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COMMONWEALTH OF KENTUCKY
ROWAN CIRCUIT COURT
CIVIL BRANCH

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TENNESSEE GAS PIPELINE COMPANY,)
Plaintiff,)
vs.)
MONSANTO COMPANY,)
Defendant.)

**CERTIFIED
COPY**

CA 93-CI-90145
VOLUME I

DEPOSITION OF JAMES E. SPRINGATE
THURSDAY, NOVEMBER 30, 1995

PAGES 1-207

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COURT REPORTING
ONE EMBARCADERO CENTER, SUITE 360
SAN FRANCISCO, CA 94111
(415) 362-6666 • FAX (415) 362-0907

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10 Deposition of JAMES E. SPRINGGATE, taken on
11 behalf of Plaintiff, at the SFO Hilton Hotel,
12 Bayshore Freeway, San Bruno, California, commencing
13 at 9:30 a.m., Thursday, November 30, 1995, before
14 Deirdre F. Cram, C.S.R. 9339.

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1 APPEARANCES OF COUNSEL:

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3

4 FOR PLAINTIFF:

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HEDLUND HANLEY & JOHN

7

BY: KEVIN B. DUFF, ESQ.

8

Sears Tower, Suite 5700

9

Chicago, Illinois 60606

10

11

12

FOR DEFENDANT:

13

14

SMITH HELMS MULLISS & MOORE

15

BY: ROLLY L. CHAMBERS, ESQ.

16

227 North Tryon Street

17

Charlotte, North Carolina 28202

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1 JAMES E. SPRINGGATE,
2 having been first duly sworn, testified as follows:

3

4 EXAMINATION

5 BY MR. DUFF:

6 Q. Good morning, sir.

7 A. Good morning.

8 Q. How are you?

9 A. Fine.

10 Q. Mr. Springgate, my name is Kevin Duff,
11 and I represent Tennessee Gas Pipeline Company in
12 this matter.

13 Would you please state your full name
14 for the record and spell your last name.

15 A. James E. Springgate,
16 S-P-R-I-N-G-G-A-T-E.

17 Q. Where do you reside?

18 A. 13060 East Sunset Drive, Los Altos
19 Hills, California.

20 Q. What is your Social Security number?

21 A. 491-26-2877, I think.

22 (Discussion off the record.)

23 BY MR. DUFF:

24 Q. Would you please state your educational

1 background, beginning with when you graduated from
2 high school?

3 THE WITNESS: I will in just a moment.

4 491-26-2877. Is that the number I just gave you?

5 THE REPORTER: Yes.

6 THE WITNESS: My educational background after
7 high school? Was that the question?

8 BY MR. DUFF:

9 Q. Yes, please.

10 A. I have a B.S. in chemical engineering
11 from the University of Missouri, and I have a
12 master's in chemical engineering from Washington
13 University in St. Louis, Missouri.

14 I have advanced management training from
15 Stanford University.

16 Q. When did you receive your B.S. from the
17 University of Missouri in chemical engineering?

18 A. In 1950.

19 Q. When did you receive your master's from
20 Washington University in chemical engineering?

21 A. In 1955.

22 Q. When did you take the advanced
23 management training studies at Stanford University?

24 A. In 1974.

1 Q. Mr. Springgate, have you ever had your
2 deposition taken before?

3 A. Yes, I have.

4 Q. How many times?

5 A. I believe on two prior occasions.

6 Q. What cases did you give depositions in?

7 A. One of those was on a PCB case for
8 Monsanto and, prior to that, was on a 2,4,5-T or
9 Agent Orange case that Monsanto was involved in.

10 Q. When did you give a deposition in the
11 PCB case?

12 A. Approximately three years ago.

13 Q. Do you recall the name of that case?

14 A. I think that was -- I think that was the
15 Texas Western Pipeline case.

16 Q. Transwestern?

17 A. I'm sorry. I don't recall specifically.

18 Q. Did that case involve Texas Eastern, if
19 you know?

20 A. I don't recall, but I also probably
21 didn't have that information at the time. I do not
22 recall.

23 Q. Where did that deposition take place?

24 A. In San Francisco.

1 Q. Do you recall the name of the lawyer who
2 represented you?

3 A. Yes. Chuck Preuss, which I believe was
4 spelled P-R-E-U-S-S.

5 Q. When did the deposition take place
6 relating to Agent Orange?

7 A. Approximately twelve years ago.

8 Q. Do you recall what case that took place
9 in?

10 A. I'm sorry?

11 Q. Do you recall the name of the case?

12 A. I couldn't give you the formal name of
13 the case. I'll give you a description. There was
14 a class action suit of Vietnamese Army veterans who
15 sued Monsanto and other producers of 2,4,5-T.

16 Q. I'd like to cover some ground rules, if
17 you will, for today's deposition; and, as you know,
18 this deposition may continue to tomorrow.

19 I'll be asking you a series of questions
20 today to which I'll need you to give verbal answers
21 because our court reporter is here to take down
22 everything that is said, and she will not be able
23 to pick up anything that is a nonverbal response.
24 So I would ask you to not nod in response to a

1 question or use a gesture which would not be picked
2 up by the record.

3 Do you understand that?

4 A. I understand.

5 Q. If, during the course of your
6 deposition, you don't understand a question that I
7 ask, please feel free to ask me to clarify the
8 question, or if we need to, we can ask the court
9 reporter to repeat the question for you.

10 Do you understand that?

11 A. I understand.

12 Q. At times, Counsel may offer an
13 objection. After he offers his objection, unless
14 he instructs you not to answer, I would ask that
15 you then proceed with your answer.

16 Do you understand that?

17 A. Right.

18 Q. When did you begin working for Monsanto?

19 A. In September of 1950.

20 Q. Was that your first job out of college?

21 A. Yes, it was.

22 Q. What was your first position with
23 Monsanto?

24 A. I was a member of an engineering group

1 in the Quéeny plant in St. Louis, Missouri.

2 Q. What were your responsibilities?

3 A. We were designing modifications and
4 improvements to chemical manufacturing plants.

5 Q. What was your title at that time?

6 A. I don't recall.

7 Q. What type of chemical manufacturing did
8 your design modifications relate to?

9 A. Do you mean the products involved?
10 What's the question?

11 Q. The type of equipment or machinery, if
12 you will.

13 A. Chemical production equipment.

14 Q. Did that involve air compressors?

15 A. Air compressors were probably one of
16 many equipment items that we worked with. I do not
17 recall specifically an air compressor.

18 Q. What type of products did your work
19 relate to?

20 A. That particular manufacturing plant
21 produced pharmaceuticals and fine chemicals, as
22 well as some higher-volume general chemicals.

23 Pharmaceuticals and fine chemicals
24 included caffeine, aspirin, phenophaline, benzoic

1 acid. Then, in the broader line, it included
2 things like phthalic anhydride and maleic
3 anhydride.

4 Q. Did your work at that time relate in any
5 way to polychlorinated biphenyls?

6 A. No. It did not.

7 Q. Did it relate to the production of
8 Aroclor?

9 A. No, it did not.

10 Q. What is Aroclor?

11 A. Aroclor is the trade name for a group of
12 Monsanto products that were chlorinated biphenyls,
13 and I believe terphenyls, under the name of
14 Aroclor.

15 Q. How long did you work in the engineering
16 group at the Queeny plant?

17 A. About two years.

18 Q. What position did you hold next?

19 A. My next position was a supervisor of a
20 manufacturing department within the Queeny plant.

21 Q. What type of manufacturing did you
22 supervise at that time?

23 A. This was chemical manufacturing also,
24 and the specific product we were manufacturing was

1 benzoic acid.

2 Q. How long did you hold that position?

3 A. I believe it was about three years.

4 Q. During that three-year period, did
5 you -- were you the supervisor for the
6 manufacturing of any other products?

7 A. No. I think only that product.

8 Q. What position did you hold next?

9 A. Next, I moved to a department within the
10 Queeny plant that was responsible for the
11 maintenance and construction of chemical
12 equipment. The title of that job was maintenance
13 supervisor.

14 Q. What year was that that you moved into
15 that position?

16 A. I'll have to do some arithmetic here to
17 answer your question. That was about 1955.

18 Q. What products did that position involve?

19 A. That position, we were responsible for
20 individual projects within the Queeny plant from
21 either a maintenance or a new construction point of
22 view. During that three-year period, I probably
23 worked on every product in the Queeny plant at some
24 time or another.

1 Q. Did that include Aroclor?

2 A. I don't recall. If there were Aroclors
3 used or manufactured in the Queeny plant, I don't
4 recall it. I don't recall.

5 May I note to you that this is now
6 1995? The time of your questioning is 40 years
7 ago.

8 Q. I appreciate that, and I also appreciate
9 your time here and your answering these questions.

10 A. Well, there will be -- you will hear "I
11 do not recall" from me a lot today because we're
12 talking about a time frame that is many years ago,
13 and as you will soon find out, I've been through
14 many other jobs since that time.

15 Q. Well, I would ask you to answer to the
16 best of your ability.

17 A. Sure.

18 Q. During the period that you were
19 maintenance supervisor, did you ever do any work on
20 air compressors?

21 A. I do not recall.

22 Q. Have you ever done any work on an air
23 compressor in a maintenance capacity?

24 A. I would say I probably did, but I do not

1 recall a specific item or activity.

2 Q. Are you familiar with how air
3 compressors operate?

4 A. Generally, yes.

5 Q. What is your familiarity with air
6 compressors and how they operate?

7 A. As a chemical engineer, air compressors
8 would have been one type of equipment that we
9 studied. Within a chemical manufacturing plant,
10 there were several processes that I can think of
11 that used high volumes of compressed air. All
12 chemical manufacturing plants at that time operated
13 on instrumentation that used compressed air, so
14 that it would only be logical for me to assume
15 that, during that point in time, I probably
16 supervised some work on air compressors, but I do
17 not recall a specific piece of equipment or a
18 specific instance.

19 Q. During the period that you were
20 maintenance supervisor, how many air compressors
21 were located in the Queeny plant?

22 A. I do not recall that.

23 Q. Do you recall if it was more than five?

24 A. I have no idea. Again, back to my prior

1 comment. I know that there were some chemical
2 processes that used air compressors, including the
3 benzoic acid process that I started out with. That
4 was an air oxidation of toluene. We used
5 compressed air. I don't happen to recall where
6 that air compressor was or what it looked like.

7 Q. Did the air compressors that were used
8 at the Queeny plant require a fire-resistant
9 lubricant?

10 A. I don't recall.

11 Q. Do you recall if air compressors at the
12 Queeny plant used any type of industrial lubricant?

13 A. I cannot recall that either. I cannot
14 recall any one specific air compressor in the
15 Queeny plant.

16 Q. How long did you hold the position of
17 maintenance supervisor?

18 A. About three years.

19 Q. What position did you hold next?

20 A. The position was called maintenance
21 superintendent, which is in the same department,
22 but it's the next level of supervision.

23 Q. Was that in 1958 that you became
24 maintenance superintendent?

1 A. I believe it was, yes.

2 Q. How long did you hold that position?

3 A. For four years.

4 Q. Was that also in the Queeny plant?

5 A. Yes, it was.

6 Q. What were your responsibilities as
7 maintenance superintendent?

8 A. Supervising a group of six to eight
9 engineers who, themselves, were maintenance
10 supervisors, as I had been previously. My real
11 recollection of that period was spending many, many
12 hours negotiating with the union board, which I
13 remember as consuming three-fourths of my time.

14 Q. During that four-year period?

15 A. Yes.

16 Q. What position did you move to next?

17 A. Next, I transferred to a chemical
18 manufacturing plant of Monsanto's in West
19 Virginia. The town was Nitro, West Virginia. I
20 transferred there as a production superintendent.

21 Q. For which products were you production
22 superintendent?

23 A. The products were rubber chemical
24 products; specifically, chemicals used in the

1 manufacturing of automotive tires.

2 Q. How long did you hold that position?

3 A. For two years.

4 Q. From 1962 to 1964?

5 A. Correct.

6 Q. During that time period, did you do any
7 work that involved air compressors?

8 A. Not that I recall.

9 Q. Do you recall if air compressors were
10 used in the production of rubber chemicals at the
11 Nitro, West Virginia plant?

12 A. I don't recall.

13 Q. What position did you hold next?

14 A. I became plant manager of that
15 manufacturing plant.

16 Q. That was in 1964?

17 A. Correct.

18 Q. How long did you hold that position?

19 A. For four years, until the summer of '68.

20 Q. While you were plant manager, did your
21 responsibilities involve any products other than
22 rubber chemicals?

23 A. Yes. As plant manager, your
24 responsibilities include all products manufactured

1 at that plant. So, in addition to the rubber
2 chemicals that I had previously, we had a series of
3 agricultural chemicals; herbicides, specifically.

4 In addition to that, there was some
5 agricultural chemicals that were feed supplements
6 to animals. I believe there were also some
7 petroleum additive products manufactured there.

8 Q. With respect to the herbicides that were
9 manufactured at that Nitro plant, did those
10 herbicides include any Aroclors?

11 A. Herbicides and Aroclors are two
12 different categories, in my mind. By herbicides,
13 I mean weed killers. So I don't believe we
14 manufactured anything in the Aroclor family.

15 Q. How would you determine the
16 effectiveness of a herbicide?

17 A. Well, that would have been done by a
18 research or development group, not by the
19 manufacturing plant, in the first place. But in
20 broad terms, the way you find the effectiveness of
21 a herbicide is you try it out. You spray it on
22 some weeds and see what happens. But that would
23 have been done by a research and development
24 group. That would not have been done at the Nitro

1 plant.

2 Q. As plant manager at the Nitro plant, did
3 you have a research and development department that
4 reported to you?

5 A. Not for new product development, no.

6 Q. For existing product development?

7 A. We had some chemists who worked on
8 existing product improvements, and we had some
9 engineers who worked on process improvements within
10 the Nitro plant, but we would not have worked on
11 any new products.

12 Q. During the period that you were plant
13 manager at the Nitro facility, did you have any
14 researchers who reported to you who were involved
15 in determining the effectiveness of existing
16 herbicide products manufactured by Monsanto?

17 A. No.

18 Q. Were you responsible for any of the work
19 done by such individuals?

20 MR. CHAMBERS: Object to the form. When you
21 say "responsible for," what do you mean? It's
22 vague.

23 BY MR. DUFF:

24 Q. In terms of a direct or indirect

1 reporting relationship within a corporate
2 structure.

3 A. Would you go back and start the question
4 over, please?

5 MR. DUFF: Would you please read the question
6 back to the witness?

7 (The pending question was read.)

8 MR. CHAMBERS: I'll add to the objection that
9 I guess it lacks foundation since he just testified
10 there weren't any such people who reported to him.
11 How could he be responsible for them if they did
12 not report to him?

13 MR. DUFF: Indirectly.

14 Q. In other words, if another individual
15 reported to you who was responsible for work of
16 such individuals.

17 A. I would consider that still directly
18 responsible, but the answer to the question is
19 still no.

20 Q. Thank you.

21 What position did you hold next within
22 Monsanto?

23 A. Next, I transferred back to St. Louis to
24 Monsanto's headquarters, and the title of the job

1 was project director. The project that I worked on
2 was the building of a new plasticizer facility in
3 Texas City.

