor paint.

12 Q. Well, Aroclor in general?

13 A. I do not remember any specific
14 information from that time period on this.

15 Q. Do you ever recall any conversations
16 with Dr. Kelly about the possibility that an Aroclor
17 might cause liver damage?

18 A. No, I do not specifically.

19 MR. ZIMMER: Doctor, give me a chance to
20 object before you answer. Let's stick with what the
21 letter says which is Aroclor paint.

22 Q. I can ask him whatever I want.

23 MR. ZIMMER: You can but that's what the
24 letter says and if he's responding to the letter I
25 just want to make that clear.

1 Q. I think I made clear that I wanted to
2 use the document as a reference point for a number of
3 questions. So do you recall ever having a
4 conversation with Dr. Kelly about Aroclors causing
5 liver damage in 1954?

6 A. No, I do not remember any conversations.

7 Q. How about with Mr. Wheeler, did you ever
8 have a conversation with Mr. Wheeler about liver
9 damage?

10 A. Not to the best of my knowledge that I
11 can remember.

12 Q. Do you recall any other conversations
13 with anyone else about the possibility of liver
14 damage again around this period 1954?

15 A. No.

16 Q. Did you at some point in time hear from
17 anyone that there were concerns that Aroclor might
18 cause liver damage?

19 A. Nothing comes to mind at that time
20 period. I do not remember any specific instance or
21 person discussing the subject with me.

22 Q. How about as part of your general
23 knowledge or understanding, whether you can trace it
24 to a person or an individual?

25 A. No.

1 Q. You worked in a lab at this period; is
2 that correct, in 1954?

3 A. Yes, either my office or I personally
4 was in the lab until 1960.

5 Q. Did you handle any materials that
6 contained PCB's in the lab?

7 A. Certainly.

8 Q. What if any precautions were you told to
9 take with the Aroclors or the PCB's?

10 A. We were told to keep them out of our
11 eyes and to wash our hands.

12 Q. Were you ever told that you had to have
13 adequate ventilation in the lab?

14 A. Not specifically. Laboratories are well
15 ventilated.

16 Q. Were you ever told that in this period
17 when you worked in the lab that there might be some
18 danger of liver damage to you?

19 A. No.

20 Q. Or to any of the other chemists?

21 A. No.

22 Q. Did any of the chemists who worked in
23 the lab during that period of time ever suffer any
24 liver damage that you know of?

25 A. Not to my knowledge.

1 Q. I'd like to show you Exhibit 12 and I
2 have to apologize, this is the way we got the
3 documents, they're difficult to read. Have you ever
4 seen this document before?

5 A. No.

6 Q. Who is Howard Mason; do you know?

7 A. Yes, he was an employee in the organic
8 division at a relatively high level and I do not know
9 his exact title in 1955, the time of this memo.

10 Q. Do you know who Dr. J. W. Barrett was?

11 A. He was also a member of Monsanto
12 Chemicals Limited which was the English firm. I do
13 not know his title and I don't see it on this memo.

14 Q. I'd like to direct your attention to the
15 second paragraph where the statement is made that
16 "there was not too great a difference between the two
17 compounds," and I think it's referring to Aroclor
18 1254 and 1242. Do you believe that that's a correct
19 statement?

20 MR. ZIMMER: Which statement?

21 Q. That "frankly, there was not too great a
22 difference between the two compounds, however."

23 A. We generally -- I generally in my work
24 in the laboratory treated them as -- in both the same
25 way.

1 Q. And what was that?

2 A. Just wash my hands, clean up spills, not
3 get them in my eyes.

4 Q. So you're speaking about in terms of
5 precautions?

6 A. Yes.

7 Q. That you didn't view a great difference
8 between the 1254 and the 1242?

9 A. Whichever we were using.

10 Q. Okay. I'd like to direct your attention
11 to the last paragraph on the first page, the
12 sentence: "We know Aroclors are toxic but the actual
13 limit has not been precisely defined." Did you ever
14 hear from Dr. Kelly that Aroclors were toxic?

15 A. I don't remember that exact wording
16 used. I do remember that we were told to treat them
17 as I've already indicated. But I do not remember
18 Kelly ever using the word toxic with me.

19 Q. Do you remember anyone else using the
20 word toxic with you?

21 A. No.

22 Q. Earlier you testified that you had a
23 fairly free-flowing relationship with both Dr. Kelly
24 and Mr. Wheeler, that you would visit their labs,
25 they would visit you?

1 A. No, I did not say I visited their
2 laboratories.

3 Q. Visit their offices. Excuse me, I
4 misspoke.

5 A. Okay.

6 Q. Are you surprised that they wouldn't
7 have told you about -- are you surprised to hear that
8 you didn't hear this statement from them?

9 MR. ZIMMER: Assuming facts not in
10 evidence based upon a document which he neither has
11 seen before nor authored. I also am going to object
12 to the continuing irrelevance of any of these issues
13 as to health and safety matters being raised in this
14 deposition due to the fact that this is an equitable
15 indemnity action for property damage and I'm sure
16 we're going hear a lot more of it nonetheless but I
17 want to make that point early on.

18 Q. You can answer if you understand the
19 question.

20 MR. ZIMMER: Why don't you reask it?

21 Q. Do you remember the question? Do you
22 need to hear the question again?

23 A. Yes, I would.

24 Q. The question was are you surprised as
25 you sit here today given what you testified about

1 your relationship with these two gentlemen that they
2 never told you either about their concerns about
3 liver damage or about toxicity?

4 MR. ZIMMER: Which two gentlemen are you
5 talking about?

6 Q. Excuse me, one gentleman. We're going
7 to get to the other gentleman in a minute. Dr.
8 Kelly.

9 MR. ZIMMER: Same objections as before,
10 particularly it assumes facts not in evidence.

11 A. My personal feeling is no, I'm not
12 surprised.

13 Q. Why not?

14 A. When I indicated that I had free access
15 to them I was referring to the problems as they came
16 from our side and if it had been a real concern that
17 one or the other would have taken me aside and told
18 me so.

19 Q. Would you have wanted to know if there
20 were concerns about either liver damage or toxicity?

21 A. Certainly, certainly.

22 Q. This is Exhibit 13. This is very
23 difficult to read. I don't want you to spend a lot
24 of time reading this. I want to direct your
25 attention to -- if you can just try and read the last

1 paragraph on the first page and it goes over a few
2 sentences to the next page. That's all I'm concerned
3 about. I can read it out loud if there are problems.

4 MR. ZIMMER: Did you write it? This is
5 going to be difficult for anybody to --

6 Q. You can confirm whether my
7 interpretation is correct.

8 I believe prolonged and repeated skin contact
9 with any of the Aroclors should be avoided for
10 two reasons. In the first place, the less
11 chlorinated products are liquids and are
12 excellent solvents for oils and fats in the
13 skin as well as other organic materials.

14 Secondly, it is possible that prolonged or
15 repeated skin contact could lead to chloracne.

16 I know of only two cases where such experience
17 has developed during the long history of
18 production and use of the Aroclors. In one
19 case an Aroclor was being used as a heat
20 transfer -- I cannot read that word -- in a
21 system that allowed vapors to escape when the
22 material was heated to 600 degrees Fahrenheit.
23 Several workers developed, quote, blackheads,
24 end quote, which were found by an industrial
25 physician but which in his words were so

1 insignificant that the men were not aware of
2 them nor would a general practitioner notice
3 them. This indicates to me, however, that
4 sufficient exposure, whether by inhalation of
5 vapors or skin contact, can result in
6 chloracne which I think we must assume could
7 be an indication of more serious systemic
8 injury if the exposure was allowed to
9 continue.

10 Now do you believe that's an accurate
11 rendition?

12 MR. ZIMMER: Rendition of what?

13 Q. Of what the letter says?

14 MR. ZIMMER: What Dr. Wheeler said in
15 one paragraph of this three-page letter?

16 Q. Yes. I just want to know if I read it
17 wrong.

18 A. The only word you did not read is heat
19 transfer medium and it is medium.

20 Q. Thank you.

21 A. That term is commonly used in heat
22 transfer.

23 Q. Thank you for the comment. This is a
24 letter from Mr. Wheeler to somebody at Westinghouse,
25 1959. Have you ever seen this letter before?

1 A. No, I have not.

2 Q. Was Westinghouse a customer that you had
3 contact with at all?

4 A. I had some contact with Westinghouse gas
5 turbine division. I did not have contact with
6 corporate Westinghouse or other divisions.

7 Q. At the time of this document which is
8 1959, searching your memory, do you recall any
9 knowledge of the possibility of chloracne from
10 exposures to Aroclors?

11 A. Yes, that was the reason for the comment
12 in handling the material to wash your hands
13 frequently.

14 Q. When were you first aware of the
15 possibility of chloracne from Aroclor?

16 A. I have no memory of a specific date.
17 When I came to work for Monsanto I read most of the
18 product bulletins of Monsanto products. If it was
19 said in there then I would have had it.

20 Q. But you recall during the period you
21 were working in the lab that you had knowledge of
22 chloracne?

23 A. Yes.

24 Q. Did you have knowledge that chloracne
25 may indicate certain other serious systemic injuries?

1 A. No.

2 Q. No one ever told you that that was a
3 possibility?

4 MR. ZIMMER: The question assumes facts
5 not in evidence and also has been asked and answered
6 but you can respond again if you want.

7 A. No, I'm not that knowledgeable of
8 medical terms.

9 Q. Did you ever tell anybody at Texas
10 Eastern, anybody you knew like Mr. Woods or Mr.
11 Fletcher or Mr. Farmer that chloracne was a
12 possibility from handling of the Aroclors?

13 MR. ZIMMER: From as this letter says
14 prolonged and repeated skin contact?

15 Q. In any way you phrase it did you ever
16 mention chloracne?

17 A. I don't think so but I better answer
18 this no, I do not remember a specific conversation
19 that said this.

20 Q. I'd like to show you what I have marked
21 as Exhibit 14, a little more readable. Have you ever
22 seen this document before?

23 A. No.

24 Q. Here's my concern, I might be missing
25 something but from my understanding of the

1 composition of OS-81, MCS-153 and then Turbinol 153,
2 none of the Aroclors that are part of that
3 composition is listed on this list. Am I correct? I
4 just wanted you to confirm that.

5 A. Would you restate what products you were
6 talking about being included?

7 Q. I'm wondering if OS-81 -- which as I
8 understand contained 1248 and 1242, we can refer back
9 to the earlier exhibit -- 1248, and 1242, and MCS-153
10 which contained 1242 and 1232, the Aroclors are not
11 included on this list?

12 A. Aroclor 1248 is included as the third
13 product -- fourth product on the list, I'm sorry.

14 Q. But then it says Santolube 70 Mixture.
15 What is the Santolube 70 Mixture?

16 A. It is a rust inhibitor.

17 Q. Would that be what would be included in
18 OS-81 or was that included in OS-81?

19 A. If you'll refer back to Exhibit 3 you
20 will note that one of the ingredients that we've
21 talked about already, MCS-153, was Santolube 70.

22 Q. But 1248 is missing from MCS-153?

23 A. Yes, I stand corrected. I just
24 remembered the Santolube nomenclature from that
25 document.

1 Q. So this would not refer to the Aroclors
2 that were included in any of the OS-81, MCS 153 or
3 Turbinol 153, would it?

4 A. That is true.

5 Q. If you note in the second full paragraph
6 there is toxicity data. And my question to you is
7 only if you know -- I'm not asking you to
8 speculate -- if you know from your experience with
9 selling this product, why it is or why it was that
10 toxicity data was included for these Aroclors but not
11 for the Aroclors that were sold to Texas Eastern?

12 A. I do not --

13 MR. ZIMMER: Before you answer, Doctor,
14 included in this memo is what you mean I assume which
15 we haven't even determined exactly where it came from
16 but it's rather incomplete in that regard because we
17 don't have information that was included elsewhere.

18 Q. We'll get to other documents but to the
19 extent that you know do you have any idea?

20 A. No. I don't even know who wrote it.

21 Q. Excuse me?

22 A. I don't even know who wrote it.

23 Q. It doesn't appear on the face of the
24 document. I'd like to mark this as Exhibit 15
25 please. This is dated September 30th, 1963 from

1 Elmer Wheeler to Mr. F. T. Nemits at the Wynn Oil
2 Company. Was Wynn Oil Company one of your customers?

3 A. Not for functional fluids. To the best
4 of my knowledge.

5 Q. I'd like to direct your attention to the
6 second paragraph where Mr. Wheeler states that
7 Aroclor 1232 would be considered toxic since this
8 dose falls within the range. Do you know what the
9 meaning of the oral LD 50 in rats is, 4470 mg/kg, do
10 you know what that means?

11 MR. ZIMMER: This is from Dr. Wheeler
12 even though it's not signed and we haven't talked to
13 him about that so go ahead and answer if you know
14 what the oral LD means.

15 A. Oral LD 50 is a measure -- or a way of
16 expressing that data that toxicologists used and it
17 related to the dosage which caused the death of 50
18 percent of the test animals. It's a very standard
19 number that is quoted.

20 Q. So, if I could repeat back -- this might
21 be an incorrect formulation -- it means that at 4470
22 mg/kg 50 percent of the rats experienced mortality;
23 is that correct?

24 A. That's my understanding from having been
25 told in the past.

1 MR. ZIMMER: Right. And thank you for
2 noting in that fashion, Doctor, because counsel knows
3 you're neither an M.D. nor a toxicologist. And I
4 really think this is getting pretty far afield. When
5 you introduced this line of questioning you said I'm
6 not going to be asking you, Doctor, for anything
7 other than trying to jog your memory. Now we're
8 exploring the substance of documents he neither
9 authored nor has seen before not to mention my
10 objection to the relevance of this document which I
11 think is a complete whitewash with regard to the
12 issues in this case with respect to property damage.

13 Q. I think that the Court has determined
14 that this is relevant.

15 MR. ZIMMER: I'm going to start
16 instructing him not to answer if you ask him medical
17 questions like this. If you want to ask him if this
18 reminds him of something as you told him you would
19 be, great. Otherwise let's move on.

20 Q. Why don't we proceed and we'll see where
21 we get, okay. Was Aroclor 1232 one of the Aroclors
22 that was used in the fluids that were sold to Texas
23 Eastern?

24 A. I must jog my memory by looking at the
25 actual formulations and the answer is on attachment,

1 or whatever you call it, No. 3 it appears.

2 Q. Now I know that this document says that
3 refers back to the oral LD 50 at a certain level but
4 did you have any knowledge or any -- did you have any
5 contact or did anybody tell you in 1963, whether it
6 be Mr. Wheeler or Dr. Kelly or anybody else, that
7 under any dosage, whether it be small or large,
8 whatever, that 1232 would be considered toxic?

9 A. I do not remember such a specific
10 statement.

11 Q. Do you have any recollections of general
12 knowledge during this time period?

13 MR. ZIMMER: Asked and answered.

14 A. I've already told you that the
15 precautions that we used because of what we were
16 told. Beyond that I don't --

17 Q. I'm trying to march through time here
18 and I know that this is many years ago but I'm trying
19 to understand when if ever you gained any knowledge.
20 So I know that's very difficult but that's part of
21 why I'm showing you documents from different time
22 periods.

23 A. This doesn't jog my memory.

24 Q. So you have no recollection during that
25 time period?

1 A. No.

2 Q. Okay. This is Exhibit 16.

3 A. Never seen that one before.

4 Q. My question to you is were the Aroclors
5 in an oil solution as sold to Texas Eastern?

6 A. No.

7 Q. What was the solution that it was in?

8 A. It was not in any solution, it was the
9 total product.

10 Q. The Aroclors were the total product?

11 A. With the other additives and materials
12 that were listed in the formulations as given.

13 Q. Okay. Did you ever hear in any other
14 context that in 1964 that there were several
15 indications that the Aroclors were more toxic when in
16 an oil solution than when administered undiluted to
17 animals?

18 MR. ZIMMER: Object since he neither
19 authored nor received this.

20 Q. He already testified to that. I'm
21 assuming that because that's what he testified to.

22 MR. ZIMMER: I'm just asking you to
23 rephrase it, that's all. There's not a question
24 pending, Doctor.

25 Q. The question is did you ever hear from

1 anybody, whether it be Mr. Wheeler or Dr. Kelly or
2 anyone, that the Aroclors are more toxic when in an
3 oil solution than when administered undiluted to
4 animals?

5 A. I do not remember hearing it.

6 Q. This is Exhibit 17. Do you know who C.
7 L. Early was?

8 A. Yes, Curt Early was -- started as a
9 research chemist, was hired from Shell Oil Company
10 after considerable experience and eventually moved to
11 commercial development like I did.

12 Q. Do you know if he's still alive?

13 A. My last indication is yes.

14 Q. Have you ever seen this document before?

15 A. No.

16 Q. Did you ever hear in relationship to
17 field tests of the fluids at Texas Eastern that there
18 was a concern about jeopardizing the chances of
19 getting a field test by releasing information about
20 toxicity?

21 A. I don't remember any such statement.
22 No, I don't remember.

23 Q. Did you hear anything about the subject
24 matter of this memo?

25 MR. ZIMMER: Note, Doctor, now she's

1 talking about the memo which refers to Pydraul 312.

2 Q. That's correct, yes.

3 A. No, I have not seen this memo before and
4 I cannot remember having discussed this area with
5 Curt.

6 Q. Was Pydraul 312 a product that you were
7 responsible for?

8 A. No. The date of this memo is 1965 and
9 this work that was being done then would have been
10 after I was in the development department.

11 Q. I see, okay. This is Exhibit 18. I'm
12 not going to ask you to read the hard to read parts.
13 I want you to turn to -- inside there's a page that
14 says a Statement from Monsanto Company, St. Louis,
15 Missouri dated October 17th, 1969.

16 MR. ZIMMER: Which page is this on?

17 Q. There's two Bates stamps but the one in
18 the right hand corner is 40110. And I want you to
19 just read that first page and then --

20 A. Is that the page that begins "late in
21 February?"

22 Q. Yes, please.

23 MR. ZIMMER: Can we be told what this is
24 or where it came from?

25 Q. It's a statement from Monsanto Company,

1 St. Louis, Missouri. I am not aware at this time in
2 what production this was made. We've had several
3 productions from various sources so I can't identify
4 it in that sense. If you could just read the first
5 two pages of this statement from Monsanto Company.

6 MR. ZIMMER: If indeed it is from
7 Monsanto Company.

8 Q. I'm not asking him to authenticate it.

9 MR. ZIMMER: I understand that but I
10 don't want the record to reflect it is a statement
11 from Monsanto Company. It's not on their letterhead.
12 I haven't seen it before myself so who knows.

13 Q. In 1966 did you ever hear about a study
14 done by a Professor Jensen in Sweden?

15 A. What date again please?

16 Q. 1966.

17 A. '66, I remember hearing or reading a
18 press release some time late in the 1960's that
19 concerned Jensen's work.

20 Q. Do you recall where that press release
21 was from?

22 A. Looked like it was from a newspaper
23 somewhere. I do not know the source of it.

24 Q. Do you recall anything about Jensen's
25 work or what Jensen had to say?

1 A. Yes, it had to do with effects on
2 wildlife of DDT and related products and in those
3 tests he found some PCB's.

4 Q. Do you recall any discussion at Monsanto
5 about the disclosures made by Jensen?

6 A. Not specific discussions, no.

7 Q. Do you recall any general discussions?

8 A. I was on a circulation list from that
9 release so therefore I assume other people read it
10 too.

11 MR. ZIMMER: Doctor, she doesn't want
12 you to assume or guess or speculate. The question
13 was whether you recall any conversations about it.

14 A. No, I do not recall any discussions that
15 we held about it at that point.

16 Q. Do you recall if in your mind when you
17 heard about this you had any concerns about PCB's?

18 MR. ZIMMER: When he read this press
19 release?

20 Q. Yes.

21 A. Two feelings, I was obviously concerned
22 that they were finding PCB's in the environment and
23 the second concern was if they truly were.

24 Q. Let's take your first concern. What
25 would be your concern about finding PCB's in the

1 environment?

2 A. Just a normal concern of anything being
3 added to the environment from chemical processes.
4 And I would have been as worried about some
5 by-product from some other process that we ran as I
6 would have of PCB's at the time.