4 Q. Texas City, Texas?

5 A. Correct.

6 Q. You supervised the building of that
7 facility from St. Louis; is that right?

8 A. That's right.

9 Q. Was there an existing plasticizer
10 facility in Texas City at that time?

11 A. No, there wasn't. There was an existing
12 Monsanto chemical manufacturing plant, but we had
13 no plasticizer operation there. This was a new,
14 large manufacturing operation at the Texas City
15 plant.

16 Q. What was the intended capacity of that
17 new plasticizer facility in terms of manufacturing
18 plasticizers?

19 A. My recollection is that that was a
20 100 million pounds per year manufacturing
21 operation.

22 Q. Did the manufacture of plasticizers at
23 that time include Aroclor products?

24 MR. CHAMBERS: Object to the form. You mean

1 the manufacture at this facility or anywhere?

2 BY MR. DUFF:

3 Q. At this facility.

4 A. At that time, at the Texas City, Texas
5 plant there were no plasticizers manufactured. The
6 facility that we were constructing at that time was
7 the first plasticizer manufacturing operation at
8 Texas City. It was called Santicizer 711, and it
9 was not related to the Aroclor family of products,
10 not chemically related to the Aroclor family of
11 products.

12 Q. So none of the plasticizers that were to
13 be manufactured at the Texas City facility were to
14 contain PCBs; correct?

15 A. That is correct.

16 Q. Were there other plasticizer facilities
17 that did produce products containing PCBs?

18 A. Well, at that point in time, PCBs or
19 Aroclors were manufactured somewhere in Monsanto.
20 They existed at that point in time. Is that your
21 question?

22 MR. DUFF: Would you please read the question
23 back for the witness?

24 (The pending question was read.)

1 BY MR. DUFF:

2 Q. Do you understand the question?

3 A. No, I don't.

4 Q. Did Monsanto manufacture plasticizers
5 that contained PCBs in 1968?

6 A. Yes, Monsanto did.

7 Q. Do you know where Monsanto produced
8 those products that contained PCBs?

9 A. My recollection is we produced that
10 product in Anniston, Alabama. I have a vague
11 recollection that we produced Aroclor products
12 somewhere in Europe, probably in the UK. That's my
13 recollection of where we produced those products.

14 Q. How long did you hold the position of
15 project director in St. Louis for building the new
16 plasticizer facility in Texas City, Texas?

17 A. Let me -- well, I'll answer it this
18 way.

19 Sometime in 1970, I changed from that
20 project director job to a job that was called
21 plasticizer business director, and I don't remember
22 the specific date.

23 Q. That was in 1970, though?

24 A. Somewhere in 1970. May I go a notch

1 farther and you'll understand my confusion in
2 times.

3 Q. Was there a change in your
4 responsibilities from the time that you became
5 project director to the time you became plasticizer
6 business director?

7 A. Yes.

8 Q. When did that change -- did more than
9 one change occur during that time period in your
10 responsibilities?

11 A. No. Well, in 1970, I became the
12 plasticizer business director, sometime in 1970.
13 Now, when I became the plasticizer business
14 director, I was then responsible for the research
15 and development, manufacture, sales and
16 profitability of all of the plasticizer products.
17 So the project that we were working on at Texas
18 City then was one of a series of plasticizers that
19 I was responsible for. I was responsible for the
20 whole series.

21 Q. Prior to the time you became plasticizer
22 business director, and while you were project
23 director, was there a change of your
24 responsibilities during that time frame? In other

1 words -- let me ask the question this way.

2 From the time that you became project
3 director in the summer of 1968 until you became
4 plasticizer business director, was your sole
5 responsibility for overseeing the building of the
6 new plasticizer facility in Texas City?

7 A. Correct. Yes, it was.

8 Q. You did not have any other
9 responsibilities during that time period?

10 A. No. Let me go back and change the date
11 a little bit as to when I became plasticizer
12 business director. Previously I said 1970. I
13 think that was probably sometime in 1969.

14 My timing, my ability to remember
15 specific times, is affected by the following:
16 1968, I went back to St. Louis for the project
17 director job. Sometime a year or so later I became
18 the business director of plasticizers. Sometime
19 within the next two years I became the general
20 manager, plasticizers and general chemicals.
21 Sometime within the next two years I became the
22 general manager, detergents and phosphates; and, in
23 1975, I moved to the West Coast as the general
24 manager of electronic materials. So my problem is

1 I went through about four jobs in five years and my
2 dates are not clear in my mind.

3 Could I give that sequence to you
4 again? Would that be helpful?

5 Q. I think that I have it.

6 A. Okay.

7 Q. Although I'll appreciate your patience
8 if I need to work through it a little bit as we go
9 through things today.

10 A. All right.

11 Q. Prior to the time you became plasticizer
12 business director, did you have any
13 responsibilities for any products that contained
14 PCBs?

15 A. I did not.

16 Q. So it was when you became plasticizer
17 business director in 1969 that you first had such
18 responsibilities?

19 A. That is correct.

20 Q. When you became plasticizer business
21 director, who did you report to?

22 A. A man named Ernie Robson, R-O-B-S-O-N.

23 Q. What was his position?

24 A. He was the general manager of

1 plasticizers and general chemicals and possibly
2 something else.

3 Q. Do you know who he reported to at that
4 time?

5 A. No, I don't recall.

6 Q. During the period that you were
7 plasticizer business director, did you report to
8 anybody other than Ernie Robson?

9 A. I don't think so. I think only Ernie
10 Robson.

11 Q. How long did you hold the position of
12 plasticizer business director?

13 A. I believe about three years.

14 Q. To approximately 1972?

15 A. Correct.

16 Q. I'm going to return to that time period
17 in a moment, but I just want to complete your
18 history at Monsanto quickly.

19 You said in approximately 1975 you
20 became general manager for electric materials; is
21 that right?

22 MR. CHAMBERS: Let me object to the form. I
23 think it was electronic rather than electric
24 materials.

1 MR. DUFF: I'm sorry. I have electric here in
2 front of me in an interrogatory response from
3 Monsanto. I'm sorry if I was mistaken.

4 Q. Is that right, that you were general
5 manager for electronic materials in approximately
6 1975?

7 A. Correct.

8 Q. How long did you hold that position?

9 A. Essentially the same position until I
10 retired in 1989, with one caveat; that sometime
11 about 1985 we changed the title to president of
12 Monsanto Electronic Materials Company, but the
13 assignment was not significantly different.

14 Q. So, from 1975 to 1989, you essentially
15 ran the electronic materials company; is that
16 right?

17 A. That's correct.

18 Q. Did you retire from Monsanto in 1989?

19 A. Yes, I did.

20 Q. Have you been employed in any other
21 capacity since you retired from Monsanto?

22 A. One year after I retired, I had a
23 consulting contract with Monsanto; and then
24 continuously, since that time, I have been a member

1 of the board of directors of a small company where
2 we are paid for those services. But other than
3 that, I have not been employed.

4 Q. What type of consulting work did you do
5 for Monsanto during the year after you retired from
6 Monsanto?

7 A. When I retired in 1989, we sold that
8 business to a German company, so my consulting work
9 with Monsanto was cleaning up odds and ends as a
10 result of the sale of that business to Monsanto.
11 So it had to do with electronic materials.

12 Q. When did you become a member of the
13 board of directors for this small company you
14 referred to?

15 A. About 1982.

16 Q. That was while you were working for
17 Monsanto?

18 A. Correct.

19 Q. What's the name of that company?

20 A. Asyst Technologies, A-S-Y-S-T,
21 Technologies.

22 Q. Are you still a member of the board of
23 directors for Asyst Technologies?

24 A. Yes, I am.

1 Q. Do you have a position on that board of
2 directors?

3 A. Well, on a board of directors, to the
4 best of my knowledge, you're either a chairman of
5 the board or a member of the board. I'm a member
6 of the board.

7 Q. What type of business is Asyst
8 Technologies in?

9 A. They manufacture equipment for the
10 semiconductor industry.

11 Q. I'd like to return to the period when
12 you became general manager for plasticizers and
13 general chemicals. Was that in 1972?

14 A. Yes, I believe that's correct.

15 Q. How long did you hold that position?

16 A. For two years, until 1974.

17 Q. What position did you hold next, after
18 that?

19 A. 1974, I became general manager
20 detergents and phosphates.

21 Q. Did you hold that position until you
22 became general manager for electronic materials?

23 A. Correct, in 1975.

24 Q. Did you attend the advanced management

1 training courses at Stanford while you were general
2 manager for detergents and phosphates?

3 A. That's correct.

4 Q. Did you receive a degree from Stanford?

5 A. No, you don't. It's an executive
6 business course.

7 Q. I'm going to backtrack on education
8 again.

9 When you received your master's from
10 Washington University in St. Louis, did you prepare
11 a thesis?

12 A. Yes, I did.

13 Q. What did your thesis relate to?

14 A. It related to the factors affecting the
15 fluidization of fine particles, which is beneficial
16 in certain chemical processes.

17 Q. Could you explain what "fluidization of
18 fine particles" means?

19 A. Yes. In some chemical processes, you
20 use fine particles, which are catalysts, in certain
21 types of reactions, and you want these fine
22 particles, either in an air stream or a gas stream,
23 to behave like a fluid rather than like a solid.
24 So if you put enough air or enough gas through a

1 bed of these fine particles, they behave more like
2 a fluid.

3 Q. What type of particles did your work
4 relate to?

5 MR. CHAMBERS: Let me object to the form.
6 When you say "work," are you talking about the
7 thesis?

8 MR. DUFF: Yes, I am.

9 MR. CHAMBERS: Okay.

10 THE WITNESS: The particles I was working with
11 was the medium that is normally used to dry air.
12 If you wish to dry a large volume of air, this is
13 the medium that would normally be used to dry air.
14 The reason I was using that particular medium is,
15 the way I was checking the effectiveness was to
16 measure the water content of the air that was going
17 through my fluidized column, check the water
18 content in and check the water content out, and you
19 were measuring the effectiveness of this fluid
20 bed.

21 So the particles I was using was
22 chemically -- I don't remember what the name of it
23 was, but it's the kind of particle you would use if
24 you wanted to dry large volumes of air.

1 Q. What type of equipment did you use?

2 A. Columns of -- glass columns, so you
3 could see the effectiveness of different flow rates
4 of air through the column; measuring equipment for
5 volumes of air in and air out; measuring equipment
6 for the humidity of the air in and the air out.

7 Q. What type of measuring equipment?

8 A. What type of measuring equipment?

9 MR. CHAMBERS: By name?

10 BY MR. DUFF:

11 Q. Not necessarily by product name, but if
12 you recall the generic description of the
13 equipment.

14 A. Well, in the case of measuring moisture
15 content of air, you use a hydrometer.

16 In measuring air volumes, I don't recall
17 what I did now.

18 Q. Did you do any work with gas
19 chromatography?

20 A. I did not.

21 Q. Did you do any work with mass
22 spectrometry?

23 A. I did not.

24 Q. What level of measurement -- strike

1 that.

2 What quantities did you measure
3 particles in?

4 A. I'm sorry?

5 Q. What quantities did you measure
6 particles in in conjunction with your work?

7 MR. CHAMBERS: Let me object to the form.
8 When you say "what quantities," are you referring
9 to how they measure the size of the particles?

10 BY MR. DUFF:

11 Q. In other words, were you able to measure
12 particles in parts per million, parts per billion
13 or any other type of quantity?

14 A. No. In the work that I was doing, I was
15 measuring the effectiveness of a fluidized bed, but
16 measuring it in grams of water in, grams of water
17 out, and in rather gross terms, if you will.

18 What I was trying to do was to develop a
19 mathematical model of what the effect of various
20 flow rates of air would be in a glass column filled
21 with very fine particles. In order for a fluid bed
22 to be effective, you have to have air flows going
23 through that are high enough to fluff up all this
24 solid material. If your air flows get too high,

1 the air goes through too fast and the bed is not
2 affected. So I was working on a mathematical model
3 of what are all the factors that affect the
4 fluidized bed. Fluid bed chemical reactions are
5 most commonly used in the petrochemical industry,
6 petroleum refining. That's the most practical use.

7 Q. When you became plasticizer business
8 director in 1969, what responsibilities did you
9 have with respect to PCBs?

10 A. My overall responsibilities had to do
11 with the research and development of plasticizer
12 products, the manufacturing of the plasticizer
13 products, the sales of those products and the
14 profitability of those products.

15 Now, the PCBs or the Aroclor family of
16 products was one of the series of products that we
17 had as plasticizers. We had probably 30 different
18 products in the plasticizer line, and we had
19 several Aroclor products within that group of 30.
20 My recollection would be that the Aroclors
21 constituted 10 percent of our total plasticizer
22 product line.

23 Q. What plasticizer products contained
24 Aroclors at that time?

1 A. What products? I'm sorry.

2 MR. CHAMBERS: By trade name?

3 BY MR. DUFF:

4 Q. You said that there were approximately
5 30 different plasticizer products; correct?

6 A. Correct.

7 Q. And you said that some of those
8 plasticizer products contained Aroclors; correct?

9 A. Some of those plasticizer products were
10 Aroclors. Santicizer 711, the plant that I built
11 in Texas, different chemistry, has nothing to do
12 with Aroclors. We had a very large one in New
13 Jersey called butyl benzyl phthalic; nothing at all
14 to do with Aroclors. We had a series of phosphate
15 ester plasticizers; nothing to do with Aroclors.

16 In total, we had probably 30 different
17 plasticizer products. Some of the 30, 5, 6, 7, 8
18 of the plasticizer products were Aroclor products;
19 and in the plasticizer business, we did not mix
20 product A with product B. We sold reasonably pure
21 compounds as plasticizers.

22 Q. What plasticizer products were Aroclors?

23 A. My recollection was that we had some
24 Aroclor number so and so, or in some cases these

1 were also called Santicizer number so and so, that
2 were Aroclors. But I don't recall the specific
3 number of the Aroclor that was used as a
4 plasticizer.

5 Q. Do you recall any of the names of any of
6 the plasticizers that were Aroclors?

7 A. Well, my recollection would be that we
8 sold Aroclor 1240, or whatever the number may be,
9 we sold it that way, Aroclor 1240, and it went into
10 a plasticizer use in the end market.

11 Q. So, for instance, a product might be
12 called Aroclor 1254. Is that what you're saying?

13 A. Yes. We would sell it -- I don't
14 remember the numbers or the nomenclature, so I
15 can't verify what you're telling me there. I just
16 don't remember. But we would sell it as an Aroclor
17 number so and so, whatever it was, to the
18 customer. That's my recollection.

19 Q. For what applications did you sell
20 Aroclors as plasticizers?

21 A. Right. The uses that I remember were
22 carbonless carbon paper usage. In other words, the
23 Aroclors were mixed with the ink and put on the
24 back of paper for carbonless carbon paper.

1 There were some uses in what they called
2 hot-melt adhesives. So if you were manufacturing
3 a cardboard box, you would use an adhesive with a
4 hot melt, so the Aroclors were used in that glue,
5 if you would.

6 I remember Aroclors being used with
7 plastic, combined with plastic materials to form
8 sealants for windows, glass windowpanes as a
9 sealant.

10 Some strange, unusual uses, like there
11 is a table lamp called a Lava Lamp that looks like
12 it has flowing lava in it. The little bubble
13 slowly goes up, and the little bubble slowly goes
14 down. That was an Aroclor plasticizer.

15 Q. Do you recall any other applications for
16 Aroclors as plasticizers?

17 A. I remember one other application. It
18 was a paint application. It was used in heavy-duty
19 paint like the stripe on a highway. But I don't
20 recall others.