7 Q. Any other concerns that you had?

8 A. The second question, when I said if they
9 truly were PCB's, because at this time frame we're
10 talking about the analytical methods for determining
11 exactly what was in there were very crude, and I knew
12 that and therefore questioned it.

13 Q. Did you have any discussions with
14 anybody about those two feelings that you had?

15 A. I don't remember spelling them out with
16 anyone.

17 Q. Did you have any discussion with Texas
18 Eastern about the Jensen report?

19 MR. ZIMMER: I don't think he said he
20 read the Jensen report.

21 Q. Or the press release about Jensen?

22 A. I don't have any recollection of a
23 specific discussion.

24 Q. You don't have any recollection of any
25 questions raised by Texas Eastern to you about --

1 A. No.

2 Q. Exhibit 19, I'm going to show you a
3 document on which your name appears. Just note the
4 fact that you're on the circulation list and then
5 turn to the last page under the heading where it says
6 replacement for Aroclors. Will you read that?

7 A. The last page?

8 Q. The last page of the document, yes.

9 A. Thank you.

10 Q. Do you recall receiving this document,
11 Dr. Hatton?

12 A. No, I do not recall receiving it.

13 Q. Does it look like a document that you
14 received, does that distribution list look familiar
15 to you?

16 MR. ZIMMER: Two questions. Which one
17 do you want him to answer? Does it look like a
18 document he received? I think he's already answered
19 that he doesn't recall receiving it.

20 Q. Do you have any doubt that you received
21 this document, let me put it that way?

22 MR. ZIMMER: I don't think he knows one
23 way or the other.

24 A. I don't remember seeing it but if my
25 name's on the list I would assume it went across my

1 desk.

2 Q. That's good. Is this what you're
3 referring to in terms of one of the reports you got
4 about Jensen that came across your desk?

5 A. No, this is not the document I was
6 referring to.

7 MR. ZIMMER: Let me also object again
8 belately that it misstates his prior testimony. He
9 said he saw a newspaper article or press release, not
10 a report about Jensen. We can find that in the
11 record if we need to.

12 Q. What is synthesized
13 bromo-chlorobiphenyls?

14 A. It's a chemical term. May I ask again
15 that you give me the chemical name again?

16 Q. It's in the document. I'm just reading
17 it. It says: We have therefore synthesized
18 bromo-chlorobiphenyls as potential replacements for
19 Aroclor.

20 A. Both bromine and chlorine are halogens.
21 They're very similar in types of reactions. And if
22 you replaced some of the chlorines in chlorobiphenyl
23 with a bromine atom you would call it a
24 bromochlorobiphenyl.

25 Q. Is this different than a PCB or is it a

1 different formulation of PCB?

2 A. PCB by common acceptance means
3 polychlorinated biphenyl. And that would not allow
4 having bromine or nitrogen or sulphur or anything
5 else in the biphenyl molecule, it is a specific term.
6 And bromo-chlorobiphenyl would not be a PCB.

7 Q. Okay. Do you recall the synthesis of
8 bromo-chlorobiphenyls?

9 A. No, I do not.

10 Q. You don't have any recollection about
11 it. Do you recall during this time period concern
12 about the biodegradability of -- specifically this
13 refers to Aroclor 1248 and 1254?

14 A. What was the first two or three words?

15 Q. Do you recall concerns at this time
16 about the biodegradability of Aroclor 1248 and 1254?

17 A. I was aware that the subject was being
18 worked on by people in research. I was in -- at this
19 point I was in marketing and I know that this was a
20 concern of people but I was not directly in any way
21 connected with the people doing the work reported
22 here.

23 Q. At this time period do you know who was
24 working on this issue?

25 A. No, I do not.

1 Q. Do you know whether they knew whether
2 those Aroclors were biodegradable at this point?

3 A. I do not.

4 MR. ZIMMER: Who is they?

5 Q. The people. He didn't identify them but
6 he knows there were people working on it.

7 A. No. I do not know the progress of the
8 work. I did not follow it.

9 Q. And you have no idea whatever happened
10 with the bromochlorobiphenyls as a replacement?

11 A. No, I do not.

12 Q. Exhibit 20. Did you ever see this
13 document?

14 A. No.

15 Q. Did you ever hear about this document
16 anywhere at Monsanto?

17 A. I do not remember hearing about this
18 one.

19 Q. Can you describe to me in this time
20 frame, 1968, if there was any sense of concern about
21 PCB's amongst the people you worked with?

22 MR. ZIMMER: Concern in what sense?

23 He's already described --

24 Q. Concern in terms of the possibility they
25 were in this instance found in avian and animal

1 tissues or any other concerns about toxicity or
2 persistence in the environment?

3 A. I indicated in the prior document that I
4 was aware that such work was going on and it would
5 not have been going on if it was not of concern to
6 somebody in the organization.

7 Q. Were you yourself worried about it?

8 A. Not officially. I did not participate
9 in this program.

10 Q. How about unofficially?

11 A. Personally, yes, I was.

12 Q. And what were you worried about?

13 A. It's quite well stated here that they
14 were finding them in animal tissues, therefore I
15 was -- I would be concerned about such information
16 that came from anywhere.

17 Q. How did you -- if you didn't see this
18 document and you didn't discuss this document how did
19 you know this at the time; do you know? Were there
20 general discussions in the hallway, was it a subject
21 over lunch, were people talking about it, was there
22 general concern?

23 A. I do not -- I cannot pin down a source.
24 Obviously I must have gotten a copy of the previous
25 exhibit and if nothing else that would have let me

1 know. Beyond that I don't really have any input.

2 Q. Did you convey any of your concerns to
3 anybody in management?

4 A. In discussions, yes.

5 Q. Do you remember who you conveyed them
6 to?

7 A. I'm having trouble coming up with a name
8 as to who I was working for at the time but it would
9 have been expressed to whoever this was. We're
10 talking about 1968.

11 Q. Was that Mr. Sands?

12 A. No. At this point I was probably in
13 marketing in technical service.

14 Q. Do you recall who you worked for?

15 A. I worked for half a dozen different
16 people in a matter of three years so I'm not sure
17 which one it would have been.

18 Q. Do you recall what you said in any one
19 of these discussions to these people?

20 A. No. General discussion of current
21 problems and programs.

22 Q. And do you remember what any one of
23 their responses back to you was?

24 A. No, I do not.

25 Q. Did you talk to either Mr. Wheeler or

1 Dr. Kelly about these concerns?

2 A. I don't remember.

3 Q. Did you talk to any of your customers
4 about these concerns?

5 A. I cannot answer that question directly
6 because I spent so much time with customers at that
7 point and I do not remember.

8 Q. Do you remember specifically whether you
9 said anything to anybody at Texas Eastern about these
10 concerns?

11 A. No, I do not.

12 Q. This will be Exhibit 21. This is a
13 March 6, 1969 letter from W. R. Richard to E. Wheeler
14 and there's a distribution list. And I note here,
15 Dr. Hatton, that you're not listed on this. But I
16 want to discuss with you several issues that are in
17 this letter so if you can take a little time to read
18 it. Have you ever seen this document before?

19 A. No.

20 Q. Have you ever heard of Industrial
21 Bio-Test before?

22 A. Yes.

23 Q. Who were they?

24 A. They were a for hire toxicological
25 laboratory.

1 Q. I note that it's not going to reflect in
2 the record but it sounded like you put quotes around
3 the 'for hire.' What did you mean by that?

4 A. I meant they were not connected with any
5 university or government, any government agency, with
6 regard to undertaking grants for work that they ran
7 animal tests for, for hire.

8 Q. To your knowledge did Monsanto use them
9 in testing, for instance, for PCB's?

10 A. Yes -- no, I don't like the last part of
11 your question. Would you repeat it again?

12 Q. To your knowledge did Monsanto use them
13 for tests of PCB's?

14 A. I cannot answer that question for PCB's.
15 I thought you dropped the question earlier.

16 Q. So that you do know that they hired them
17 for tests?

18 A. Yes, I did know that.

19 Q. Did you ever have any contact with
20 anybody at Industrial Bio-test?

21 A. No.

22 Q. This time period, 1968, beginning of
23 1969, did you ever hear about the Risebrough article
24 in Nature?

25 A. I do not remember reading the article.

Q. Did you ever hear of Risebrough?

A. I just don't know how to answer that question. I can't remember whether I did or didn't.

Q. Does the name sound familiar to you as you sit here?

MR. ZIMMER: You don't have to feel bad, Doctor, about not remembering something. That's fine.

A. Lots of names.

Q. I perfectly understand. I don't want you to make up anything or speculate. If you don't remember, you don't remember. That's fine. Did you ever hear about any report in which PCB's were found in peregrine falcons?

A. I cannot now remember which animals were being checked even in the earlier Jensen work so I don't know that I heard about a specific species of bird.

Q. Okay. Turning to page 2 I want you to read to yourself paragraph (b). Again I don't want you to speculate about what Mr. Richard meant by this but I want to know if you ever heard any discussion about defending against the accusations of enzyme and hormone activity?

A. No.

1 Q. Or the isolation of enzyme or metabolic
2 products?

3 A. No.

4 Q. You never heard of any of that, okay. I
5 want you to look at the paragraph which starts: "But
6 we can't easily control hydraulic fluid losses in
7 small plants." This is to help educate me but would
8 this -- or is there a difference between hydraulic
9 fluid losses and gas compressor lubricants in terms
10 of the amount that is lost?

11 A. It depends upon the application.

12 MR. ZIMMER: That calls for an
13 incredible amount of speculation.

14 Q. I just want to know if he knows.

15 MR. ZIMMER: Let me finish my objection
16 if I may make one. I'm according you the same
17 respect.

18 MS. WELCH: Sometimes.

19 MR. ZIMMER: Quite obviously by both the
20 language of this memo which he's never seen before
21 and your question itself, it's vague, ambiguous,
22 calls for speculation. You can answer it if you
23 know, Doctor.

24 A. Before I answer it I'd like to know what
25 the exact question was.

1 Q. Okay. Let me rephrase it. Do you know
2 whether it was possible to control gas compressor
3 lubricant losses in a compressor station? Do you
4 know, don't speculate.

5 A. No, I do not know.

6 Q. Okay, that's all I wanted to know. The
7 next paragraph where it says, starting with the last
8 two sentences:

9 Since Risebrough's paper in Nature, December
10 1968, has just been published, it is timely,
11 perhaps imperative, that this paper and its
12 implications be discussed with certain
13 customers.