21 Q. Other than as related to the research
22 and development and manufacture and sales and
23 profitability of plasticizers, including Aroclor
24 used as plasticizers, how else did you have

1 responsibilities relating to PCBs when you were
2 plasticizer business director?

3 A. Would you repeat that?

4 Q. Certainly.

5 MR. DUFF: Would you please read the question
6 back to the witness?

7 (The pending question was read.)

8 THE WITNESS: I guess I still don't
9 understand, because I was the business director of
10 plasticizers, and I was therefore responsible for
11 all elements of that business as the Aroclors were
12 used for plasticizers. So I apparently don't
13 understand what you're getting to.

14 MR. CHAMBERS: I don't understand it either,
15 so don't feel like the only one.

16 BY MR. DUFF:

17 Q. Did there come a point in time when you
18 learned that Aroclors or PCBs -- strike that.

19 Did there come a point in time when you
20 learned that PCBs were an environmental
21 contaminant?

22 A. Yes.

23 Q. When was that?

24 A. Well, there was a period of time

1 somewhere in the 1969-'70-'71 period when we
2 first heard of the peregrine falcon on the West
3 Coast and the thin eggshells and the baby chicks
4 that did not hatch properly. So that started, or
5 that was one of a series of things that happened
6 over the next couple of years.

7 The next thing that happened was there
8 were some university laboratories that were looking
9 for environmental contaminants, specifically
10 herbicides, and were finding compounds at the part
11 per billion and part per million levels that they
12 were not able to identify, so there was then an
13 ongoing series of discussions with those
14 laboratories, series of communications with those
15 laboratories, and with the U.S. government, between
16 Monsanto people and those discovering some unknown
17 material in the environment.

18 So, over this period of time, Monsanto
19 proceeded to investigate this system also, to try
20 to understand what it was that was being found. I
21 remember we worked with a lot of laboratories. We
22 sent samples of Aroclors back to the laboratories
23 so they could compare with what they were finding.
24 They shared information with us; we shared

1 information with them. Over a period of time, we
2 became convinced that there was some environmental
3 contamination as a result of some PCBs.

4 Now, all that took a period of time.

5 Q. Was there a committee formed to look at
6 the environmental problem relating to PCBs?

7 A. Yes. Early on, there was a task force
8 put together because the Aroclors were being sold
9 by two different business units of Monsanto. So
10 there was a task force put together representing
11 both of those business units, and Monsanto's
12 medical and toxicity groups were involved. This
13 task force assumed the responsibility of looking
14 into this problem and then reporting back to the
15 two business units involved as to what they were
16 finding and what they believed.

17 Q. Were you a member of that task force?

18 A. No. A member of my group was on that
19 task force.

20 Q. Who was that?

21 A. I believe it was our director of
22 research, Martin Farrar, F-A-R-R-A-R.

23 Q. What were the two business units that
24 were represented by the task force?

1 A. Well, ours was the plasticizer business
2 unit, and I'm not sure of the name that was used on
3 the other unit at that time. It was probably
4 functional fluids, but I'm not sure of that.

5 MR. DUFF: Mr. Springgate, I'd like to show
6 you a document that's been previously marked as
7 Plaintiff's Exhibit 172. This document is dated
8 March 6, 1969 and bears production numbers
9 TRAN 058343 through 45. Please take as much time
10 as you need to review this document.

11 (Previously marked Exhibit 172
12 was shown to the witness and is annexed
13 hereto.)

14 THE WITNESS: Okay.

15 BY MR. DUFF:

16 Q. This is a document that you received
17 from W.R. Richard on or about March 6, 1969;
18 correct?

19 A. I don't recall your quotation of the man
20 sending it, and the fact that I'm one of the
21 copyees is correct, but I don't recall the memo.

22 Q. You're a copyee of this memo; correct?

23 A. That's what it says here.

24 Q. Was it the custom and practice in

1 Monsanto at that time to deliver documents to
2 everybody who it was addressed to?

3 A. I would think that's true, yes.

4 Q. Was it your custom and practice, when
5 you were business director for plasticizers, to
6 read all documents that were addressed to you?

7 A. I don't believe that can be answered yes
8 or no. I did try to read all documents that were
9 sent to me that I thought were of some significance
10 or required my action. In business, you obviously
11 get some documents that you scan, and you get some
12 that you read critically. Generally, I at least
13 reviewed everything that came to me.

14 Q. Was the presence of PCBs or Aroclor in
15 wildlife a significant issue to you in March of
16 1969?

17 A. It became a significant issue to us over
18 a period of time. I don't recall the dates.

19 Q. Was this a document that you would have
20 expected to have reviewed carefully at the time it
21 was sent to you?

22 A. Again, it's not quite a yes or no
23 because early on we did have a task force that we
24 had assembled and we were in a period of scientific

1 evaluation, trying to understand what the situation
2 was. So, depending on whether it was a scientific
3 dissertation, I would have expected someone in my
4 group who was the scientist to handle this
5 subject.

6 So I don't recall how I would have
7 looked at this memo in 1969.

8 Q. To the extent that a document sent to
9 you in 1969 related to sales or research and
10 development or marketing or manufacturing or
11 profitability of plasticizers, would that have been
12 a document that you would have reviewed carefully?

13 MR. CHAMBERS: I object to the hypothetical
14 form of the question. If you're asking as a
15 general proposition, I suppose that's fair.

16 THE WITNESS: Should I answer that?

17 MR. CHAMBERS: Yes. You should respond.

18 THE WITNESS: Yes, generally I did review such
19 documents.

20 BY MR. DUFF:

21 Q. Does this document refresh your
22 recollection regarding what your position was in
23 March of 1969?

24 A. No, it doesn't.

1 Q. Seeing your name on this document as a
2 copyee in this context, does this suggest to you
3 that you were plasticizer business director at this
4 time?

5 MR. CHAMBERS: Object to the form. Anybody
6 can read the document and interpret it.

7 You can respond.

8 MR. DUFF: This witness has the benefit of his
9 own experience.

10 MR. CHAMBERS: You know, if it refreshes him
11 as to what that was, fine. Then he should share
12 that refreshed recollection with us.

13 MR. DUFF: That's the question.

14 MR. CHAMBERS: Okay.

15 THE WITNESS: That doesn't help me in that
16 regard, so no, I don't recall.

17 BY MR. DUFF:

18 Q. What was the problem that faced Monsanto
19 with respect to the accumulation of Aroclors in
20 wildlife in 1969?

21 A. What was the problem?

22 Q. Yes.

23 A. That faced Monsanto.

24 MR. CHAMBERS: I object to the form of the

1 question, but if you're able to respond, go ahead.

2 THE WITNESS: What was the problem that
3 affected Monsanto. I don't see how I can answer
4 that. I can only answer what I thought I faced.

5 BY MR. DUFF:

6 Q. Please answer in that way, then.

7 A. We had indications, again, from the
8 peregrine falcon case and from the university
9 laboratories, that they were picking up compounds
10 in the environment that appeared to be PCBs. We
11 needed to find out if these were truly PCBs,
12 because if they were, we would either have to
13 change the methods or the distribution methods by
14 which we were selling PCB. In other words, limit
15 certain areas, if that was necessary. But we
16 needed to solve the problem.

17 Now, Monsanto is a science-based
18 company. We needed to understand the science
19 behind, number one, were these really PCBs, and
20 number two, if they were, how did they get there.
21 Then, number three, what were we going to do about
22 it. So we needed to solve all those problems.

23 Now, in the meantime, as we went down
24 this road, at first, we even doubted that these

1 were truly PCBs. We thought they were probably
2 some naturally occurring substance that was winding
3 up in the waterway, because we had been in this
4 business and had been manufacturing Aroclors for a
5 long time and had never had any problems with them,
6 and we couldn't understand why, all of a sudden,
7 they seemed to be appearing in the environment.

8 So we had to find out what the problem
9 was, and then, if it was truly an environmental
10 contaminant, we would have to take whatever steps
11 are necessary to reduce that contamination or
12 eliminate it.

13 Q. You say that Monsanto was surprised that
14 PCBs were showing up in waterways; is that right?

15 A. I can't speak for Monsanto. I can only
16 speak for where I was and what I was doing at the
17 time. But I can answer from my point of view, if
18 you would.

19 Q. Certainly.

20 A. We were surprised because PCBs are
21 extremely insoluble in water, and we could not
22 understand how the PCB would wind up in waterways.
23 So we were required to do a lot of work to try to
24 understand how to get from point A to point B, and

1 we had to do a lot of work for a good reason. We
2 had a series of customers, and these customers were
3 in business, and we were the supplier of a raw
4 material.

5 When you're a supplier of a raw material
6 to a customer, you cannot ethically, arbitrarily,
7 shut them off. You have to, if you go back on the
8 other hand and say, "This is a problem product
9 because," then you can work with your customer and
10 tell them that you're going to have to go out of
11 business, if necessary. But you can't do that
12 arbitrarily. You have to have the reason to do
13 it. You can't ethically shut off your customer
14 arbitrarily.

15 Monsanto is a very ethical company, very
16 conservative company. They wanted to do things
17 right. So we had to go through all the steps to
18 find out is this truly a PCB, how did it get there,
19 and then what can we do about it. That's what we
20 spent -- I don't remember whether it was months or
21 a couple of years doing. But that's what we did.

22 Q. Prior to this time, do you know if
23 Monsanto had ever checked waterways to see if PCBs
24 were present previously?

1 A. I don't know. I would comment, however,
2 that at this point in time, most of the PCBs that
3 were originally detected, the work was done by
4 people who were looking for herbicide
5 contamination. Herbicides meaning DDTs and the
6 2,4,5-Ts, and they were looking at extremely low
7 levels, parts per billion, parts per million. So
8 they stumbled on it, if you would. There was
9 nobody out there specifically taking samples of the
10 Mississippi River to find out what any contaminant
11 may or may not be there.

12 Q. So, is it your understanding that
13 Monsanto had never checked waterways for the
14 presence of PCBs before this time because that
15 question had not been posed?

16 MR. CHAMBERS: Object to the form. Lacks
17 foundation and assumes facts not in evidence.

18 THE WITNESS: I don't know what Monsanto had
19 done previously. It's a big company and a lot of
20 people doing a lot of things. All I do know is,
21 within my particular business group, we had not
22 checked waterways looking for PCBs.

23 BY MR. DUFF:

24 Q. I'd like to direct your attention to the

1 second page of this document. Specifically, a
2 paragraph in the middle of this page that begins
3 "We can take steps...."

4 Do you see that?

5 A. Yes.

6 Q. Did you discuss with others working with
7 Monsanto's larger customers to minimize pollution,
8 from their plants, of Aroclors?

9 A. My background is only with the
10 plasticizer end of the business. I can only speak
11 to that. In the plasticizer end of the business,
12 the answer to your question would be yes. We
13 either discontinued the sale of the product, but we
14 also had customers who still had some of the
15 product. So we had to set up a system of disposal
16 of the product. So, from the plasticizer's point
17 of view, the answer is yes, we did that.

18 Q. Did you work with all of your
19 plasticizer customers that were purchasing
20 PCB-containing plasticizers?

21 A. To the best of my knowledge, we did.

22 Q. As the business director for the
23 plasticizer group, was it your opinion at that time
24 that the responsible thing to do would be to work

1 with all of your customers relating to minimizing
2 pollution of Aroclors from their plants?

3 A. From the plasticizer point of view,
4 that's what we attempted to do was to work with
5 each of our customers; but, as you might expect,
6 the customer himself took the final steps rather
7 than Monsanto.

8 Q. Was it important, at that time, to work
9 with each customer or only some customers?

10 A. We attempted to work with every
11 customer.

12 Q. Why is that?

13 A. Well, we thought that it was necessary
14 to work with every customer, who had purchased the
15 material, to understand the problem and, if they
16 had any PCBs, to properly dispose of them. So we
17 had no reason to skip a customer.

18 Q. Would it have been irresponsible to have
19 purposefully skipped customers at that time?

20 MR. CHAMBERS: Object to the form.
21 Hypothetical. Assumes facts not in evidence. It's
22 vague.

23 THE WITNESS: I would say that's not
24 Monsanto's way of doing things. We're a very much

1 aboveboard and ethical operation.

2 BY MR. DUFF:

3 Q. Do you recall the work of a man named
4 Robert Risebrough relating to PCBs about this time?

5 A. I have seen that name in some papers,
6 either this one or some I reviewed casually
7 yesterday. But, without that review, I do not
8 recall that, no.

9 Q. In this memo that Bill Richards sent to
10 you on March 6th, 1969, he discussed Risebrough's
11 work at the bottom of the second page; is that
12 correct?

13 A. Yes, apparently that's correct.

14 Q. Risebrough published a paper in Nature
15 magazine in December of 1968; correct?

16 MR. CHAMBERS: Objection.

17 THE WITNESS: That's what it says here, but I
18 don't recall it.

19 BY MR. DUFF:

20 Q. In this memorandum, Bill Richard told
21 you that there is no question of identification
22 with respect to the work of Risebrough; is that
23 right?

24 A. I don't recall that, but if that's what

1 this paper says, I don't know. I haven't read it
2 in that detail. Shall I read it in detail?

3 Q. Please take as much time as you need to
4 review this document.

5 A. Number one is I don't recall any of
6 this. Number two is I don't reach the same
7 conclusion as you do. The last sentence says,
8 "This is a rough one because it could mean loss of
9 business on empty and false claims by Risebrough."

10 Q. In connection with Risebrough's work,
11 did Bill Richard say, "It is timely, perhaps
12 imperative, that this paper and its implications be
13 discussed with certain customers"?

14 A. I do not personally recall that. If
15 that's what this paper says -- where is that
16 wording?

17 Q. He said that in the last full paragraph
18 on the second page; correct?

19 A. I agree that that's what this paper
20 says, but again, I don't recall this.

21 Q. Why not discuss Risebrough's paper with
22 all customers?

23 MR. CHAMBERS: Object to the form to the
24 extent you're asking him to speculate about what

1 Dr. Richard had in mind when he wrote this; but, if
2 you're able to respond, go ahead.

3 THE WITNESS: I can't respond to that. I
4 don't know what Bill Richard had in mind.

5 BY MR. DUFF:

6 Q. Did you discuss Risebrough's paper with
7 all of your plasticizer customers at this time?

8 A. I don't recall that one way or the
9 other. I don't recall.

10 Q. Did you tell Bill Richard that Monsanto
11 should talk with all of its customers relating to
12 Risebrough's work?

13 A. I don't recall the subject of this paper
14 or that conversation with Bill Richard. I don't
15 recall.

16 Q. Did you ever tell Bill Richard that
17 Monsanto should talk with Tennessee Gas relating to
18 Risebrough's work?

19 A. I do not recall. On that particular
20 subject, I have no reason to have had a
21 conversation in regard to a customer of the other
22 marketer of Aroclors. I had -- I'm quite sure I
23 had no input as to how the functional fluids group
24 handled their customers.

1 Q. Was Tennessee Gas ever one of your
2 customers?

3 A. Not to the best of my knowledge.

4 Q. Was Tenneco ever one of your customers?

5 A. I don't remember Tenneco ever being an
6 Aroclor customer. I remember Tenneco Chemical
7 being a customer of ours and a supplier of ours,
8 but when I was in one of these other businesses,
9 not in regard to plasticizers.