14 Did anyone ever say to you that
15 Risebrough's paper had to be discussed with any of
16 your customers?

17 A. No.

18 Q. Did anyone ever say to you what Mr.
19 Richard says in the next line which is:

20 This is a rough one because it could mean loss
21 of business on empty and false claims by
22 Risebrough?

23 A. I don't remember anybody making that
24 point with me.

25 Q. That's fine.

1 MR. ZIMMER: Let me just note for the
2 record we're also talking about a memo which makes no
3 reference at all to the products that were sold to
4 Dr. Hatton's customers but to far more open
5 applications of hydraulic fluids and the like.

6 Q. I'd like to mark this as Exhibit 22.
7 Have you ever seen this document before?

8 A. No.

9 Q. Is Monte Throdahl a person who you
10 testified you worked for at a certain point or worked
11 with?

12 A. At one time he was in the development
13 department and I think he would have been a level or
14 two above me in development and I know he worked
15 through there somewhere in the period between 1960
16 and 1968.

17 Q. In 1969 did you work with him?

18 A. No.

19 Q. When did you stop working with him?

20 A. As I say I can't give you the exact
21 dates of the bosses at that time and I know he was
22 not in development when I moved over to marketing.
23 So I guess that deduces down to the answer that, no.

24 Q. This is a letter to Dr. Kelly from Mr.
25 Wheeler and it uses fairly descriptive language --

1 the Aroclor pot is really boiling. To me that's very
2 descriptive language. And I'm wondering just in
3 terms of a general sense of the atmosphere whether
4 you had a sense at that time that quote, the Aroclor
5 pot is really boiling, end quote?

6 MR. ZIMMER: The question is vague,
7 ambiguous, calls for speculation, a variety of other
8 things that I'm sure are quite obvious by its terms
9 but if you can answer, Doctor.

10 A. I would not have used such language in
11 describing it. I was aware that activities had
12 increased in the area. To what extent, I don't know,
13 don't remember.

14 Q. The last document that we referred to
15 when we talked about your concerns was in 1968. Do
16 you remember to the extent that you can remember -- I
17 know this is a long time ago -- but do you remember
18 increased concerns by the beginning of 1969 on your
19 part?

20 MR. ZIMMER: Why don't we take a look at
21 whatever document this is that references his
22 concerns. I don't remember it.

23 Q. We talked about that document from the
24 Fish and Wildlife people.

25 MR. ZIMMER: I don't recall him relating

1 his so-called concerns as you put them to any
2 particular point in time.

3 Q. Do you recall increased concerns in
4 1969?

5 A. Not increased, no. You're talking about
6 myself personally?

7 Q. Yes. During this period of time, the
8 beginning of 1969, do you recall any discussions with
9 Texas Eastern about any kind of controversy over the
10 Aroclors?

11 A. No, I do not recall discussions.

12 Q. Do you know who Calandra is? Second
13 paragraph first line, Joe Calandra.

14 A. That name does not ring a bell at all.

15 Q. Fourth paragraph where Mr. Wheeler says
16 that he has "enclosed a copy of the final form of the
17 PR release that was developed last week. This has
18 been sent to 21 Monsanto customers over my
19 signature." Unfortunately we do not have a copy of
20 the press release but I'm curious about whether you
21 remember whether that press release was sent to
22 either Texas Eastern or Transwestern?

23 A. I do not know.

24 Q. If it had been would it have gone
25 through you first?

1 A. No.

2 MR. ZIMMER: That calls for blatant
3 speculation.

4 Q. Do you know who Bergen is, Howard
5 Bergen?

6 A. Yes, I know who he is.

7 Q. Who was he? He's referred to in this
8 document in the next to last paragraph.

9 A. He was -- he spent some time in one of
10 the functional fluid groups at a relatively high
11 level. I do not know where he was in 1969.

12 Q. How about -- do you know if he's still
13 alive by the way?

14 A. I do not know.

15 Q. How about Mr. Minckler; do you know who
16 he was?

17 A. Yes. Mr. Minckler was also a member of
18 what would be considered the management team in areas
19 relating to functional fluids.

20 Q. Do you know if he's still alive?

21 A. I think he is passed on.

22 Q. Exhibit 23. Have you ever seen this
23 document before?

24 A. No.

25 Q. I just want to take you through each of

1 the incidents that are mentioned here and find out if
2 either contemporaneous with the incident or
3 subsequently you heard about the incident. The first
4 incident in 1950, had you heard that there had been
5 several workers who had gastrointestinal illness due
6 to vapor inhalation plus possible liver damage --
7 either in 1950?

8 A. No.

9 Q. Subsequently?

10 A. No.

11 Q. In 1964 were you aware that in Canada a
12 worker had developed a chest condition thought to be
13 from fume exposures?

14 MR. ZIMMER: This question and others I
15 want a continuing objection. It assumes facts not in
16 evidence because these are reports of this. They
17 don't state that they did occur. But go ahead,
18 Doctor, if you've heard of that.

19 A. I have not, that one.

20 Q. Then or subsequent?

21 A. No.

22 Q. Did you hear about the incident in 1966
23 in Kodiak, Alaska of swollen eyes and kidney
24 soreness?

25 A. That doesn't -- no.

1 Q. Did you hear in November 1968 that there
2 was a strike in a plant in St. Louis that was caused
3 by two men who were overcome by fumes?

4 A. No.

5 Q. Did you hear about the incidence of an
6 exposure of a truck driver in 1969?

7 A. No.

8 MR. ZIMMER: To what?

9 Q. To Inerteen?

10 A. No.

11 Q. Did you hear about the incident in 1969
12 of exposure to Therminol when maintenance men
13 reported hand and forearm rashes?

14 A. I do not remember hearing that one.

15 Q. Okay, that's fine.

16 (brief recess taken)

17 Q. Back on the record. I'd like to show
18 you Exhibit 24. This is a document dated September
19 9th, 1969 to Mr. Wheeler from Mr. Richard and I note
20 here that you are not cc'd on this document. I don't
21 want you to sit and read this whole document. I just
22 would like you to read the first page actually.

23 A. It gets kind of fuzzy at the bottom.

24 MR. ZIMMER: There's some handwritten
25 notes that are illegible.

1 Q. They are to me also. Did you ever see
2 this document?

3 A. No.

4 Q. The time period, September 1969, do you
5 recall knowing that it was probable that some animals
6 or fish or insects would be harmed by the Aroclors?

7 A. No, I don't recall that.

8 Q. Can you tell me, not what Mr. Richard
9 meant, but what the term means to you, Aroclor
10 degradation rate will be slow? Does that refer to
11 biodegradability or do you know if it does?

12 A. I do not know. I don't know what he
13 meant when he wrote it down.

14 MR. ZIMMER: Thank you for covering that
15 for me.

16 Q. Do you know if you knew at the time in
17 1969 that there were problems with Aroclor
18 biodegradation?

19 A. No, I do not know whether -- I cannot
20 remember whether I knew it at that time.

21 Q. Do you recall knowing at that time
22 whether there was a difference or if there was a
23 difference between higher chlorinated compounds and
24 lower chlorinated compounds with respect to
25 biodegradation?

1 A. No, I do not remember knowing that if
2 it's true.

3 Q. I don't know if it's true either but --

4 A. So I cannot answer your question.

5 Q. I'd like you to turn to the last page,
6 the reference to biodegradation studies. Do you have
7 any knowledge of the biodegradation studies?

8 A. I do not have.

9 Q. Do you know why -- don't speculate --
10 just do you know why they were studying Aroclor 1224
11 versus Aroclor 1254?

12 A. No.

13 Q. Fair enough. This is Exhibit 25.
14 First, before we get into the document, did you ever
15 hear at this time period or subsequently about the
16 Aroclor ad hoc committee? The date on this report is
17 1969.

18 A. Yes. I was aware that such a committee
19 existed and that activities were going on.

20 Q. Were you aware of what their activities
21 were?

22 A. No, I was not.

23 Q. How were you aware that there was such a
24 committee?

25 A. We at various times had group meetings

1 at which such things would have been mentioned in
2 passing.

3 Q. What kind of group meetings?

4 A. The department, what you would call a
5 departmental type meeting.

6 Q. In the functional fluids group?

7 A. Yes.

8 Q. And if you could help me understand who
9 some of these people are. Who is James Springate?

10 A. I think he was Howard Bergen's
11 manufacturing man at the time.

12 Q. What do you mean by Howard Bergen's
13 manufacturing man, did he report to Howard Bergen?

14 A. Yes. At this point Howard Bergen would
15 have been top man in the fluids -- in this area and
16 Jim Springate would have been reporting to him in
17 terms of manufacturing I believe.

18 Q. How about Mr. Farrar?

19 A. He was a group leader in research and I
20 do not know his position at the time.

21 Q. So he had kind of a comparable position
22 to what you used to have?

23 A. I think so.

24 Q. And how about Mr. John?

25 A. I do not remember him.

1 Q. By the way, have you ever seen this
2 document before?

3 A. No.

4 Q. Did you receive any of the publications
5 of the ad hoc committee to your knowledge?

6 A. No.

7 Q. Turn to the page which is Bates stamped
8 024252 please. Read the first paragraph please.
9 Were you a business group director of the functional
10 fluids?

11 A. No, I was not.

12 Q. Do you recall who was business group
13 leader -- director, excuse me?

14 A. No, I cannot recall who that would have
15 been.

16 Q. Turn to the next page please. Read the
17 first paragraph please. Focusing on the first
18 paragraph, did you ever hear that there was, quote,
19 little probability that any action that can be taken
20 will prevent the growing incrimination of specific
21 polychlorinated biphenyls?

22 MR. ZIMMER: Assuming that that was an
23 accurate statement and/or the position of this
24 committee.

25 Q. Did you ever hear it? That's the

1 question.

2 A. No, not that I can remember.

3 Q. You never heard it from any report of
4 this committee?

5 A. I didn't see the reports of this
6 committee.

7 Q. But in any oral report of the committee
8 either?

9 A. No.

10 Q. This is a tough one but do you know
11 whose handwriting this is on this page by any chance?

12 A. No.

13 MR. ZIMMER: You don't need to apologize
14 for that, Doctor.

15 Q. We have to ask everybody that because we
16 don't know who wrote it. I didn't expect you to
17 know.

18 MR. ZIMMER: There's no duty of yours to
19 know whose handwriting it is and when you say no
20 apologetically it implies --

21 Q. He's just a nice person.

22 A. You know, once in a while you get
23 handwriting that will trigger something but this
24 doesn't.

25 Q. Looking at the handwriting, it is

1 legible, the last point: Likelihood of natural
2 origin or degradation is remote. Were you aware of
3 that at the time in 1969 that the likelihood of
4 natural origin or degradation is remote?

5 MR. ZIMMER: I don't see how he can
6 possibly respond to that since not only did he not
7 write it but he doesn't know what it means because
8 you've asked him to read now one paragraph out of --
9 a more than ten-page document.

10 Q. If he doesn't understand that he can
11 tell me that and I will attempt to rephrase it.

12 MR. ZIMMER: I just don't know why we're
13 spending time on documents he didn't author, didn't
14 read, wasn't copied on, then you ask him to interpret
15 a handwritten note. Do you know what that means,
16 Doctor?

17 A. I know what the first part means and
18 this means that in my training as a chemist and in
19 looking into reading numerous books I could find no
20 reference to polychlorinated biphenyls being natural
21 products. Degradation was not discussed in those
22 articles and I do not know anything about it.

23 Q. So that means that it could only come
24 from synthetics is what you're telling me?

25 A. Yes.

1 Q. Next page please. First paragraph. Did
2 you have any customers that used Aroclor 1254 or
3 1260?

4 MR. ZIMMER: When?

5 Q. In 1969?

6 MR. ZIMMER: If you recall, Doctor.

7 A. No, I had no customers.

8 Q. Do you have any knowledge of why the
9 decision was made to contact Aroclor 1254 and 1260
10 customers?

11 A. No.

12 MR. ZIMMER: Assuming --

13 A. No, I don't know why they picked those
14 two.

15 Q. Do you know if at this time in 1969
16 there was also a decision, for instance, or a
17 recommendation from the ad hoc committee to contact
18 other Aroclor customers?

19 A. I do not know what the committee
20 recommended, decided or thought.

21 Q. Paragraph No. 6, did you have any
22 contact with the organic division laboratories at
23 this period of time in 1969?

24 A. No. The reference to organic division
25 laboratories has to do with plant laboratories and

1 no, I had no connection with plant laboratories.

2 Q. What is a plant laboratory, what do you
3 mean?

4 A. It is the laboratory that provides the
5 analytical data required to run a chemical plant,
6 samples are taken from process materials and analyzed
7 to keep the plant running.

8 Q. I see. One of the points here is to get
9 samples from customer plants' environments. Did
10 anybody ever come to you and ask for a sample from
11 Texas Eastern or Transwestern?

12 A. I don't know.

13 Q. You don't recall?

14 A. I don't recall.

15 Q. Turning to the next page, just paragraph
16 8. Do you have any knowledge of whether an
17 individual was assigned from the division full time
18 to coordinate division and corporate staff department
19 efforts?

20 A. Yes, there was an announcement that Bill
21 Papageorge had such a position, was being given such
22 a position.

23 Q. And what did Bill Papageorge do before
24 he was given this position?

25 A. I don't remember his resume that well

1 but I think he was down in manufacturing.

2 Q. Did you have any contact with him up to
3 this point?

4 A. Up to this date?

5 Q. Yes.

6 A. Not before he was pointed to this
7 position.

8 Q. After this point did you have contact
9 with him?

10 A. Yes, I talked to him. He was located in
11 the general area.

12 Q. Did you have frequent conversations with
13 him?

14 A. No.

15 Q. Turn to the next page, page 5, second
16 paragraph. Read the first sentence where it refers
17 to a March 3rd, 1969 letter sent to 31 major Aroclor
18 customers in the transformer and capacitor
19 applications. Do you recall that letter?

20 A. No.

21 Q. Do you have any recollection of whether
22 any of your customers received this letter?

23 A. The letter apparently based on this
24 document was sent to capacitor or transformer and
25 capacitor users, applications, makers of those

1 products. I had none of those for any of my
2 products.

3 Q. Do you have any knowledge of why the
4 letter was not sent, for instance, to gas compressor
5 companies or pipelines? I asked him if he had any
6 knowledge.

7 MR. ZIMMER: I haven't made any
8 objection yet. It calls for speculation and it
9 refers to a letter which he's neither seen but which
10 we also haven't established did go and once again is
11 part of this multi-page document which we're reading
12 one sentence out of context at a time. But if he
13 knows.

14 A. I don't know.

15 Q. Who would have been the person making a
16 decision -- who was the head of the functional fluids
17 group at that time, March 3rd, 1969, do you know?

18 A. Based on the documents I've seen I
19 believe it was Howard Bergen.

20 Q. Next page, page 6. Please read the
21 first paragraph. Did you ever hear in this time
22 period which is fall of 1969 that you had to notify
23 all customers of the potential implication?

24 MR. ZIMMER: Once again the question
25 assumes facts not in evidence, that that is true.

1 Secondly it is taking completely out of context one
2 paragraph of this memo which we have not reviewed in
3 its entirety to even know whether or not customers
4 refers to all Aroclors, all PCB-containing products
5 or sorts of applications those are used in.

6 Q. Why don't we take some time and read the
7 "Basis for Recommendations?"

8 MR. ZIMMER: Why don't we take the time
9 to read the whole document if we keep fooling around
10 with stuff he's not copied on or didn't author. I
11 can't believe we're spending this amount of time on
12 documents you're going to ask other people about. I
13 don't know what more you need to know about this
14 particular issue.

15 Q. Why don't we take time and just read the
16 section on notification of all customers because
17 that's primarily what I have questions about so I
18 think that's a good idea.

19 MR. ZIMMER: I think he's going to have
20 to read the whole thing if you're going to want him
21 to answer questions about things that he has not seen
22 before.

23 Q. Would you care to read the whole
24 document, Dr. Hatton?

25 MR. ZIMMER: Yes, he would.

1 (A brief recess was taken.)

2 Q. Back on the record. I'd like to go back
3 to page 6 of the document which is Bates stamped
4 024257 and ask if you ever heard at this time
5 period -- I'm going to quote the document:

6 The company could be considered derelict,
7 morally if not legally, if it fails to notify
8 all -- underlined all -- potential --

9 MR. ZIMMER: -- customers of the
10 products referred to.

11 Q. It says all customers.

12 MR. ZIMMER: Right. And the memo deals
13 with specific Aroclors.

14 Q. Did you ever hear this?

15 A. I did not remember hearing that specific
16 statement.

17 Q. Did you hear anything generally along
18 these lines?

19 MR. ZIMMER: Again, Doctor, confine your
20 answer to the Aroclors which you've already responded
21 you weren't selling to anybody at that point.

22 A. I was aware of the existence of this
23 committee. I was not made aware that this decision
24 had been taken.

25 Q. So you were not aware that there had

1 been a decision made to phase out 1254 and 1260?

2 A. Not at the time of this document.

3 Q. At what time were you made aware of
4 that?

5 A. I do not remember an exact date but
6 within the next few months.

7 Q. At the time that you were made aware of
8 this did you have any questions in your mind about
9 the future viability of the products which you were
10 selling?

11 MR. ZIMMER: Did you say liability or
12 viability?

13 Q. Viability. In other words, did you have
14 any questions about whether you would be able to
15 continue to sell your products?

16 A. I don't remember a great concern at all.

17 Q. Earlier today you testified in the
18 context of your own handling of the materials that
19 you did not draw a big distinction between the
20 Aroclor 1242 and 1254; is that correct?

21 A. Yes, I did make that statement.

22 Q. Did you still have that feeling at this
23 time?

24 A. I was no longer handling them as such
25 and I cannot truthfully say that I had a worry in my

1 mind about the differences. I think my memory tells
2 me that I was concerned about Aroclors totally.

3 Q. So that you didn't distinguish between
4 the various chlorination levels in your mind?

5 A. Not in my mind until this came out, this
6 became common knowledge around the place.

7 Q. What are you referring to?

8 A. The fact that 54 and 60 should be
9 removed from the market.

10 Q. Up until that time you had not
11 distinguished them in your mind?

12 A. My own mental processes did not separate
13 them into Aroclors A and Aroclors B, for example.

14 Q. Why was that to the extent that you can
15 recall?

16 A. I don't know why I thought that.

17 Q. Is there anything else that contributed
18 to your separating out the Aroclors during this
19 period other than that the decision was made to
20 discontinue 1254 and 1260?

21 MR. ZIMMER: That misstates his
22 testimony. He's indicated he did not separate out
23 the Aroclors.

24 Q. He testified he started to make a
25 distinction in his mind at about the time there was a

1 decision made.

2 MR. ZIMMER: After the decision became
3 common knowledge that 1254 and 1260 were to be
4 removed from the market. I think I'm quoting him.

5 A. That's what I mean and that's what
6 influenced me. Obviously the company had presented
7 data that found this and I was willing to accept the
8 data.

9 Q. Okay. Did you in fact accept the data
10 as true?

11 A. The data that I heard directly from the
12 company that our capable scientists said was okay I
13 believed. We hired good people. Now I shouldn't
14 have said that. That's beside the point but it is
15 truth.

16 Q. Exhibit 26.

17 MR. ZIMMER: It is another document that
18 he has neither authored, been copied or read before
19 obviously with the exception of things that have been
20 shown to him by counsel. We're going to have to
21 spend all the time it takes if you're going to
22 continue to pull one sentence out of one paragraph.

23 Q. Why don't I tell you the section I'm
24 going to ask questions and you can make a decision,
25 counsel, about whether you're going to advise him to

1 read the whole document. I just want to ask him
2 about pages 10 to 11 and I would be glad to take the
3 time for him to examine the whole document but let me
4 just tell you those are the pages I'm going to focus
5 on so it's your decision.

6 MR. ZIMMER: Why don't we take a look at
7 those first and then we'll decide. As long as it's
8 clear he's only looking at pages 10 to 11 I guess
9 we'll see what you have to ask him.