10 Q. With respect to what business was
11 Tenneco Chemical a customer and/or supplier?

12 A. I think it was probably when I was
13 general manager of the general chemicals group,
14 plasticizers and general chemicals.

15 Q. Do you recall what Tenneco Chemical
16 purchased from Monsanto?

17 A. No, I don't. I do recall the names of a
18 couple of people there that we met with from time
19 to time.

20 Q. What are their names?

21 A. One of them was a man named Larry
22 Wigdor, W-I-G-D-O-R. Now I can't recall the name
23 of the second gentleman, but I met him again five
24 years ago and spent a lot of time with him, because

1 he wound up being an intermediary in the business
2 that we sold. At this moment, I can't recall his
3 name.

4 Q. Do you recall any conversations with
5 either of those gentlemen in the nineteen -- at any
6 time prior to 1980?

7 A. I know I've met with those people prior
8 to 1980.

9 Q. Do you recall any specific conversations
10 with them?

11 A. No, I don't. I would also think it was
12 not related to the Aroclor or PCB business. I have
13 a vague recollection it had to do with the general
14 chemicals family that I was with.

15 Q. Do you recall what Tenneco Chemical
16 supplied Monsanto with?

17 A. No, I don't.

18 Q. Getting back to Exhibit 172, on the last
19 page of this document, the last full sentence, Bill
20 Richard asked you for comments; is that right?

21 A. I don't recall that, but that's what the
22 paper says.

23 Q. Do you recall if you -- strike that.
24 Did you ever give Bill Richard any

1 comments on the information set forth in this
2 memorandum?

3 A. I don't recall that one way or the
4 other.

5 MR. CHAMBERS: Can we go off the record?

6 MR. DUFF: Yes.

7 (There was a brief recess.)

8 BY MR. DUFF:

9 Q. Mr. Springgate, during the break, did
10 you recall the names of the individuals who you
11 were familiar with at Tenneco Chemicals?

12 A. Yes. The second name that I couldn't
13 think of was Joe Fath, F-A-T-H.

14 Q. Were there any other names that you
15 recall?

16 A. Not that I recall.

17 Q. Do you recall any conversations with Joe
18 Fath relating to Aroclor?

19 A. I do not.

20 Q. Do you recall any discussions with Joe
21 Fath relating to PCBs?

22 A. I do not.

23 Q. Do you recall any conversations with Joe
24 Fath relating to products purchased by Tenneco

1 Chemicals or supplied by Tenneco Chemicals to
2 Monsanto?

3 A. I recall conversations with him, but I
4 cannot tell you what the specific product was.

5 Q. Do you recall the general subject matter
6 of any of the conversations you had with him?

7 A. The subject matter would have been
8 either selling Monsanto products to him or buying
9 products from him.

10 Q. Do you recall anything more specific
11 than that?

12 A. No, I don't.

13 MR. DUFF: Would you please mark this document
14 as Plaintiff's Exhibit 401.

15 (Plaintiff's Exhibit 401
16 was marked for identification.)

17 BY MR. DUFF:

18 Q. Mr. Springgate, this document has been
19 marked as Plaintiff's Exhibit 401. It bears
20 production numbers TRAN 057762 through 66.

21 Let me ask you at the outset if you
22 recognize the handwriting anywhere on this
23 document.

24 A. No, I don't.

1 Q. Please take as much time as you need to
2 review this document.

3 A. Okay.

4 Q. Does your name appear at the top of the
5 first page of this document?

6 A. That is my name on the document, yes.

7 Q. And these appear to be handwritten notes
8 from a meeting that took place which you attended;
9 is that right?

10 A. That's what it appears to be.

11 Q. Do you recall the meeting that is
12 reflected by these notes?

13 A. No, I do not.

14 Q. Do you recall any meetings that you
15 attended in 1969 relating to the PCB pollution
16 problem?

17 A. I don't recall any specific meetings.

18 Q. Do you recall that you did attend such
19 meetings?

20 A. I recall that we had meetings on the
21 subject, yes.

22 Q. When you refer to "we," who are you
23 referring to?

24 A. Myself; my research director, whose name

1 was Martin Farrar; the research director of the
2 fluids group, who was Bill Richards; and the
3 representative from the medical and toxicity group,
4 who is Elmer Wheeler.

5 Q. What was Paul Hodges' position at this
6 time? For time frame, I'm talking in 1969.

7 A. I don't recall.

8 Q. Do you recall what Don Olson's position
9 was in 1969?

10 A. I believe he was the director of
11 marketing of the fluids group.

12 Q. Who was Howard Bergen?

13 A. I believe he was the director of the
14 fluids group. Where I was the director of the
15 plasticizer business group, he was the director of
16 the fluid business group.

17 Q. Who was T. Ford?

18 A. I don't recall.

19 Q. Do you recall an individual named Tom
20 Ford?

21 A. The name sounds familiar, but I don't
22 recall that person.

23 Q. Who was E. John?

24 A. I think that was Ed John. I believe he

1 was a member of the public relations department.

2 Q. Were the individuals whose names are
3 reflected at the top of the first page of this
4 document on a PCB committee in 1969?

5 A. I don't recall that. I recall the PCB
6 task force that we had in operation, but it was
7 somewhat different than this list of people.

8 Q. How did the PCB task force come into
9 being?

10 A. Since we had two different business
11 units selling PCBs, we were trying to determine
12 whether we truly had an environmental
13 contamination, and if so, where did it come from.

14 Rather than two units operating
15 independently, we formed a task force that
16 consisted of Wheeler, from the medical department;
17 Martin Farrar from our plasticizer group -- he was
18 our research director; Bill Richards from the
19 fluids group, a research director; and I believe Ed
20 John was on it, representing public relations
21 department.

22 There were probably others, but those
23 are the ones I remember.

24 Q. Were they appointed to that committee?

1 A. Yes.

2 Q. Who appointed them?

3 A. My recollection would be that I
4 appointed part of them, representing the
5 plasticizer group, and Howard Bergen appointed part
6 of them, representing the fluids group.

7 Q. Did you appoint Martin Farrar?

8 A. Yes, I did.

9 Q. Who else did you appoint?

10 A. I don't recall.

11 Q. Martin Farrar reported directly to you
12 at this time; correct?

13 A. That's correct.

14 Q. He was the director of research for your
15 plasticizer group; is that right?

16 A. That is correct.

17 MR. DUFF: I'd like to show you a document
18 that has been previously marked as Plaintiff's
19 Exhibit 311. This document is dated August 25,
20 1969 and bears production number TNGS 009432.

21 Please take as much time as you need to
22 review this document.

23 (Previously marked Exhibit 311
24 was shown to the witness and is annexed

1 hereto.)

2 THE WITNESS: Okay.

3 BY MR. DUFF:

4 Q. This is a document that you received
5 from Ed John on or about August 25, 1969; correct?

6 A. That's what the paper says. I don't
7 happen to remember that. That's what the paper
8 would indicate.

9 Q. You're indicated as a recipient of this
10 document; correct?

11 A. That is true.

12 Q. This document was sent by Ed John, who
13 was a member of the PCB task force that you were
14 referring to; correct?

15 A. That's what this paper says, even though
16 I don't recall that.

17 Q. He sent this document to the other
18 members of the PCB task force; correct?

19 A. That's what this paper says.

20 Q. He copied this document to others,
21 including yourself; correct?

22 A. That's what this paper shows.

23 Q. Who was R.J. Stratmeyer?

24 A. Ray Stratmeyer was in the manufacturing

1 department of this unit of Monsanto, and at the
2 time he left Monsanto, he was the director of
3 manufacturing of the -- I believe what was called
4 the organic chemicals division. He was a
5 manufacturing manager.

6 Q. When you refer to "this unit," do you
7 mean the organic chemicals division?

8 A. Yes.

9 Q. Who was J.J. Spano?

10 A. I don't recall. That's a familiar name,
11 but I don't recall.

12 Q. The PCB task force was given the
13 responsibility of outlining a future program to be
14 pursued by Monsanto in the manufacturing, marketing
15 and consumer use of Aroclor; correct?

16 A. That's what this paper says.

17 MR. CHAMBERS: Let me object to the form. I
18 think you said "consumer use" rather than "customer
19 use," as the document is worded.

20 THE WITNESS: That's what this paper says,
21 even though I don't recall that personally.

22 Let me expand a bit. I do recall that
23 there was a task force assigned to this particular
24 problem. That, I do recall.

1 BY MR. DUFF:

2 Q. Is the assignment that was given to that
3 task force, which is reflected in this document,
4 consistent with your recollection of what that task
5 force assignment was?

6 A. Yes, I would say that's consistent.

7 MR. DUFF: Please mark this document as
8 Exhibit 402.

9 (Plaintiff's Exhibit 402
10 was marked for identification.)

11 BY MR. DUFF:

12 Q. Mr. Springgate, this document has been
13 marked as Plaintiff's Exhibit 402. It is dated
14 August 25, 1969 and has the indication "Draft
15 8/25/69" at the top of the page as well. It bears
16 production number TNGS 009431.

17 Please take as much time as you need to
18 review this document.

19 A. All right.

20 Q. Do you recognize any of the handwriting
21 on this page?

22 A. No, I don't.

23 Q. Do you recall a draft of this document
24 was circulated to you before it was sent out?

1 A. No, I don't recall that.

2 MR. DUFF: I'd like to show you a document
3 which has been previously marked as Plaintiff's
4 Exhibit 312.

5 (Previously marked Exhibit 312
6 was shown to the witness and is annexed
7 hereto.)

8 BY MR. DUFF:

9 Q. This document has the date 8-25-69 and
10 bears production numbers TNGS 009429 through 30.

11 Please take as much time as you need to
12 review this document.

13 A. Okay.

14 Q. Did you attend the meeting as reflected
15 by these notes?

16 A. I don't recall.

17 MR. CHAMBERS: Let me object to the form.
18 When you say attend a meeting as reflected by these
19 notes, is there something you're looking at that
20 reflects Mr. Springgate's presence at this meeting
21 that I'm missing? Otherwise I would object on the
22 grounds that the document does not reflect
23 Mr. Springgate's presence at such a meeting.

24 BY MR. DUFF:

1 Q. You said earlier that you appointed
2 Martin Farrar to a PCB task force; correct?

3 A. That's correct.

4 Q. On the second page of this document, it
5 is indicated that a decision was made at the
6 meeting reflected by these notes to put together a
7 committee which was given the assignment of putting
8 an overall program on paper. Martin Farrar was
9 made a member of that committee; correct?

10 A. That's what it says, yes.

11 Q. Did you attend the meeting at which
12 Martin Farrar was made a member of the committee
13 that was appointed to put an overall program
14 relating to PCBs on paper?

15 A. I do not recall that, no. I do not
16 recall, period.

17 Q. Did you attend a meeting where Elmer
18 Wheeler discussed inquiries that Monsanto had
19 received relating to the PCB problem on or about
20 August 25th, 1969?

21 A. I don't recall.

22 Q. Did you attend a meeting on or about
23 August 25th, 1969 at which Elmer Wheeler discussed
24 a study by the Wisconsin Alumni Research Fund?

1 A. I do not recall.

2 Q. Did you attend any meetings when the PCB
3 problem was discussed?

4 A. Yes. I attended lots of meetings where
5 the PCB problem was discussed.

6 Q. Do you recall any of those meetings?

7 A. I beg your pardon?

8 Q. Do you recall what was discussed at any
9 of those meetings?

10 A. Only in general terms.

11 Q. What was discussed?

12 A. Back to the things that I do recall, it
13 would be that PCBs were being found, usually by
14 university groups, in some waterways of the United
15 States; and, at one point in time, I remember PCBs
16 were being found in milk as a result of some cattle
17 being fed from silage that contained PCBs.

18 I remember some discussions of contacts
19 with governmental agencies, and a lot of
20 discussions with university laboratories. I
21 remember discussions of the need to add equipment
22 to Monsanto's own analytical laboratories and the
23 need to develop some new procedures on identifying
24 extremely low levels of PCBs.

1 I remember those subjects in the
2 meetings, but I don't remember specific dates or
3 attendees.

4 Q. Do you recall what was discussed with
5 respect to the identification of PCBs in waterways
6 by university groups?

7 A. Again, only in general terms. General
8 terms meaning there was a family of PCB products,
9 different degrees of chlorination of the biphenyl.
10 Most of these products were not 100 percent pure,
11 meaning Aroclor 1250 was not 100.000 Aroclor 1250.
12 It had a little bit of the higher chlorinated chain
13 and a little bit of the lower chlorinated chain.
14 So if you found PCBs in the environment, you still
15 weren't sure which product it might have come
16 from.

17 There were different -- I remember
18 conversations about the biodegradation of PCBs.
19 Some products were more degradable than others or
20 would degrade more quickly than others. I remember
21 that kind of subject matter in conversation, but in
22 generalities, not specifics.

23 Q. Do you recall what Aroclors were
24 considered to be biodegradable as opposed to

1 Aroclors that were not considered biodegradable?

2 A. No, I don't.

3 MR. CHAMBERS: Let me object to the form. I
4 think the testimony was there was discussion about
5 some of the products that degraded faster than
6 others, but no testimony about anything being
7 considered biodegradable or not. May have been.
8 Just, I don't think there was a good foundation for
9 your question.

10 THE WITNESS: I don't remember the specifics
11 of the biodegradation data. The answer is no, I
12 don't remember the specifics.

13 BY MR. DUFF:

14 Q. What do you recall -- strike that.

15 What conversations did you have relating
16 to communications with governmental agencies with
17 respect to PCBs?

18 A. What I recall is a man named John Mason
19 who had contacted several governmental agencies to
20 inform them of what we were finding and to get
21 their input. What I recall is that John Mason, who
22 was a citizen of the UK at the time, became better
23 acquainted with the agencies of the U.S. Government
24 than most of us who were born and raised and lived

1 full time in the United States. He was finding his
2 way through the government agencies. I remember
3 that very clearly.

4 Q. What did Monsanto tell the governmental
5 agencies it was finding?

6 MR. CHAMBERS: Object to the form. Lacks
7 foundation.

8 MR. DUFF: He just said that.

9 THE WITNESS: I don't recall specifically what
10 those conversations were about. I did not have
11 firsthand knowledge of the conversations.

12 BY MR. DUFF:

13 Q. What discussions were had with
14 university laboratories relating to PCBs at this
15 time?

16 A. Again, I can't recall specifics. I do
17 recall reading reports where various university
18 agencies, university analytical laboratory groups,
19 had requested samples of the Aroclor products from
20 Monsanto, and Monsanto had responded by sending
21 them samples of the various products so that they
22 could compare what they were finding with what
23 Aroclors were as provided by Monsanto.

24 Q. Do you recall anything else?

1 A. No.

2 Q. What additional equipment needed to be
3 added to Monsanto's analytical labs?

4 A. I don't recall the specifics of that
5 either. The generality that I recall was that they
6 were trying to identify compounds that were
7 appearing in the fish or wildlife in extremely low
8 levels, meaning parts per billion or a few parts
9 per million. This took equipment and techniques
10 that were different than were normally used by the
11 analytical group in Monsanto doing this work.

12 Q. Do you have any experience with
13 analytical chemistry yourself?

14 A. Extremely little.

15 Q. What experience do you have?

16 A. Analytical chemistry is a requirement
17 for chemical engineers.

18 Q. Did you take a course in analytical
19 chemistry when you were receiving your Bachelor of
20 Science degree?

21 A. Yes.

22 Q. Beyond that, do you have any other
23 training or experience in analytical chemistry?

24 A. No.

1 Q. What procedures did Monsanto need to
2 develop with respect to low levels of PCBs?

3 A. I don't have firsthand knowledge of
4 that, and I don't recall that. But also I probably
5 never had firsthand knowledge of that.