10 Q. That's fair. This document is a
11 report -- I won't say that because I'm not sure what
12 this document is. It's a PCB Environmental Pollution
13 Abatement Plan. It refers to the October 15th ad hoc
14 committee meeting. It is unclear I believe who
15 issued this document from the face of the document.
16 Referring to pages 10 and 11, were you ever in any
17 meetings where the various courses of action that are
18 described here were discussed?

19 A. I don't remember any. The decision had
20 been made in the meetings that I remember.

21 Q. You mean the decision was announced to
22 you in the meetings that it had been discussed in
23 prior meetings?

24 A. Yes.

25 Q. And what was the decision that was

announced to you?

2 A. That we were going to look at the
3 various applications of the fluids and determine what
4 the exposure things were and get -- withdraw from the
5 market on a phased time plan based on the amount of
6 exposure of the various products.

7 Q. Did you understand at this point in time
8 which I believe is the fall 1969 from the indications
9 in the document that there would be a total phase-out
10 eventually?

11 MR. ZIMMER: Before answer that, Doctor,
12 let's figure out why you understand that it's fall of
13 1969 since the document isn't dated.

14 Q. It refers to October 15th I assume '69
15 meeting of the ad hoc committee and I say I assume
16 '69 because the prior document was October 2nd, 1969
17 of the ad hoc committee. So that was what my
18 assumption was. It may be incorrect but that's my
19 assumption.

20 MR. ZIMMER: So there isn't any
21 indication on the document of when it was drafted and
22 it in fact is a draft because there are lots of
23 handwritten notes. And I forgot the question, I'm
24 sorry.

25 Q. We know it's 1969 because on page 12 it

1 says "immediate by 12-1 '69. So it's got to be
2 before 12-1 '69. So I would think that it's the fall
3 of '69.

4 MR. ZIMMER: That may very well be. We
5 don't know anything about it unfortunately because we
6 don't have somebody here who participated in its
7 drafting.

8 Q. I'm trying to understand what you just
9 said about what was presented to you at the meeting.
10 Maybe you can explain to help me understand better.
11 Was your understanding at this point in time which
12 for the sake of discussion I'll say is the fall of
13 1969 that there would be an eventual phase-out of all
14 PCB products?

15 MR. ZIMMER: Let's not say anything for
16 the sake of discussion. Let's ask him whether he
17 recalls this meeting or meetings. I don't want to
18 confuse any of the meetings of this ad hoc committee
19 with those meetings that Dr. Hatton participated in
20 because he's indicated that he had nothing to do with
21 that.

22 Q. I want to make it clear that he was at
23 meetings not of the ad hoc committee but future
24 meetings.

25 A. And I am not sure that it was stated as

1 a positive fact that they would eventually be
2 withdrawn but I was given to understand immediately
3 that there would be some rather immediate withdrawals
4 depending on applications which exposed the most
5 people to and the most environment to the people.

6 Q. Do you recall what those applications
7 were?

8 A. Not specifically but there was
9 discussion about open systems and closed systems.

10 Q. And what was the discussion about open
11 systems and closed systems?

12 A. Which was which and trying to define how
13 products were used where they should be.

14 Q. Was there any discussion about Texas
15 Eastern at these meetings?

16 A. I do not remember specifically.

17 Q. Do you recall if there was any
18 discussion about gas compressors at these meetings?

19 A. The general application was in the list
20 of things that had to be checked off eventually.

21 Q. Do you recall anything that was said
22 about that application?

23 A. These meetings were merely to outline
24 the work that should be done and the work had not
25 been done by then so, no.

1 Q. Did you have any understanding at this
2 time about what would happen to the products that
3 were being sold to Texas Eastern?

4 A. No, not specifically.

5 Q. Did you have an understanding at this
6 time that there would be an eventual withdrawal of
7 those products?

8 A. Yes, in my own mind. As I said before
9 it was not -- didn't come out and make this as a
10 firm, positive statement. But it was implicit in the
11 way in which we were told that we would be getting
12 there eventually.

13 Q. Did you convey that to anybody at Texas
14 Eastern?

15 A. I don't remember.

16 MR. ZIMMER: Are you talking about
17 during a specific time frame because Dr. Hatton was
18 in on the eventual --

19 Q. End of 1969?

20 A. In 1971 I was involved I know because
21 I --

22 Q. I'm talking about 1969?

23 A. I don't know. I cannot relate it to
24 that date.

25 Q. Exhibit 27, November 6, 1969 document

1 from R. H. Munch to W. R. Richard. Please take a
2 minute to look at it in full. It is short enough to
3 do that. My question about this relates to the
4 Aroclor 1242 which we established before was one of
5 the components of the Turbinol that was sold to Texas
6 Eastern. This is dated November 6th, 1969 and it
7 refers to the growing possibility that Aroclor 1242
8 may cause environmental pollution to an unacceptable
9 extent. Were you involved in any discussions with
10 Mr. Munch or anybody else about the growing
11 possibility that Aroclor 1242 may cause environmental
12 pollution?

13 MR. ZIMMER: Object, it assumes facts
14 not in evidence, is argumentative. I want to give
15 the memo proper context. Since it deals with Aroclor
16 1242 in application as a dielectric fluid I think in
17 fairness to the witness we should outline that.

18 Q. The question stands.

19 MR. ZIMMER: Fine.

20 A. No, I was not aware.

21 Q. Who is Mr. Munch?

22 A. Research chemist who specialized --
23 research group leader I should say. He did have a
24 group working for him. Who specialized in the area
25 of dielectric fluids.

1 Q. What is a dielectric fluid? What's the
2 application of a dielectric fluid?

3 A. The purpose of using a dielectric fluid
4 is primarily for electrical insulation and it is used
5 in transformers and in capacitors for such purpose.
6 And it must have a series of specific properties as
7 indicated through here. That much I know about
8 dielectrics.

9 Q. Do you know whether the transformers --
10 you referred to transformers and capacitors?

11 A. Capacitors.

12 Q. Are they generally referred to as closed
13 systems or open systems?

14 A. Closed systems.

15 Q. Okay. Page 2 second to the last
16 paragraph, did you ever hear that there was some
17 consideration of altering the distillation of Aroclor
18 1242?

19 MR. ZIMMER: With respect to the
20 contents of this memo and dielectric fluids?

21 Q. Just in general.

22 A. I cannot recall any discussions on that
23 subject.

24 Q. Exhibit 28. Let me ask you a foundation
25 question which may --

1 MR. ZIMMER: Why start now?

2 Q. -- take out the necessity to talk any
3 further about this document. Did the organic
4 division cover your division as well, was functional
5 fluids part of the organic division?

6 A. The functional fluids group never
7 attained division status. We were always a section
8 under these groups, under the organic division.

9 Q. So you were a section under the organic?

10 A. Under the organic division. There was
11 one for plasticizers. There was one for a number of
12 other products.

13 Q. Okay. Then I would like to ask
14 questions about this document. So why don't you take
15 a few minutes to read it. Referring to the paragraph
16 on the first page that starts with: The division has
17 maintained an aggressive program of customer
18 education. Were you aware of any customer education
19 of Texas Eastern with respect to PCB's and the
20 hazards of PCB's?

21 MR. ZIMMER: At any point in time? The
22 question is vague, ambiguous in terms of time. I
23 mean this document isn't dated and once again we're
24 pulling one sentence out of context out of it.

25 Q. It's a broad question. He can give me a

1 broad answer.

2 MR. ZIMMER: Customer education as to
3 PCB's could mean anything. Doctor, if you can answer
4 it go ahead.

5 A. I cannot give a specific answer to your
6 question. During this time frame it was discussed
7 but I cannot give you a specific answer as to what
8 was said because I don't remember.

9 Q. The PCB problem was discussed with Texas
10 Eastern during this time frame meaning 1969?

11 A. No, I don't know when this is but
12 certainly it was discussed in the '70, '71 period.

13 Q. Okay. Do you have any specific
14 recollections of those discussions?

15 A. No, I do not.

16 Q. Turning to the second page under the
17 heading 'Conclusions,' the sentence says:

18 It was decided that the division should
19 discontinue sales by June 1 for all uses
20 except for transformers and capacitors/ballast
21 and to NCR, for which there are no substitute
22 products.

23 Was it ever told to you that there would
24 be discontinuing of the selling of products to Texas
25 Eastern during this time period?

1 MR. ZIMMER: What time period? The
2 document is not dated.

3 Q. Was it ever told to you in any time in
4 late 1969, early 1970?

5 A. Yes.

6 Q. That the product would be discontinued?

7 A. Yes.

8 Q. To Texas Eastern?

9 A. Yes.

10 Q. Who told you that?

11 A. Whoever my boss was at the moment.

12 Q. Okay. Do you know who Mr. Putzell is?

13 A. He was a member of the law department
14 and I believe quite high in the legal -- in fact he
15 may even have been corporate counsel at that point.
16 I just don't -- I don't know his title but I know
17 that he was one of the final people in terms of any
18 legal activities that Monsanto was involved in.

19 Q. Exhibit 29. I'm going to refer to the
20 Schedule for Discontinuing Aroclor Applications which
21 is on 005207. Dr. Hatton, I don't see on here that
22 gas compressor lubricants are named in terms of that
23 they're going to be a product that's going to be
24 discontinued by July 1971. Am I wrong, am I missing
25 something here?

1 A. I do not see them there either but this
2 does not necessarily mean that this was a complete
3 list that was ever put together.

4 Q. Do you recall seeing a list that
5 included the Texas Eastern lubricants?

6 A. Eventually, yes. And I cannot give you
7 a date because I don't know when I saw the list.

8 Q. Do you have a date or any memory of a
9 date when you told Texas Eastern that you would
10 discontinue selling them lubricants?

11 A. Yes, and I remember the meeting early
12 '71.

13 Q. Okay. Next page, if you could take a
14 minute just to read the next page. Looking at the
15 next to the last paragraph, do you recall hearing at
16 any time at the end of 1969 or the beginning of 1970
17 that Aroclor 1242 resisted degradation?

18 A. I don't remember hearing that statement.

19 Q. Do you recall just in your knowledge,
20 did you at some time learn that there were problems
21 with the biodegradability of Aroclor 1242?

22 MR. ZIMMER: If that's true. I'll
23 object that it assumes facts not in evidence.

24 A. I don't specifically remember getting
25 any communications that would say this, whether it

1 was hearsay or not, I don't know.