6 Q. Who was Swisher?

7 A. What's the name?

8 Q. Swisher, referred to on the second page
9 of this document.

10 A. I don't recall.

11 MR. DUFF: I'd like to show you a document
12 which has been previously marked as Plaintiff's
13 Exhibit 313. This document is also dated August
14 25, 1969 and bears production numbers TNGS 009421
15 through 28.

16 (Previously marked Exhibit 313
17 was shown to the witness and is annexed
18 hereto.)

19 BY MR. DUFF:

20 Q. Let me ask you at the outset if you
21 recognize any of the handwriting in this document.

22 A. No, I don't.

23 Q. Please take as much time as you need to
24 review this document.

1 A. Okay.

2 Q. This document reflects notes of a
3 meeting of a PCB committee on August 25th, 1969;
4 correct?

5 A. That's what it says, yes.

6 Q. Directing your attention to the last
7 page of this document, do you have that in front of
8 you?

9 A. Yes, I do.

10 Q. Do you see where it says "PCB
11 committee"?

12 A. Yes.

13 Q. And then there are individuals listed to
14 the right of that?

15 A. Correct.

16 Q. Your name is one of those names; is that
17 right?

18 A. That's correct.

19 Q. Does that refresh your recollection
20 regarding whether or not you were on a PCB
21 committee in August of 1969?

22 A. It does not. I think the PCB committee
23 is probably the group of six.

24 Q. You're talking about the PCB task force?

1 A. Yes.

2 Q. There's a reference to task force on
3 this page as well; isn't there?

4 A. Yes.

5 Q. And there's a second column of names
6 under that; is that right?

7 A. I agree there is a second column of
8 names. I don't remember something called a PCB
9 committee.

10 Q. Does this document refresh your
11 recollection regarding whether or not you attended
12 a meeting where the PCB problem was discussed on
13 August 25th, 1969?

14 A. No, it doesn't. I don't recall that.

15 Q. Directing your attention to the first
16 page of this document, do you have that in front of
17 you?

18 A. Yes, I do.

19 Q. Did you ever discuss contacting all
20 customers to assure them there is no way to
21 contaminate without detection?

22 A. I'm sorry. Would you try that again?

23 MR. DUFF: I'm looking at the bottom of the
24 first page of this document.

1 Would you please read the question back,
2 for the witness?

3 (The pending question was read.)

4 THE WITNESS: I am quite sure I never
5 discussed contacting Therminol customer one way or
6 the other. That was outside the scope of my
7 plasticizer business. That was the fluids
8 business, and I'm sure I didn't discuss their
9 customer contacts at all, one way or the other.
10 BY MR. DUFF:

11 Q. Did you ever discuss contacting all
12 plasticizer customers to assure them that there was
13 no way to contaminate the environment with PCBs
14 without detection?

15 MR. CHAMBERS: Object to the form.

16 MR. DUFF: Independent of this document.

17 THE WITNESS: I don't believe we ever
18 contacted customers with that specific message.

19 In the plasticizer business, we tried to
20 keep our customers informed of where we were on the
21 investigation of PCBs; but in the plasticizer
22 business, we eventually discontinued the product.
23 The point of contaminating without detection was
24 never an issue that I ever remember discussing.

1 BY MR. DUFF:

2 Q. How did you keep plasticizer customers
3 informed regarding where Monsanto was in the
4 investigation of PCBs?

5 A. My recollection was that the subject of
6 PCBs was appearing in the public press and in the
7 scientific press. So we were questioned by our
8 customers as to where we were, or sometimes we
9 would voluntarily tell them where we were. This
10 was primarily with our largest customers, meaning
11 the carbonless carbon paper people, the larger,
12 more sophisticated companies.

13 There was one use that had to do with a
14 table lamp that was extremely -- an unsophisticated
15 customer, and I doubt that we ever contacted him
16 about the status of PCBs.

17 Q. Why didn't you contact Monsanto's less
18 sophisticated customers who were using PCBs?

19 A. Because we didn't, at that point in
20 time, know which direction we were going to go. We
21 didn't know where all this was going to take us.
22 Some customers were simply not capable of tracking
23 where we were and where we speculated we were going
24 to wind up.

1 Where people were large customers with
2 sophisticated research groups, they would read in
3 the press that there was a question about PCB
4 contamination, and they would talk to us, and we
5 would talk to them in return.

6 Q. Did you discuss where Monsanto was on
7 the investigation of PCBs with plasticizer
8 customers to help those customers appreciate the
9 significance of allowing PCBs to escape into the
10 environment?

11 MR. CHAMBERS: Let me --

12 THE WITNESS: You lost me.

13 MR. CHAMBERS: Let me ask to have that
14 question read back again.

15 MR. DUFF: Please read the question back for
16 the witness and for Mr. Chambers.

17 (The pending question was read.)

18 MR. CHAMBERS: Object to the form. I'm still
19 not sure I have it, but if you're able to respond,
20 you may.

21 THE WITNESS: Let me work on the last two
22 phrases. In order to let them understand the
23 significance of escape into the environment, the
24 answer to your question is no.

1 BY MR. DUFF:

2 Q. Wasn't it important at that time for
3 your customers to understand how PCBs were getting
4 into the environment?

5 A. I think the answer to that is we,
6 ourselves, were trying to understand how PCBs were
7 getting into the environment. So, until we reached
8 the point in time that we were convinced that we
9 understood where the PCBs were coming from, we
10 didn't really have a recommendation for our
11 customers. That's the problem.

12 May I elaborate a bit? When we started
13 out and originally found PCBs in the environment,
14 we lined up the most probable cases and the least
15 probable sources.

16 Now, this was a changing picture
17 over time because originally we weren't sure there
18 were PCBs at all. Then we became convinced there
19 probably were PCBs, so the question is which ones.

20 Over this time frame, you start to
21 speculate on how does this wind up in the
22 environment. Originally we thought that some
23 closed systems, like those used for transformers,
24 probably did not escape into the environment, and

1 therefore that was reasonably safe. We looked at
2 things like the sealant around a window and said
3 that's not likely to escape into the environment.

4 Originally we thought that the use for
5 carbonless carbon paper was not escaping into the
6 environment, but over a period of time, we found
7 out that the causes of PCBs that wound up in the
8 environment was considerably different than we
9 originally thought.

10 We found out that that carbonless carbon
11 paper, number one, was spread around as carbon
12 paper. Number two, it was collected and sent back
13 to the mills to be made into cardboard boxes. It
14 was recycled.

15 On the second time around, some of the
16 PCBs were being washed out of that paper and were
17 honestly going into streams. So in the carbonless
18 carbon paper that we originally thought was not
19 distributing the material into the environment, as
20 time went on, we found that that was probably one
21 of the biggest distributors of PCBs into the
22 environment.

23 So all of this occurred over a period of
24 about a year and a half or something, and our

1 thoughts were changing during this period of time.

2 But we were trying to get to the point
3 that we could determine whether we did have a
4 problem and would have to discontinue the product,
5 or we did not have a problem, would have to
6 discontinue some products but not others. We were
7 trying to figure out where all this was going to
8 take us.

9 Now, you can't arbitrarily go to a
10 customer and say, "I'm going to discontinue the
11 product tomorrow" because he has a system set up to
12 use the product and he needs it for his business
13 purposes. So until you have a good reason to
14 discontinue a product, ethically, you can't
15 arbitrarily shut it off.

16 Also, this is not the first product that
17 Monsanto ultimately shut down. We've been through
18 shutdowns before. I can think of one specific one,
19 that I got involved in later, in our rubber
20 chemicals business at the Nitro plant that turned
21 out to be carcinogenic to the human being. When
22 we found that out, we shut it down quickly. Once
23 you decide it's carcinogenic to the human being,
24 people were in contact through both manufacture and

1 use of it, we shut it down very quickly.

2 Q. What is quickly?

3 A. Quickly, in that particular case, where
4 it can be that harmful to a human being, quickly is
5 a matter of days or weeks. When you get your mind
6 around the fact that this data is real, that's it.
7 You shut it down, and we shut it down. So shutting
8 down products is -- was not a new thing to
9 Monsanto. We had had problems before, of some type
10 or other.

11 So what we were trying to do here was to
12 find out what is the problem. How do you get from
13 A to B; and, if it is a problem, then we can go to
14 our customers and say this is the problem. That's
15 what we eventually did. We went to the customers
16 in the plasticizer group and said, "This is a
17 problem. This is a persistent product, one of the
18 benefits in the first place, but it is a persistent
19 product that is being distributed into the
20 environment, and the Monsanto Corporation has
21 decided to discontinue this product." You look the
22 customer in the eye and say that's the business
23 reason and that's what we're going to have to do.

24 Q. When Monsanto knew that PCBs were highly

1 toxic to some forms of marine and aquatic life, why
2 didn't Monsanto shut down the PCB business at that
3 time?

4 A. Let me differ with you. I don't think
5 PCBs are considered highly toxic. I think PCBs
6 are way down the list of compounds in terms of
7 toxicity. PCBs are very safe to the individual.

8 Q. My question was in relation to aquatic
9 and marine life.

10 MR. CHAMBERS: I'll object to the form of the
11 question because it lacks foundation. I think
12 that's what Mr. Springgate is pointing out.

13 THE WITNESS: My recollection of what happened
14 was that, when we finally got to the point that
15 PCBs were truly being identified in fish and shrimp
16 in the waterways, we very quickly thereafter did
17 shut it down.

18 BY MR. DUFF:

19 Q. Was it within a matter of days or weeks?

20 A. Yes.

21 Q. And that was the responsible thing to
22 do; is that right?

23 MR. CHAMBERS: Object to the form.

24 THE WITNESS: The decision was -- all I can

1 say is how it looked to me. It appeared so to me.

2 BY MR. DUFF:

3 Q. As a business director of the
4 plasticizer group; is that right?

5 A. That's correct.

6 Q. Directing your attention to the second
7 and third pages of the document that's in front of
8 you, which is Exhibit 313, do you -- strike that.

9 Did you discuss plant effluent that had
10 escaped from Monsanto's Pensacola plant into the
11 Escambia River in 1969?

12 A. I have a vague recollection of testing
13 the outflow from the Pensacola plant, but I don't
14 remember that in any detail.

15 Q. What do you recall?

16 A. I think I just told you everything I
17 recall about that.

18 Q. Did state officials visit the Pensacola
19 plant in 1969?

20 A. I don't recall.

21 Q. Do you recall discussing, at a meeting,
22 that, following a visit from state officials at the
23 Pensacola plant, there was a feeling that they had
24 not asked any searching questions?

1 MR. CHAMBERS: Object to the form. Lacks
2 foundation.

3 THE WITNESS: I don't recall that subject at
4 all.

5 BY MR. DUFF:

6 Q. Was there a sense within Monsanto that
7 the lid had been kept on with respect to the
8 pollution that escaped from the Pensacola plant in
9 1969?

10 MR. CHAMBERS: Object to the form to the
11 extent that question calls for speculation.

12 THE WITNESS: Well, I can't respond to what
13 Monsanto thought, whatever Monsanto is, so I can't
14 comment on that. I personally have no recollection
15 of that.

16 BY MR. DUFF:

17 Q. What type of Monsanto product was
18 escaping into the Escambia River in 1969?

19 A. I have no recollection of that.

20 Q. Do you recall that it was Pydraul AC?

21 A. I have no recollection of that.

22 MR. CHAMBERS: Let me note an objection as
23 well. To the extent the questions you are asking
24 are based on this document, the handwriting on that

1 second page with respect to questions does have the
2 word "satisfied" after it. For the sake of
3 completeness, I'm going to note that. Let's move
4 forward.

5 BY MR. DUFF:

6 Q. Did you discuss with anyone that the
7 Pensacola plant felt that it could be in for a
8 lawsuit by shrimp fishermen in the Pensacola Bay
9 following the escape of Pydraul AC into the
10 Escambia River from the Pensacola plant?

11 A. I don't recall that.

12 Q. Do you recall that PCBs that escaped
13 from Monsanto's Pensacola plant were associated
14 with the death of shrimp in the Escambia Bay?

15 A. I don't recall that. I have some
16 recollection of the detection of some PCB in
17 shrimp, but I don't know where or when. I don't
18 recall that.

19 Q. Did you ever state, at a meeting
20 relating to PCBs, that your overall impression of
21 the PCB problem was that researchers and the press
22 would put Monsanto out of the Aroclor business?

23 A. I don't recall ever saying that. It
24 doesn't even sound like something I would say.

1 Q. Did anyone else ever say that to you?

2 A. Not that I can recall.

3 Q. Did you attend a meeting where the
4 alternatives for the future course of Monsanto's
5 Aroclor business were discussed?

6 A. Yes, I'm sure I have.

7 Q. Let me direct your attention to the
8 fifth page of this document.

9 Do you see at the top of this page where
10 it says, "Subject is snow balling"?

11 A. Yes, I do.

12 Q. And it says, "Where do we go from here."

13 Do you see that?

14 A. Yes.

15 Q. And there are three alternatives listed
16 on this page.

17 Do you see those?

18 A. Yes, I do.

19 Q. And the first alternative is to go out
20 of business?

21 A. That's what it says, yes.

22 Q. Do you recall a discussion of that
23 alternative?

24 A. Yes, I do, at a date when we were

1 preparing a presentation for our executive
2 management group. We prepared several
3 alternatives. At that time, I remember discussing
4 alternatives.

5 Q. Did you discuss a second option as
6 selling the hell out of PCBs as long as we can and
7 do nothing else?

8 A. No, I don't recall that option.

9 Q. Was the option that you ultimately
10 pursued to try and stay in the Aroclor business?

11 A. The option that we ultimately pursued
12 was to not remain in the Aroclor business for the
13 plasticizer group. My recollection is -- I can
14 only speak for plasticizers. The functional fluids
15 group was somewhat different. In the plasticizer
16 group, the option we ultimately pursued was to
17 discontinue the manufacture and sale of
18 plasticizers.

19 Q. So you went with alternative number one
20 here, getting out of the business; is that right?

21 A. In the plasticizer group, we went out of
22 the business, but I have no way of knowing -- I
23 don't know who the writer was of this particular
24 paper. He shouldn't be very proud of himself. So

1 I don't know where this paper came from or who
2 generated it, but it doesn't speak for my business,
3 nor Monsanto as I knew it.

4 Q. And that was from your perspective as
5 director of the plasticizer group; is that right?

6 A. That's correct.

7 Q. Was the big question at the time, in
8 August of 1969, what should Monsanto tell its
9 customers?

10 A. I would not say that was the big
11 question. The big question was what should
12 Monsanto do about the business. Are we truly
13 polluting the environment? And if the answer to
14 that is yes, some of the following steps take care
15 of themselves. So the question is what should
16 Monsanto do. Is it truly an environmental
17 contaminant, and if so, what should Monsanto do?

18 Q. Directing your attention to the next
19 page, do you see the two items listed at the top of
20 that page?

21 This page bears production number
22 TNGS 009426. Do you have that page in front of
23 you?

24 A. Yes, I see that.

1 Q. Do you see the two items listed at the
2 top of that page?

3 A. Yes.

4 Q. One is "Have alternate products."
5 Do you see that?

6 A. Yes.

7 Q. And two is "or help customers clean up
8 their use."

9 A. I see that.

10 Q. Did you discuss developing alternate
11 products or helping customers clean up their use
12 with respect to PCBs?

13 A. Again, I can only speak from the
14 plasticizer business. From the plasticizer
15 business, once we decided -- once the corporation
16 decided we were going to discontinue the sale of
17 Aroclors as plasticizers, we did help customers
18 find alternate products. We did that. Helped
19 customers clean up their use did not apply to the
20 plasticizer business unless you had excess material
21 you needed to return.

22 Q. Some of the ways that your customers
23 used Aroclors allowed Aroclors to get into the
24 environment; correct?

1 MR. CHAMBERS: Object to the form. Lacks
2 foundation.

3 THE WITNESS: Monsanto's ultimate conclusion
4 was that Aroclors sold into certain markets did,
5 indeed, wind up in the environment.

6 BY MR. DUFF:

7 Q. And some of those applications included
8 use of plasticizers that were Aroclors; correct?

9 A. That is correct.

10 Q. So some of those customers -- strike
11 that.

12 Those customers that used Aroclors in
13 applications that allowed PCBs in the environment
14 needed to clean up their use of those products;
15 correct?

16 MR. CHAMBERS: Object to the form.

17 THE WITNESS: I guess I don't understand what
18 you mean. We were going to discontinue the
19 manufacturing and sale of the products as a
20 plasticizer. So I don't understand what you mean.

21 BY MR. DUFF:

22 Q. Aroclor was used in carbonless copy
23 paper; correct?

24 A. That is correct.

1 Q. How does one use -- strike that.

2 How did one use carbonless copy paper
3 back in 1969?

4 MR. CHAMBERS: Object to the form to the
5 extent you're calling for speculation.

6 BY MR. DUFF:

7 Q. I'm asking in the context of your
8 knowledge of your customer's application,
9 specifically here carbonless copy paper.

10 A. To the best of my knowledge, carbonless
11 carbon paper, copy paper, was being manufactured
12 and sold broadly for thousands of applications.
13 I'm not an authority on paper farms and so forth.

14 Q. Was carbonless copy paper used to create
15 multiple copies of a document by merely pressing a
16 pen on top of the first page and then the copy
17 would appear on subsequent attached sheets?

18 A. That's my understanding, yes.

19 Q. That was an application where carbon
20 paper was not necessary; correct?

21 A. That is correct.

22 Q. That's why it was carbonless copy paper;
23 correct?

24 A. Correct.

1 Q. And it was the carbonless copy paper at
2 this time that contained Aroclor; correct?

3 A. Yes, or technically, I guess, probably a
4 thin layer on the back of the paper.

5 Q. And after somebody used a sheet of
6 carbonless copy paper, would those sheets typically
7 be thrown out in the garbage?

8 MR. CHAMBERS: Object to the form.
9 Hypothetical.

10 THE WITNESS: My recollection was that most
11 carbonless carbon paper is actually used by
12 businesses and offices where they collected excess
13 paper and recycle paper. That's what I think
14 happened. That's my understanding of what happened
15 to the carbonless carbon paper.

16 BY MR. DUFF:

17 Q. Did you also understand that some of the
18 carbonless paper went into garbage?

19 A. I would say I guess that's logical that
20 that happens; yes.

21 Q. Was that your understanding at that time
22 in 1969?

23 A. No. In 1969, when we started looking
24 for the sources of PCBs, we didn't originally

1 believe that carbonless carbon paper was a method
2 of distributing PCBs. It was only after many
3 months of work that we started to reach the
4 conclusion that that was one of the distribution
5 methods of PCBs.

6 Q. Once you realized that, was it then
7 necessary to clean up that use of carbonless copy
8 paper?

9 A. We discontinued the sale of the product
10 to the manufacturer of carbonless carbon paper. I
11 might also add we didn't run around the world
12 trying to burn all the carbon paper that had ever
13 been made. We didn't consider that our problem,
14 our responsibility.

15 Q. So when you discussed helping customers
16 to clean up their use, it was only with respect to
17 returning unused fluid; is that right?

18 A. Your reference is off of a line off of
19 this sheet; and, frankly, I don't know what the
20 author of this sheet had in mind when he wrote that
21 line. I don't know what he had in mind.

22 To the plasticizer group, clean up their
23 use doesn't make any sense to me. I don't know
24 what that means.

1 Q. Actually, you used the term "unused
2 material" earlier, and that's what I was picking up
3 from. When you said that, were you referring to
4 the return of unused Aroclor to Monsanto?

5 A. Correct.

6 Q. So you were not talking about material,
7 that had been used by customers, that had already
8 gotten into the environment.

9 A. No. That is correct.

10 Back to the carbonless carbon paper. If
11 National Cash Register had several tons of
12 carbonless carbon paper, we considered that their
13 problem, not ours.

14 MR. DUFF: I'd like to show you a document
15 which has been previously marked as Plaintiff's
16 Exhibit 316. This document is dated October 2,
17 1969.

18 (Previously marked Exhibit 316
19 was shown to the witness and is annexed
20 hereto.)

21 BY MR. DUFF:

22 Q. This document bears production numbers
23 TNGS 009475 through 87.

24 Please take as much time as you need to

1 review this document.

2 A. Okay.

3 Q. Does this document reflect the report of
4 the PCB task force?

5 A. That's what the document says, even
6 though I don't recall this specific document.
7 That's what it says.

8 Q. This is a document that was sent to you
9 on October 2, 1969; correct?

10 A. That's what it says, even though I don't
11 recall it.

12 Q. Do you recognize any of the handwriting
13 in this document?

14 A. No, I don't.

15 Q. Directing your attention to the third
16 page of the document which has the number 1 at the
17 top of the page and the title "Objectives," do you
18 see that?

19 A. Yes, I do.

20 Q. Do these objectives -- strike that.

21 Are these the objectives that were
22 recommended to you by the PCB task force?

23 A. I think they probably do, yes.

24 Q. Was the PCB task force also known as the

1 ad hoc committee?

2 A. I don't remember the term "ad hoc
3 committee." I remember the PCB task force, but the
4 people appear to be the same.

5 Q. One of the objectives was to protect
6 continued sales and profits of Aroclors; correct?

7 MR. CHAMBERS: Let me object to the form. The
8 document states that the objective of the committee
9 was to recommend action that will, number one,
10 protect continued sales and profits of Aroclors.

11 BY MR. DUFF:

12 Q. One of the actions recommended by the
13 task force was to protect continued sales and
14 profits of Aroclors; correct?

15 A. That appears to be --

16 MR. CHAMBERS: Well, I'm going to object to
17 the form of that. What it says is that the
18 objective of the committee was to recommend action
19 that will protect continued sales and profits of
20 Aroclors, not that the objective of the committee
21 was to recommend protecting continued sales and
22 profits of Aroclors as you've suggested. That's a
23 misreading of the document, in my view.

24 BY MR. DUFF:

1 Q. You may answer.

2 A. The paper says, "The objective of the
3 committee was to recommend actions that will:
4 1. Protect continued sales and profits of Aroclors;
5 2. Permit continued development and new uses and
6 sales, and 3. Protect the image of the Organic
7 Division and the Corporation as members of the
8 business community recognizing their
9 responsibilities to prevent and/or control
10 contamination of the global ecosystem."

11 That's what it says.

12 Q. Were those the objectives of the PCB
13 plan?

14 A. Sounds generally correct, even though I
15 don't remember that specifically.

16 Q. The probability of success of this plan
17 was discussed -- is discussed on the page that has
18 the number 2 at the top; correct?

19 A. Apparently; that's what it says.

20 Q. At this time, was the identification of
21 PCBs in the environment confirmed?

22 A. I really don't recall that.

23 Q. Do you see the handwritten points at the
24 bottom of this page?

1 A. Yes.

2 Q. The second one says "toxicity towards
3 certain species is high."

4 A. Yes.

5 Q. Is this person mistaken when he says
6 that?

7 MR. CHAMBERS: Object to the form.

8 THE WITNESS: I don't know what species he's
9 referring to. When you do toxicity testing --

10 BY MR. DUFF:

11 Q. Were PCBs highly toxic to some forms of
12 marine and aquatic life?

13 MR. CHAMBERS: Object to the form.

14 THE WITNESS: I don't know.

15 BY MR. DUFF:

16 Q. Did you know in 1969 that PCBs were
17 persistent?

18 A. Persistent, yes. That's one of the
19 benefits of the product in the first place.

20 Q. Did you also know in October of 1969
21 that the likelihood of natural origin or
22 degradation of PCBs was remote?

23 MR. CHAMBERS: Would you read that question
24 back, please?

1 (The pending question was read.)

2 MR. CHAMBERS: I object to the form, but you
3 should respond.

4 THE WITNESS: I don't recall that at all.

5 BY MR. DUFF:

6 Q. The recommendations of the task force to
7 you and Mr. Bergen are set out on the third and
8 fourth pages of this document or the pages that
9 have the numbers 3 and 4 at the top; correct?

10 A. I don't remember any of this. That's
11 what it says. I'd like to also point out to you
12 that this looks like a draft copy of something. It
13 doesn't look like the final report.

14 Q. I'd like to direct your attention to the
15 last full paragraph on the page that has the
16 number 6 at the top.

17 Do you see that? This is in a text
18 called "Basis for Recommendations"?

19 A. I see that that's what it says, yes.

20 Q. Do you see the discussion in the last
21 full paragraph of this page of uses of PCBs in the
22 plasticizer area?

23 A. Yes, I see that.

24 Q. Are the uses that are discussed here

1 consistent with your recollection of the uses of
2 Aroclors as plasticizers when you were business
3 director of the plasticizer group?

4 A. It would be my recollection that this
5 was one use of Aroclors. This is a very small use,
6 but it is one use of Aroclors.

7 Q. Used in rubber-based paint or surface
8 coating?

9 A. Yes.

10 Q. Another use is referred to in the next
11 paragraph as use as highway marking paints; is that
12 right?

13 A. I recall that, yes.

14 Q. Did you know that Aroclors were also
15 used as caulking compound and sealants?

16 A. Yes, I did.

17 Q. I'd like to direct your attention to the
18 bottom of the page that has the number 7 at the
19 top.

20 Do you see the last full paragraph on
21 that page? It begins "In August, a laboratory..."

22 A. Yes, I see that.

23 Q. Does this document refresh your
24 recollection regarding Pydraul AC that escaped from

1 Monsanto's Pensacola plant in 1969?

2 A. No, it doesn't. I don't recall that.

3 Q. This document indicates that the
4 Department of the Interior of the Bureau of
5 Commercial Fisheries in Florida reported that five
6 parts per billion of the Aroclor 1254 killed baby
7 shrimp in 18 days; correct?

8 MR. CHAMBERS: Let me object to the form and
9 ask you to read that question back.

10 (The pending question was read.)

11 THE WITNESS: Where are you reading that?

12 MR. CHAMBERS: Let me object to the form and
13 just read that last paragraph, which states, "In
14 August, a laboratory of the Bureau of Commercial
15 Fisheries, Department of Interior, at Pensacola
16 Florida, reported finding..." and so forth.

17 BY MR. DUFF:

18 Q. You may answer the question.

19 A. I don't recall that, no.

20 Q. That's indicated in this document;
21 correct?

22 A. You're correctly reading the document;
23 but I don't recall any portion of this.

24 Q. Do you recall efforts to reduce losses

1 of Aroclor in Monsanto plants in or about 1969?

2 A. Yes, I do recall that.

3 Q. What do you recall?

4 A. Simply that, just as you stated it.

5 There was an attempt to be sure that Aroclors were
6 not escaping from the plant in the water systems
7 from the plants that manufactured Aroclors.

8 Q. Directing your attention to the page
9 that has the number 8 at the top and specifically
10 the section that's numbered 4, "Losses from
11 Monsanto Plants."

12 Do you see that?

13 A. Yes.

14 Q. Do you recall that an investigation
15 showed that the waters in receiving streams below
16 the Anniston plant contained significant parts per
17 million concentrations of PCB?

18 A. I see that it says that, yes. Do I
19 remember that? No.

20 MR. CHAMBERS: Wait. I need to see where we
21 are.

22 THE WITNESS: The first paragraph under 4.

23 MR. CHAMBERS: Okay. Thank you.

24 BY MR. DUFF:

1 Q. Did you realize, at that time, that more
2 ominous, perhaps, was the fact that sediment in the
3 bottom of these streams miles below Monsanto's
4 plants may have contained up to 2 percent Aroclor?

5 A. I don't recall that. You are correctly
6 reading from the paper, but I do not recall that.

7 Q. Directing your attention to the last
8 paragraph on this page, did you realize, when you
9 learned about the loss of PCBs from Monsanto's
10 Pensacola plant, that all Monsanto plants using
11 Aroclors should be made aware of the potential
12 problem and efforts to eliminate any losses?

13 A. I don't recall that.

14 Q. This document indicates that one to
15 three gallons of PCBs were being lost at the
16 Pensacola plant per day. Is that right?

17 A. You are correctly reading the document.
18 I don't have any recollection of that.

19 MR. DUFF: Off the record.

20 (The luncheon recess was taken
21 at 12:47 p.m.)

22

23

24

1 APPEARANCES OF COUNSEL:

2

3 (P.M. SESSION)

4

5

6 KEVIN B. DUFF, ESQ.

7 ROLLY L. CHAMBERS, ESQ.

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18 REPORTED BY:

19

20 DEIRDRE F. CRAM, C.S.R. 9339

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23

24

1 (The deposition of JAMES E.
2 SPRINGGATE was reconvened at 1:53 p.m.)

3
4 JAMES E. SPRINGGATE,
5 having been previously duly sworn, testified
6 further as follows:

7
8 MR. DUFF: Mr. Chambers, I would like to
9 address an issue with you on the record before we
10 return to questions for Mr. Springgate.

11 MR. CHAMBERS: Okay.

12 MR. DUFF: This morning, Mr. Springgate
13 indicated that he had given a deposition in the
14 Transwestern litigation, and I believe that's borne
15 out by his testimony. I do not believe that a
16 transcript from Mr. Springgate was produced by
17 Monsanto to Tennessee Gas Pipeline, and I would ask
18 that that be provided.

19 MR. CHAMBERS: Was one asked for?

20 MR. DUFF: Yes, one was. If you look at
21 Tennessee's first request for production, request
22 No. 12, you'll see that Tennessee asks for all
23 deposition transcripts of former or current
24 Monsanto employees in that case; that case being

1 Transwestern.

2 MR. CHAMBERS: Okay. If that has been the
3 case, we'll certainly get you a copy.

4 MR. DUFF: If at all possible, I would like to
5 get a copy today so that we can conclude this
6 deposition tomorrow.

7 MR. CHAMBERS: Since it's now five o'clock,
8 east coast time, I think that's a pretty
9 unreasonable thing to expect. We certainly will
10 get it to you in due course as best we're able, if
11 it hasn't been given already.

12 MR. DUFF: Do you need to take a break to make
13 a phone call before business closes?

14 MR. CHAMBERS: If your expectation is that
15 that thing can be sent out this evening, I don't
16 think that's going to be workable, even if we break
17 now at this point in the day.

18 MR. DUFF: I would note that it's only 4:00
19 p.m. in St. Louis right now.

20 MR. CHAMBERS: I'll call, but I'm very
21 pessimistic that that thing can be provided within
22 the time frame you're talking about.