2 Q. Did you have it in your knowledge, in
3 your general store of knowledge?

4 A. No.

5 Q. Just looking at the first page of the
6 document -- I don't know what this document is but it
7 appears that it may be a speech. I'm not sure. It
8 appears that it may be a speech because the second
9 paragraph says:

10 At this meeting I wish to bring you up to date
11 on the latest developments, the progress we've
12 made, and the need for modifying our strategy.

13 Did you ever hear this speech or was
14 this ever read to you?

15 MR. ZIMMER: If it was indeed a speech.

16 A. I cannot remember, I don't know. I
17 don't know.

18 Q. Have you ever seen this document?

19 A. No.

20 MR. ZIMMER: Remember, Doctor, that when
21 you're asked if you've seen a document that means
22 exclusive of what you've been shown by counsel.

23 Q. Yes. I don't want to know about your
24 discussions with counsel. I don't want to know about
25 anything you've talked about with counsel.

1 A. I take it that does not include seeing
2 it right now.

3 Q. No. I'm not interested in interfering
4 with the attorney-client privilege. This is Exhibit
5 No. 30.

6 MR. ZIMMER: Sooner or later she'll show
7 you something that you've seen.

8 Q. Do you know this handwriting?

9 A. No, I do not.

10 Q. I'm going to refer you to the page that
11 starts 'The Issue,' it's Bates stamped 013375. Just
12 the phrase 'close the loop.' Did you ever hear the
13 phrase 'close the loop' in early 1970?

14 MR. ZIMMER: You must be kidding. In
15 what context?

16 Q. In any context. I don't know what close
17 the loop means.

18 MR. ZIMMER: In 1970 did anyone ever use
19 the phrase close the loop to him?

20 Q. If he can't answer it he can't answer
21 it.

22 A. I can't answer that. That's a common
23 expression.

24 Q. It wasn't an expression that was used in
25 Monsanto to describe plans for how to phase out

1 PCB's, that we're going to close the loop?

2 A. Not to my knowledge.

3 Q. So this is the first time you've ever
4 seen this in this context?

5 A. In this context, yes.

6 Q. The next page, did you ever hear of
7 MCS-1016? At the bottom of the page it's referred
8 to.

9 A. Yes.

10 Q. Can you tell me what MCS-1016 was?

11 A. I was told that it was a product for
12 dielectric uses developed to generally replace 1242.

13 Q. Do you know if it would replace 1242 in
14 the application in gas compressor lubricants?

15 A. I do not know and I don't remember that
16 we looked into this.

17 Q. What application was it referring to?

18 A. The dielectric application.

19 MR. ZIMMER: And in the document you
20 just showed him it refers to capacitors.

21 A. Specifically capacitors which is --

22 Q. I know that. I'm just wondering if
23 there was broader application. I'm wondering, if you
24 know, if it wasn't considered why it wasn't
25 considered for the broader application?

1 A. I don't know that it was considered or
2 not considered. It was developed by research.

3 Q. Did it include PCB's?

4 A. Yes.

5 Q. Was it a different chlorination of PCB's
6 than the 1242?

7 A. I am not aware of the details of the
8 development.

9 Q. Do you remember who was responsible for
10 the development of the 1016?

11 A. I cannot give you a name. It would
12 generally have been somebody in the functional fluid
13 research area and that could be very broad.

14 Q. Last page where it says 'The Current
15 Position.' Please read that, the phrase where it
16 says: PCB's now, quote, deadly chemicals, end quote.
17 What's your reaction to that?

18 MR. ZIMMER: Don't answer that, Doctor.

19 Q. Are you instructing him not to answer?

20 MR. ZIMMER: I am instructing him not to
21 answer. You're asking him about another document
22 that he has not only not authored but he can't
23 identify the handwriting in it. It's entirely
24 handwritten. And I'm not going to sit here and let
25 him speculate about his reaction to what somebody

1 else wrote in an undated memo when they write to
2 themselves, PCB's now, quote, deadly chemicals.

3 Q. We don't know that. The question I'm
4 asking, if I may ask, counsel, is did you ever hear
5 in any conversations at Monsanto PCB's being referred
6 to as deadly chemicals by anybody?

7 MR. ZIMMER: That's an entirely
8 different question. You can answer that one, Doctor.

9 A. I do not remember anybody using those
10 terms.

11 MR. ZIMMER: I urge you, counsel, to get
12 to documents that Dr. Hatton either authored, was
13 copied on or has some knowledge of based upon his
14 work experience at Monsanto.

15 Q. I'll restate my earlier position which
16 is that I will get to those documents but I'm also
17 entitled to ask him questions about documents he may
18 not have seen. And he can tell me that he hasn't
19 seen them and that he has no knowledge of them. It
20 takes a lot of time on the transcript for you to keep
21 on reiterating your position because I'm going to
22 show him these documents.

23 MR. ZIMMER: It's 4:15. You can rest
24 assured that we're not going to stay beyond five
25 tomorrow.

1 MS. WELCH: The deposition is not going
2 to go beyond five tomorrow. We have another
3 deposition on Thursday. But I am entitled to ask him
4 these questions.

5 MR. ZIMMER: This has not been a very
6 fruitful expenditure of time.

7 MS. WELCH: This has been fruitful.

8 Q. Exhibit 31 please.

9 MR. ZIMMER: I disagree but I think the
10 record speaks for itself in that regard.

11 A. Look at the last page and see whose
12 initials are on it.

13 Q. That's a good starting place, thank you.

14 Q. Nobody else's initials are on it. This
15 states it's a Management Plan. Have you ever seen
16 this document before?

17 A. I have not seen it.

18 Q. Would you typically say in 1969, 1970
19 get documents of management plans given the position
20 you were in?

21 A. No, I would not.

22 Q. I want you to turn to page 2 which is
23 005211. Again it's your option, counsel, if you want
24 to take the time to read the whole document but I'm
25 going to ask him questions about the portion that's

entitled 'Objectives.'

2 MR. ZIMMER: It's going to depend on the
3 question. I mean I think the record is going to
4 speak for itself that we're talking about a ten-page
5 single-spaced document he's already indicated he
6 wasn't copied on, would not have been copied on and
7 didn't author.

8 Q. Why don't we just read the objectives
9 section. That's the section I'm going to ask
10 questions on. My only question is --

11 MR. ZIMMER: I'm not finished, counsel.

12 Q. Have you ever heard of the return on
13 investment objectives of the functional fluids and
14 plasticizers groups?

15 A. Other than this document, anybody who
16 worked in the division knew what the division would
17 be rated on and it was return on investment, it was a
18 mathematical thing that could be easily calculated
19 and could be followed from month to month to
20 determine how well your division was doing. Now what
21 the objective was for each group, I do not know the
22 figures.

23 Q. Do you recall any discussion of managing
24 the PCB pollution problem without adversely affecting
25 the established return on investment objectives of

the functional fluid group?

A. No, I did not know what the objectives were and I did not hear about plans for doing anything about it.

Q. Was that at a different level of management than you?

A. Yes, it was.

Q. Who in the functional fluids group would have been involved in that?

A. The business director, the top man.

Q. Do you have any recollection of who that was?

A. Probably Bergen as I said previously.

Q. Did I ask you whether he's still alive?

A. Yes, and I think I indicated I don't know because I've not been in contact with him for a number of years.

Q. Exhibit 32, this is a document that is entitled 'What Could We Expect From This Program.' The second and third page -- even though it's not dated the second and third page seem to indicate that it addresses issues in early 1970 because it talks about determining something in March 1970 and it talks about a 1970 budget. I'm just going to ask you about certain charts on here.

1 MR. ZIMMER: Our silence is not intended
2 to accept that characterization but I should also
3 point out the document isn't necessarily entitled
4 What Could We Expect From This Program. That's a
5 heading on the first page. Each page that follows
6 has its own heading.

7 Q. Thank you for that clarification,
8 counsel. Bates stamp No. 021546, the page is
9 entitled 'Fluids Business Threatened, 1970 Budget.'
10 Were lubricants that were sold to Texas Eastern
11 classified as industrial fluids?

12 MR. ZIMMER: In terms of this chart or
13 in Dr. Hatton's mind?

14 Q. In his mind.

15 MR. ZIMMER: Because he didn't author
16 this chart. Once again any implication from there
17 that these definitions are the same is not a fair
18 one.

19 Q. In your mind?

20 A. Industrial fluids would be the most
21 applicable of anything here.

22 MR. ZIMMER: Doctor, don't relate it to
23 this chart though because you don't know what's in
24 the author's mind. She's asking in your mind was
25 Texas Eastern's fluid an industrial one.

1 A. In my mind industrial fluids would have
2 included the products used at Texas Eastern.

3 Q. Okay. And were you aware, did anybody
4 ever discuss with you the fact that there were
5 \$4,000,000 in sales of industrial fluids that were
6 threatened?

7 MR. ZIMMER: If that was indeed a fact.
8 The question assumes facts not in evidence.

9 A. I do not remember specifically that
10 number. I know that -- I just do not remember that
11 number.

12 Q. Do you remember there being a general
13 concern that a large amount of business was
14 threatened at this time?

15 A. Yes.

16 Q. And who conveyed this concern to you?

17 A. I don't remember which member of
18 management it was.

19 Q. But you do remember that it was a
20 concern at the time?

21 A. It was a general concern of the
22 management group.

23 Q. The next page, the Recommended Action
24 Plan, paragraph 2, it says: Notify all Aroclor
25 customers of PCB problem and relabel containers -

1 within sixty days. Now again this document is not
2 specifically dated although it seems to stem from the
3 early 1970 period. Were you told in early 1970 that
4 within sixty days that you would have to notify your
5 customers of the PCB problem?

6 A. I cannot confirm that.

7 Q. Were you told that you had to relabel
8 containers?

9 A. No.

10 Q. Is there anyone else who would have been
11 told besides you in terms of relationship with Texas
12 Eastern?

13 A. The relabeling of containers would have
14 been the function of a manufacturing group and a
15 labeling group and this would have been taken care of
16 by actually being done.

17 Q. Do you know if that was done?

18 A. I don't specifically know of my own
19 knowledge.

20 Q. And how about contacting the customers,
21 was there -- if Texas Eastern were going to be
22 notified within sixty days of this document is there
23 anyone else besides you who management should have
24 gone to to talk to Texas Eastern?