23 MR. DUFF: Off the record.

24 (Discussion off the record.)

EXAMINATION (CONTINUED)

BY MR. DUFF:

Q. Mr. Springgate, I'm handing you a document that's been previously marked as Plaintiff's Exhibit 369. This document has the printed date with the heading of October 1969 and has a date in the upper right-hand corner of November, and the date -- specific date is unclear. It bears production numbers TRAN 058372 through 73.

Please take as much time as you need to review this document.

(Previously marked Exhibit 369 was shown to the witness and is annexed hereto.)

THE WITNESS: Okay.

BY MR. DUFF:

Q. This was a document that you received from the public relations department at Monsanto in or about October 1969; correct?

A. It says it's a report from the public relations department. I don't remember the report, but the report does say it's a public relations report from October 1969.

1 Q. And you're indicated as a recipient;
2 correct?

3 A. Yes, that's the way it appears.

4 Q. Do you recognize any of the handwriting
5 on this document?

6 A. No, I don't.

7 Q. In October 1969, a memo was sent to
8 plant managers, communicators and field offices
9 alerting key Monsanto personnel to the growing PCB
10 controversy; correct?

11 A. That's what it says here. I don't
12 remember that, but you're reading of the statement
13 is correct.

14 Q. Also in October 1969, an updated
15 position statement on polychlorinated biphenyls was
16 prepared and copies were provided to the PCB
17 committee and task force members; correct?

18 A. I don't remember that either. That's
19 what this particular report says.

20 Q. Also, in October 1969, the PCB task
21 force reported -- sorry. Excuse me. Also in
22 October of 1969, the PCB task force report on the
23 future of Aroclor was completed; correct?

24 A. That's what this says, but I don't

1 recall that.

2 Q. What was the bird kill in the Irish Sea
3 that took place in October 1969?

4 A. I don't recall.

5 Q. I'd like to go back to the bottom of the
6 first page of this document.

7 What was the position statement that was
8 updated in October 1969?

9 A. I don't recall. The report says,
10 "updated position statement on polychlorinated
11 biphenyl was prepared during the month," but I
12 don't recall that.

13 MR. DUFF: I'd like to show you a document
14 that's been previously marked as Plaintiff's
15 Exhibit 319. This document is dated November 10,
16 1969 and bears production numbers TNGS 009488
17 through 93.

18 Please take as much time as you need to
19 review this document.

20 (Previously marked Exhibit 319
21 was shown to the witness and is annexed
22 hereto.)

23 MR. CHAMBERS: While the witness is reviewing
24 that, let me state that my production records

1 indicate that the deposition transcript you've
2 inquired about was in Box 123 at Folder 738. I
3 would suggest you have your folks look carefully
4 for that.

5 MR. DUFF: Off the record.

6 (Discussion off the record.)

7 BY MR. DUFF:

8 Q. Have you had an opportunity to review
9 Exhibit 319, Mr. Springgate?

10 A. Not quite. Just a moment.

11 Okay.

12 Q. This is a document that you received
13 from Ed John on or about November 10, 1969;
14 correct?

15 A. I did not recall that. On the other
16 hand, that's apparently what the paper says.

17 Q. This document was transmitted to you
18 along with a statement from Monsanto company dated
19 October 29, 1969; correct?

20 A. I did not recall that, but that's what
21 the paper says, yes.

22 Q. This is the position statement that was
23 referred to in Exhibit 369, the public relations
24 report; correct?

1 MR. CHAMBERS: I object to the form. Calls
2 for speculation.

3 THE WITNESS: I'm confused. The question was
4 what?

5 MR. DUFF: Would you please read the question
6 back for the witness?

7 (The pending question was read.)

8 MR. CHAMBERS: Same objection to the form.
9 Calls for the witness to speculate.

10 THE WITNESS: I don't recall that. I don't
11 recall this paper. I don't recall this paper, so I
12 don't see how I can answer that. I don't recall
13 this.

14 BY MR. DUFF:

15 Q. The individuals who are listed on the
16 left-hand column of Exhibit 319 were all members of
17 the PCB task force; correct?

18 A. Yes, I believe that is correct.

19 Q. Were the members -- strike that.

20 Were the individuals -- strike that.

21 In the right-hand column, four
22 individuals are listed; correct?

23 A. That's correct.

24 Q. And that's Bergen, Springgate, Spano and

1 Dahlstrom; correct?

2 A. That's correct.

3 Q. Were those the members of the PCB
4 committee?

5 A. I don't remember --

6 MR. CHAMBERS: Let me object to the form of
7 that question. Lacks foundation. Go ahead.

8 THE WITNESS: I don't recall the term "PCB
9 committee." I do recall the term of "PCB task
10 force," AS the names of the people on the left. I
11 don't recall the use of the term "PCB committee."
12 I would believe that the names on the right are the
13 people responsible for the business of which
14 Aroclors are a product. That's true of Bergen.
15 That's true of Springgate, and Dahlstrom was our
16 manager in Europe. I believe I answered previously
17 that Spano doesn't ring a bell with me.

18 BY MR. DUFF:

19 Q. Dahlstrom was manager for what in
20 Europe?

21 A. I think my recollection is that
22 Dahlstrom was the organic division's representative
23 for all of its products in Europe.

24 Q. Directing your attention to the

1 attachment to Ed John's November 10, 1969
2 memorandum, was this a press release issued by
3 Monsanto in October 1969?

4 A. I don't know what this paper was. I
5 don't recall this.

6 Q. Directing your attention to the second
7 paragraph in this document, this paragraph states,
8 "Monsanto manufactures polychlorinated biphenyl
9 and markets it under our Aroclor trade name,"
10 correct?

11 A. That's what it says.

12 Q. And then the second full sentence,
13 excluding a parenthetical, says, "We, therefore,
14 would like to present some additional facts."
15 Correct?

16 A. That's what it says, yes.

17 Q. What additional facts did Monsanto want
18 to present?

19 A. I don't know, since I don't recall this
20 particular memo.

21 Q. Was it important to deal with the press
22 in an accurate and truthful manner in 1969?

23 A. I'm sorry. What was the first part of
24 that again?

1 MR. DUFF: Would you please read the question
2 back for the witness?

3 (The pending question was read.)

4 MR. CHAMBERS: Object to the form of the
5 question. Argumentative.

6 THE WITNESS: From my point of view, from my
7 position, yes. That was very important, and I
8 think my view of Monsanto, then and now, is that it
9 was always important to deal accurately with the
10 press.

11 BY MR. DUFF:

12 Q. Is that, in part, because the press is
13 the medium by which everyday citizens get their
14 information?

15 MR. CHAMBERS: Object to the form.

16 THE WITNESS: It was our position to be
17 accurate in everything we did, and dealing with the
18 press accurately was not any different than dealing
19 with our customers accurately or our suppliers
20 accurately. We tried to be as accurate as we
21 could.

22 BY MR. DUFF:

23 Q. Directing your attention to the second
24 page of this statement, do you have that in front

1 of you?

2 A. Yes.

3 Q. Do you see the third paragraph on this
4 page where it says, "The common uses of commercial
5 PCB would not normally lead to its release into the
6 natural environment"?

7 A. Yes, I see that.

8 Q. Was that a position that Monsanto took
9 in 1969?

10 A. As I believe I've said earlier, our
11 belief, when people first thought they were finding
12 PCBs in the environment, was just this, that the
13 normal uses of PCBs, we did not believe led to
14 releases in the environment.

15 Q. By normal -- strike that.

16 By common use, did you mean that, if the
17 commercial PCB was used as it was intended, then it
18 would not constitute a potential environmental
19 contaminant?

20 MR. CHAMBERS: Object to the form of the
21 question.

22 THE WITNESS: I believe what we thought is
23 fairly well stated here, that the common uses of
24 commercial PCBs would not normally lead to a

1 release into the environment. I believe that's
2 reasonably well stated.

3 BY MR. DUFF:

4 Q. By that, did you mean that, if a product
5 was used as intended, it would not become an
6 environmental contaminant?

7 A. To the best of our knowledge, if it was
8 used as intended, it would not be an environmental
9 contaminant. That's right.

10 Q. In the paragraphs following that
11 statement, the use of PCBs in different
12 applications is discussed; correct?

13 A. That is correct.

14 Q. In the next paragraph, the use of PCBs
15 as insulating fluids for transformers and
16 capacitors is discussed; correct?

17 A. I don't remember this, but the line
18 says, "A principal market for PCB is in electrical
19 applications where they are used as insulating
20 fluids for transformers and capacitors."

21 Q. And this statement from Monsanto
22 indicates that that type of use is in a completely
23 sealed system?

24 A. The next sentence says, "In this use,

1 the chemical is completely sealed in metal
2 containers."

3 Q. And that is considered to be a closed
4 system; correct?

5 A. I think the line stands on its own.

6 Q. In fact, it uses the term "closed
7 system" in the next sentence; correct?

8 MR. CHAMBERS: Let me object to the form.

9 "Another market is for heat-transfer applications
10 where the PCB fluid functions in a closed system."
11 It doesn't have anything to do with transformers
12 and capacitors.

13 MR. DUFF: Fair enough.

14 MR. CHAMBERS: Okay.

15 BY MR. DUFF:

16 Q. There's another application discussed in
17 the next sentence.

18 A. The sentence that says, "Another market
19 is for heat-transfer applications where the PCB
20 fluid functions in a closed system."

21 That's what it says. Again, I don't
22 recall it. That's what the sentence says.

23 Q. At the top of the third page, there is
24 discussion of PCBs which appear as solid material

1 in different applications; correct?

2 A. The line says, "PCBs are also used in
3 several applications where the chemical is
4 incorporated into polymer as an integral part of
5 the solid material."

6 That's what the line says. I don't
7 remember this memo.

8 Q. And the next paragraph says that PCBs
9 "are not sprayed or dusted on crops, woodlands or
10 any other areas, as are pesticides"; correct?

11 A. That's what the line says, yes.

12 Q. And in the three paragraphs following
13 the sentence that "The common uses of commercial
14 PCB would not normally lead to its release into the
15 natural environment," there is no reference or
16 discussion -- no reference to or discussion of open
17 system applications of PCBs, is there?

18 A. I don't know what you mean by "open
19 system applications." PCBs which are incorporated
20 into polymers are certainly open systems. They're
21 not closed. Adhesives, elastomers, surface
22 coating.

23 Q. Let me ask the question this way. In
24 the three paragraphs following that sentence,

1 there's no discussion of PCBs in a liquid form used
2 in systems that are not considered to be closed or
3 completely sealed; correct?

4 MR. CHAMBERS: Object to the form of the
5 question.

6 THE WITNESS: As I said earlier, I don't
7 recall this memo at all. If you are saying those
8 words do not appear in either one of these three
9 paragraphs, I would have to agree with you. I
10 guess those words do not appear in any one of these
11 three paragraphs, if that's the point.

12 BY MR. DUFF:

13 Q. The next paragraph says, "Therefore,
14 conclusions as to the source of PCB found in the
15 environment are difficult to make"; correct?

16 A. That's what it says, yes.

17 Q. When this statement was prepared,
18 Monsanto -- strike that.

19 When this statement was prepared, you
20 knew that Pydraul AC had escaped from Monsanto's
21 Pensacola plant; correct?

22 A. No. I said earlier I didn't recall
23 that.

24 Q. When this statement was prepared, you

1 knew that PCBs had escaped from Monsanto's
2 Pensacola plant into the Escambia Bay; correct?

3 MR. CHAMBERS: Object to the form.

4 THE WITNESS: I didn't recall that.

5 BY MR. DUFF:

6 Q. At the time this statement was prepared
7 by Monsanto, you knew that it was possible to
8 determine the source of some PCBs found in the
9 environment; correct?

10 A. I don't recall what I thought at this
11 point in time.

12 Q. You knew that carbonless copy paper
13 could get into the environment; correct?

14 A. At some point in time we came to the
15 conclusion that carbonless carbon paper could wind
16 up in the environment. That's true.

17 Q. And you knew that certain paints and
18 sealants that contained PCBs were in the
19 environment; correct?

20 A. That's a real stretch. That is like
21 saying the paint on this wall is in the
22 environment. Under those terms, everything is in
23 the environment. So it's hard to say the paint on
24 a stripe on a highway is an environmental

1 contaminant. That's a big stretch, in my opinion.

2 Q. In the next paragraph, this statement
3 from Monsanto says, "It has also been implied that
4 polychlorinated biphenyls are 'highly toxic'
5 chemicals. This is not true." Correct?

6 A. That's what it says.

7 Q. But in fact that statement was itself
8 not true.

9 A. No --

10 MR. CHAMBERS: Object.

11 THE WITNESS: I don't agree with that at all.
12 To this day, I still believe polychlorinated
13 biphenyls are not highly toxic chemicals.
14 Toxicity, again, is a range.

15 BY MR. DUFF:

16 Q. Are you saying that PCBs are not highly
17 toxic to any species?

18 MR. CHAMBERS: Object to the form. Let me ask
19 you to read the witness' response back.

20 (Record read as requested.)

21 MR. DUFF: Then read the question back.

22 (The preceding question was read.)

23 BY MR. DUFF:

24 Q. You may answer.

1 A. The term "highly toxic" generally means
2 highly toxic to human beings and upper levels of
3 mammals. You go from human beings on the upper
4 extreme to the simplest form of aquatic life in the
5 lower. The term "highly toxic" is generally used
6 to mean compounds that are highly toxic to human
7 beings or animals.

8 Q. At the time this statement was prepared,
9 Monsanto knew that PCBs were highly toxic to
10 certain species of fish and marine or wildlife;
11 correct?

12 MR. CHAMBERS: Object to the form of the
13 question. There's no foundation for that. You're
14 just arguing with Mr. Springgate about it.

15 THE WITNESS: I'll just say I do not recall.
16 The previous statement is yours, not mine.

17 MR. CHAMBERS: You can argue as much as you
18 want, but I don't think that's going to change the
19 witness' testimony.

20 BY MR. DUFF:

21 Q. In this same paragraph, there is a
22 statement that "PCBs are not hazardous when
23 properly handled and used."

24 Do you see that?

1 A. I see that, yes.

2 Q. Do you agree that this statement is true
3 when products containing PCBs are used as intended?

4 MR. CHAMBERS: Object.

5 THE WITNESS: Yes. I agree, that statement is
6 true.

7 BY MR. DUFF:

8 Q. I'd like to direct your attention to the
9 fourth page of this document.

10 Do you see the paragraph that begins
11 "Monsanto has always..."

12 A. Yes, I see that.

13 Q. It's the last full paragraph on the
14 page.

15 A. Yes.

16 Q. The first two sentences say, "Monsanto
17 has always cooperated on a regular basis with
18 federal, state and university laboratories in their
19 analysis of chlorinated hydrocarbon residues. We
20 will continue to do so."

21 Do you see that?

22 A. Yes.

23 Q. Did you know that other individuals
24 within Monsanto, in this same time frame, were

1 hoping to defend Monsanto's Aroclor business by
2 making the government and universities prove that
3 PCBs are bio-harmful?

4 MR. CHAMBERS: Object to the form of the
5 question. Assumes facts not in evidence, lacks
6 foundation.

7 THE WITNESS: And I would only respond, I
8 don't know what you're talking about. I have no
9 recollection of that set of factors.