25 MR. ZIMMER: Calls for speculation but

1 if you know, Doctor.

2 A. I don't know who would have been. I
3 cannot give you an answer to that question.

4 Q. Turning to the I believe it's about
5 three pages later where it says Sources of Fluids
6 Pollution. It says application and intensity of
7 pollution. And then it has a list starting with
8 industrial fluids and ending at producing plants.
9 Did you have any kind of understanding that
10 industrial fluids were the greatest intensity of
11 pollution at this time which again we're assuming is
12 early 1970?

13 A. The term industrial fluids included
14 things other than Turbinols.

15 Q. Right, I know it does.

16 A. These would have been broken down in
17 various places in this chart. If this chart had been
18 made Turbinols, Pydrauls, OS numbers and a few other
19 things would have been applied. I did not make the
20 decision to put this where it is.

21 Q. So you're telling me that you disagree
22 with this chart?

23 A. Yes, I do.

24 Q. Why do you disagree with the chart?

25 A. Because I believe that certain of these

1 applications fall down at least under the heat
2 transfer, equal to or under the heat transfer.

3 Q. In other words, you would rate heat
4 transfer as a higher intensity pollutant?

5 A. About similar to turbine lubrication.

6 Q. Before we begin on this, Dr. Hatton, do
7 you know what the corporate management committee was?

8 A. Corporate management committee was one
9 that existed at the highest levels of the company and
10 was concerned with actually making decisions that
11 related to management of the whole company.

12 Q. So I assume that the people who are
13 listed here are the top managers of the company, is
14 that a correct assumption?

15 A. You're right.

16 Q. We know who Mr. Minckler is. Who was
17 Rodney Harris?

18 A. I have no idea.

19 Q. How about Mr. Kelly?

20 A. I do not know.

21 Q. How about Mr. Smith, T. K. Smith?

22 A. T. K. Smith by 1970 would have moved
23 from the organic division I think into some other
24 activity but he was again at a very high level and
25 came up the company through marketing.

1 Q. How about Mr. Ehlers?

2 A. I don't remember ever -- don't remember
3 the name at all.

4 Q. Turning to the next page. If you want
5 to take time to read this document go ahead. I'm
6 going to ask you a few very specific questions.
7 Starting with the discontinuing the sale of -- first
8 of all, have you ever seen this document?

9 A. No, I have not.

10 Q. Did the corporate management committee
11 ever make reports to somebody on your level at
12 meetings that you were present at?

13 MR. ZIMMER: That's a mouthful.

14 A. To say never, I don't know.

15 Q. Did you ever hear a report of this
16 meeting?

17 MR. ZIMMER: One that you can answer.

18 A. By whom?

19 Q. By anyone?

20 A. That broadens the question. As to
21 whether my boss was told and he told me -- and I do
22 not remember a specific discussion.

23 Q. You don't recall a specific meeting?

24 A. No.

25 Q. Do you recall knowing or hearing at

1 about this time which is May 1970 that the sale of
2 Aroclor 1242 would be discontinued to NCR?

3 A. I remember hearing this.

4 Q. Do you remember what the application was
5 of Aroclor 1242 to NCR?

6 A. Yes, it was in carbonless carbon paper.

7 Q. Do you know why the decision was made to
8 discontinue the sale of 1242 to NCR but not to Texas
9 Eastern at this time?

10 A. Because the application of carbonless
11 carbon paper was about as open using terms we've used
12 before as any application could be because every
13 secretary in the country would tear off the sheets
14 and put them in the file. Also put them in the
15 incinerator.

16 Q. I want you to look at the various little
17 bullet points here and read through those and I want
18 to ask you a question about the overall bullet points
19 at the end.

20 A. What do you mean by bullet points?

21 Q. The little dash. It says discontinued.

22 A. Thank you.

23 Q. My question to you is given your
24 understanding do the sales to Texas Eastern or
25 Transwestern fit into any of these descriptions, the

1 bullet points?

2 MR. ZIMMER: Let's not have any
3 presumption of the question that he's aware of sales
4 to Transwestern because he already testified that he
5 was not.

6 Q. Let's restrict to it Texas Eastern,
7 that's fair.

8 MR. ZIMMER: I'm sorry, the question?

9 Q. Do they fit into any of these
10 categories?

11 MR. ZIMMER: If he can presume what --
12 as he interprets the categories.

13 Q. That's correct. Obviously he didn't
14 write the document. As he interprets the categories.

15 A. I would presume that they would fall
16 into the general timing under the third bullet down
17 the list.

18 Q. Which is replace all non-biodegradable
19 chlorinated biphenyls in hydraulic applications?

20 A. Yes, because to include these here
21 correctly you should make a separate bulletin for
22 that application. And you asked me to assume where
23 they would go. Again I would assume that that's
24 where they would be.

25 MR. ZIMMER: Doctor, the danger here is

1 that she doesn't want you to assume anything nor that
2 you have to fit them in under one of these
3 categories.

4 Q. I could just as well say that they
5 aren't fit in. I don't want you to squeeze them in.
6 I mean I was under the impression that gas
7 compressors are different than hydraulic applications
8 and so they don't fit into these bullets?

9 A. No, they do not fit in here as such.

10 Q. Okay. Did you have any other knowledge
11 as of May 1970, independent knowledge, that there
12 would be termination of sales to Texas Eastern? That
13 you can recall?

14 A. I don't remember, no, I don't remember.

15 Q. Maybe when we get to some of the
16 subsequent documents a little later in time it will
17 help.

18 MR. ZIMMER: Subsequent or substantive?

19 Q. They're all substantive. Exhibit 34,
20 Draft Letter to U. K. Aroclor Customers. Have you
21 ever seen this document before?

22 A. No, I have not.

23 Q. Do you recall ever sending a document
24 like this to Texas Eastern?

25 A. No, I do not.

1 Q. In the 1970 time frame?

2 A. No, I do not recall.

3 Q. Do you know if anybody else sent a
4 letter like this to Texas Eastern?

5 A. I do not, no.

6 Q. Who is Jack Garrett?

7 A. Jack Garrett also worked for Dr. Kelly
8 in medical department and I believe he joined at a
9 later date.

10 Q. Do you know if he's still alive?

11 A. I believe he is.

12 Q. And who is Mr. Clay?

13 A. Carl Clay, he's field salesman and I
14 assume must have been assigned to Texas Eastern at
15 one time -- or not to Texas Eastern but to that
16 territory.

17 Q. Did you have any contact with him ever?

18 A. Over the years, yes, on many products.

19 Q. In relationship to Texas Eastern did you
20 have contact with him?

21 A. I don't remember a specific call report
22 or visit with him.

23 Q. Exhibit 35, did you have knowledge as of
24 the time this was written which was February 19th,
25 1970 of a request from Carl Clay to discuss the

1 toxicity of Turbinol 153 with Texas Eastern?

2 A. I was generally aware, yes.

3 Q. Where did you get that general knowledge
4 from?

5 A. I do not remember the source of the
6 general knowledge but I do know that a request was
7 sent over to medical.

8 Q. Do you know -- did you have knowledge
9 that medical was holding the request?

10 MR. ZIMMER: What do you mean by
11 holding?

12 Q. I don't know. It says holding in here.

13 MR. ZIMMER: We don't have the author of
14 this here so I want to know what you mean by holding.

15 Q. Let's start with that -- you said that
16 they had a request, Carl Clay sent over a request.
17 So I assume that they had it.

18 MR. ZIMMER: He said he was generally
19 aware that some request had been made by Texas
20 Eastern.

21 Q. To the medical department. Were you
22 aware that that request was being held in the sense
23 that it was not immediately responded to?

24 A. No. I do not remember being aware of
25 that information.

1 Q. Do you know if it was responded to?

2 A. I do not know that.

3 Q. Do you know who would know whether it
4 was responded to?

5 MR. ZIMMER: Take a guess if you know.
6 I mean that's what she's asking you to do.

7 Q. The question speaks for itself. I'm not
8 asking you to guess.

9 A. Since the request was generated by Carl
10 Clay I would assume it would have gone back with at
11 least a copy to him.

12 Q. The next point that I'd like to ask you
13 is the question that's raised by Mr. Garrett or is it
14 Dr. Garrett or Mr.?

15 A. Mr. Garrett.

16 Q. Mr. Garrett. The question is, quote:
17 The question that arises is do we tell this
18 customer that this product is composed of
19 principally PCB with some phosphate ester and
20 then give the customer the toxicity and safe
21 handling characteristics?

22 My question to you is had you ever
23 previously told the customer, namely Texas Eastern,
24 or anybody at Texas Eastern, that the product was
25 composed of principally PCB with some phosphate

1 ester?

2 A. I believe that this was discussed in
3 various discussions at various times.

4 Q. Can you identify any of those
5 discussions?

6 A. Not specifically. I made many, many
7 calls on Texas Eastern and I do not remember which
8 one of them it would have been.

9 Q. Do you recall anyone you told that it
10 was composed of PCB with phosphate ester?

11 A. Since I can't come back with the exact
12 time it was I can only indicate that Ollie Fletcher
13 was my primary contact at that time.

14 Q. Did you also give the customer at that
15 point the toxicity and safe handling characteristics?

16 A. That material was given to him before he
17 got the first sample of material.

18 Q. So it would have been the printed --
19 whatever the printed material was that the company
20 put out?

21 A. Yes.

22 Q. Not any side conversations that you had
23 with him in particular?

24 A. He may have asked me a question and I
25 may have answered it but I don't remember a specific

discussion.

2 Q. Do you know were the general PCB
3 information program was?

4 A. Not as a title but I do not know what
5 Jack is referring to here specifically in terms of
6 information program.

7 Q. Was there a general PCB information
8 program in capital letters that everybody knew about?

9 A. It was not in capital letters to the
10 best of my knowledge and we have seen many exhibits
11 over here which would certainly indicate that
12 Monsanto had a general PCB program.

13 Q. Do you have any knowledge of what
14 happened as a consequence of this memo?

15 A. No, I do not.

16 MS. WELCH: That's all I have for today.
17 The deposition is adjourned until tomorrow morning.
18 I thank you very much for your time today. I know
19 it's been a long and arduous day.

20 [Proceedings were adjourned for the day]
21
22
23
24
25