10 BY MR. DUFF:

11 Q. Did you ever discuss PCBs with Bill
12 Richard?

13 A. Yes, I'm sure I have.

14 Q. Do you recall any conversations that you
15 had with Bill Richard?

16 A. Not any specific conversation, no.

17 Q. Did you ever discuss defending
18 Monsanto's Aroclor business with Bill Richard?

19 A. Not that I recall.

20 Q. I'd like to direct your attention to the
21 last sentence in this statement.

22 Do you see where it says, "It will take
23 extensive research on a worldwide basis, to confirm
24 or deny these scientific conclusions."

1 Do you see that?

2 A. I see that.

3 Q. Are you familiar with the work of the
4 Swedish scientists Soren Jensen and Gunnar Widmark?

5 A. The question was am I acquainted with
6 the work of those gentlemen?

7 Q. Yes.

8 A. I think the answer is no. Seeing some
9 of these documents refreshed my memory on the names
10 of those two people, but I do not know the details
11 of their work. I do not recall the details of
12 their work, and I'm not sure I ever did understand
13 the details of their work.

14 Q. In October 1969, did you know that there
15 had been research prior to that date that indicated
16 that PCBs accumulated in the environment and in the
17 tissues of certain life forms?

18 A. Try the question again, please.

19 MR. DUFF: Please read the question back for
20 the witness.

21 (The pending question was read.)

22 MR. CHAMBERS: Object to the form of that
23 question. When you say "accumulated," do you mean
24 present in or are you talking about built up?

1 THE WITNESS: You're also -- Monsanto, at some
2 point in time, concluded that the material being
3 found, the residue being found in certain types of
4 marine life was, indeed, PCB.

5 You're concluding that that was a
6 foregone conclusion in October of 1969. I do not
7 have a recollection that that was a foregone
8 conclusion in October of 1969. I'll go further.
9 I'll even doubt that that was a conclusion at that
10 point in time.

11 BY MR. DUFF:

12 Q. If that conclusion had been made, then
13 this last sentence is misleading; correct?

14 MR. CHAMBERS: Object to the form. It's
15 argumentative.

16 BY MR. DUFF:

17 Q. You may answer.

18 A. Try the question again.

19 MR. DUFF: Please read the question back for
20 the witness. Actually the last two questions and
21 the answer in between there.

22 (Record read as requested.)

23 MR. CHAMBERS: Object to the form of the
24 question. It's hypothetical. I don't understand

1 what part of the phrase you are asking or
2 suggesting is misleading. I don't know what your
3 question goes to within that last statement.

4 THE WITNESS: I would have to ask you to
5 restate the question because I don't understand
6 your question.

7 MR. DUFF: Mr. Chambers, I'll note for the
8 record that I believe your objection goes beyond
9 what is permitted under the Kentucky Rules of Civil
10 Procedure, but I'll ask the question again.

11 MR. CHAMBERS: And I will note, for the
12 record, I think you need to know what the nature of
13 my objection is so you can decide whether to do
14 something about it or not.

15 BY MR. DUFF:

16 Q. If the initial scientific conclusions
17 that PCBs were turning up in marine life residue
18 were correct, then this last statement was
19 misleading; is that right?

20 MR. CHAMBERS: Object to the form. That's a
21 misreading of this statement. It's not clear what
22 the phrase "these initial scientific conclusions"
23 is even referring to, whether it's the conclusion
24 you're talking about or some other one.

1 If you can respond, you sure should.

2 THE WITNESS: I do not recall this paper at
3 all. However, I do not find anything about that
4 last sentence that is misleading.

5 BY MR. DUFF:

6 Q. What was the Corporate Development
7 Committee within Monsanto in 1969?

8 A. The Corporate Development Committee was
9 an executive committee, if you would, of
10 higher-level officers of the corporation who formed
11 a committee to review business plans, budgets and
12 appropriation requests. In other words, rather
13 than having one person, such as a president or a
14 chairman, review all of these things, there was a
15 committee that consisted of the highest level
16 officers of the corporation who -- they used
17 different titles at different times.

18 If that one -- if at that time it was
19 called the Corporate Development Committee -- I
20 know they used that term at one time -- that's what
21 it would have been. A committee of the
22 highest-level officers of the company to review the
23 various subjects.

24 Q. Was that committee also known at times

1 as the Corporate Management Committee?

2 A. That would have -- in another -- yes. I
3 would say yes.

4 Q. Did you report to anybody on the
5 Corporate Development Committee?

6 A. In 1969, the answer would have been no.
7 I was too far down in the organization to have
8 reported to somebody who was on the Corporate
9 Development Committee.

10 Q. Who did you report to in 1969?

11 MR. CHAMBERS: Objection. That's been asked
12 and answered, I think. Tell him one more time.

13 THE WITNESS: Ernie Robson.

14 BY MR. DUFF:

15 Q. Do you know who Mr. Robson reported to?

16 MR. CHAMBERS: Objection. That's been asked
17 and answered already. Tell him again.

18 THE WITNESS: I really don't recall.

19 BY MR. DUFF:

20 Q. Did you ever attend meetings of the
21 Corporate Development Committee?

22 A. Yes, I have.

23 Q. Was that a frequent occurrence?

24 A. Yes. You may quote me as too frequent.

1 From the time I was a business director of
2 plasticizers until the time I retired, I reported
3 to that committee or an equivalent committee --
4 they used different names at different times --
5 probably some number between four and six times per
6 year, times 20 years.

7 Q. From 1969 to 1989?

8 A. Yes, that's correct.

9 Q. During the time period that you were
10 business director for plasticizers, what were your
11 reporting responsibilities to the Corporate
12 Development Committee?

13 A. As business director of plasticizers, I
14 reported to Ernie Robson, who would have been a
15 general manager of plasticizers and general
16 chemicals and something else. He, in turn, would
17 have reported to a corporate vice president, and
18 that corporate vice president would have been one
19 of the members of the Corporate Development
20 Committee.

21 Does that answer your question?

22 Q. No. When you appeared before the
23 Corporate Development Committee, why did you
24 appear -- let me ask it that way.

1 Why did you appear before the Corporate
2 Development Committee when you were business
3 director for plasticizers?

4 A. Okay. We would appear before the
5 Corporate Development Committee for appropriation
6 requests for large capital expenditures. We would
7 appear before them with our business plans. We
8 usually had a long-range plan requirement of once a
9 year. I think, at that time, those were probably
10 the reasons I was appearing.

11 Q. Did you also appear before the Corporate
12 Development Committee to discuss the PCB problem in
13 1969?

14 A. I don't recall whether I did or not, to
15 tell you the truth. I don't recall.

16 Q. Do you recall if you appeared before the
17 Corporate Development Committee at any time to
18 discuss the PCB problem?

19 A. I don't recall a specific time, but I
20 would not be surprised if I had.

21 Q. Do you have any specific recollection of
22 having appeared before the Corporate Development
23 Committee to discuss PCBs?

24 A. I don't.

1 MR. DUFF: I would like to show you a document
2 that has been previously marked as Plaintiff's
3 Exhibit 140.

4 (Previously marked Exhibit 140
5 was shown to the witness and is annexed
6 hereto.)

7 BY MR. DUFF:

8 Q. This document is dated 11/10/69 and
9 bears production numbers STR 021938 through 61.

10 Please take as much time as you need to
11 review this document.

12 A. All right.

13 Q. Is this a draft of the PCB Environmental
14 Pollution Abatement Plan that you helped to prepare
15 in 1969?

16 A. I don't know. I don't recall this
17 particular document. And again, since I haven't
18 said this for a while, this has now been some 26
19 years ago. I have been through three completely
20 different assignments since that time. So I have
21 no continuity in this subject at all. So there are
22 lots of things about this point in time that I
23 simply do not recall.

24 (Interruption.)

1 MR. DUFF: I'd like to show you a document
2 that has been previously marked as Plaintiff's
3 Exhibit 135. You can keep Exhibit 140 handy, as I
4 will be getting back to it.

5 This is a document dated November 17,
6 1969, TRAN 091377 through 79.

7 Please take as much time as you need to
8 review this document.

9 (Previously marked Exhibit 135
10 was shown to the witness and is annexed
11 hereto.)

12 THE WITNESS: Okay.

13 BY MR. DUFF:

14 Q. These are minutes of a November 17, 1969
15 meeting of the Corporate Development Committee at
16 which you were present; correct?

17 A. That appears to be minutes of such a
18 meeting, but I don't recall the meeting or being
19 there.

20 Q. The first page of this document
21 indicates that you were present at that meeting;
22 correct?

23 A. That's what it says, yes.

24 Q. And the minutes reflect that you gave a

1 presentation on a plan of action with respect to
2 the PCB plan; correct?

3 A. That's the way it appears, yes.

4 Q. You gave that presentation with Howard
5 Bergen; correct?

6 A. Apparently -- yes, that's what it says.

7 Q. Do you recall that meeting?

8 A. No, I don't.

9 Q. Do you recall ever giving any
10 presentation to the Corporate Development Committee
11 with Howard Bergen, related to PCBs?

12 A. No, I don't.

13 Q. At this meeting -- strike that.

14 Who is D.W. Miller?

15 A. I don't know. I don't recall.

16 Q. At this meeting, Mr. Miller discussed
17 legal aspects of the PCB problem before the
18 Corporate Development Committee; correct?

19 A. That's what this paper says, although I
20 don't remember it.

21 Q. One of the things that Mr. Miller
22 informed the Corporate Development Committee of was
23 that, "...if a manufacturer knows or should know
24 that a product of its manufacture may cause damage

1 if not properly used, he has a duty to give
2 adequate warning to customers and users"; correct?

3 A. I believe that's what it says.

4 MR. CHAMBERS: Let me object to the form.
5 What it says is, "Although the law is unsettled,
6 the present general rule is that if a manufacturer
7 knows or should know that a product of its
8 manufacture may cause damage if not properly used,
9 he has a duty to give adequate warning to customers
10 and users."

11 BY MR. DUFF:

12 Q. Did you finish your answer?

13 A. My answer was I do not remember this
14 meeting. In regard to what the paper says, it's
15 specifically as Mr. Chambers just read it.

16 Q. Mr. Miller also made a recommendation
17 from the legal standpoint; correct?

18 MR. CHAMBERS: Object to the form. Lacks
19 foundation. He's already testified he doesn't
20 remember anything about this meeting.

21 THE WITNESS: I don't remember anything about
22 this meeting at all.

23 BY MR. DUFF:

24 Q. Mr. Miller's recommendations are set out

1 in this document; correct?

2 MR. CHAMBERS: Object to the form. There's no
3 foundation for that.

4 THE WITNESS: There are some words here,
5 "Recommendations from the legal standpoint consist
6 of."

7 Q. And then there are three points below
8 that; correct?

9 A. There are three points below that,
10 right. "Take steps to ensure that PCB's are
11 contained and not discharged in plant effluent."

12 "Provide adequate warnings to customers
13 and users, including advice as to disposal
14 methods."

15 "Establish testing program to determine
16 precise effects of PCB's on birds, aquatic life and
17 animals and to determine the possible escape of
18 PCB's from plasticizers."

19 None of which do I recall or remember.
20 I'm simply reading the lines out of this document.

21 Q. Was it important to warn customers --
22 strike that.

23 Was it important to give customers
24 advice as to disposal of unused PCB-containing

1 fluids?

2 MR. CHAMBERS: Object to the form of the
3 question. Important to who? It's vague.

4 THE WITNESS: After a later point in time,
5 when plasticizers had decided to or had -- the
6 decision had been made that we were going to
7 discontinue the marketing of these products to
8 plasticizer customers, we had some customers who
9 had leftover materials, so we told the customers we
10 would take the materials back and properly dispose
11 of the materials.

12 Does that answer your question?

13 BY MR. DUFF:

14 Q. Did you give customers advice regarding
15 disposal of contaminated soil?

16 A. I don't recall that.

17 Q. Did you give customers advice regarding
18 disposal of contaminated equipment?

19 A. I don't recall that either.

20 Q. Did you give customers advice regarding
21 cleaning of contaminated equipment?

22 A. I don't recall that either.

23 Q. At this November 17, 1969 meeting of the
24 Corporate Development Committee, you presented to

1 the committee a recommended plan of action with
2 respect to the PCB problem; correct?

3 A. That's what this memo says, although I
4 don't remember it, any of this.

5 Q. Returning to Exhibit 140, and
6 specifically the fifth page of that document, which
7 has the number 3 at the top of the page.

8 Do you see that page? The page has
9 Roman numerals II, III and IV.

10 A. Yes.

11 Q. This document indicates that the problem
12 with respect to PCBs was damage to the ecological
13 system by contamination; correct?

14 A. That's what it says; correct.

15 Q. And the nature of that problem is
16 discussed under Roman IV; correct?

17 A. That's what the paper says, yes.

18 Q. The environmental aspects of the PCB
19 problem were discussed at the November 17, 1969
20 meeting by Elmer Wheeler; correct?

21 I'll direct your attention to the second
22 page of Exhibit 135 for that point.

23 MR. CHAMBERS: Object to the form of the
24 question. Lacks foundation.

1 THE WITNESS: Since I don't recall this, what
2 you are insinuating is that this rough draft of
3 November 10th, 1969 is what was presented to the
4 Corporate Development Committee on November 17th,
5 1969. It may be; it may not be. I don't know.

6 BY MR. DUFF:

7 Q. Directing your attention to Exhibit 135,
8 the minutes of the Corporate Development Committee
9 on November 17, 1969 indicate that Elmer Wheeler
10 discussed environmental aspects of the PCB problem
11 at that meeting; correct?

12 A. I don't remember it, but I don't have
13 any problem with that being accurately written.
14 No, I don't have any problem.

15 Q. So the record is clear, that's what this
16 document indicates; correct?

17 A. That's what that document indicates;
18 that's correct.

19 Q. Returning then to Exhibit 140,
20 specifically the page with the number 3 at the
21 top --

22 A. Uh-huh.

23 Q. Elmer Wheeler's initials appear on the
24 left-hand margin of this page; correct?

1 A. The initials EW appear on the left-hand
2 side of this page. That's true.

3 Q. Next to Roman II where it says
4 "Problem," it says "EPW, 5 minutes"; correct?

5 A. That's apparently what it says, yes.
6 I'd ask you, who is EPW?

7 Q. I would say it's Elmer Wheeler.

8 MR. CHAMBERS: Do you swear?

9 THE WITNESS: As well as EW?

10 BY MR. DUFF:

11 Q. Do you know of an EPW, other than Elmer
12 Wheeler, at Monsanto at this time in 1969?

13 A. If I ran through the phone book, I would
14 probably find one, but I don't know. I'd start
15 off, I don't remember any of this, so my question
16 for you really is how did you get from this
17 document to this document? Or vice versa.

18 MR. CHAMBERS: Well, he hasn't gotten there
19 yet. That's been the nature of my objections. I
20 don't think he can get there, but we're proceeding
21 along, regardless.

22 THE WITNESS: Okay.

23 BY MR. DUFF:

24 Q. Exhibit 140 indicates, under Roman

1 numeral IV, which is entitled "Nature of the
2 Problem," that, "Professors Widmark and Jensen of
3 the Institute of Analytical Chemistry at Stockholm,
4 Sweden in November 1966, announced and confirmed
5 findings of PCB in fish, birds, and eggs";
6 correct?

7 A. That's what it says.

8 Q. I'd like to direct your attention back
9 to Exhibit 319, and specifically the last page of
10 that exhibit. If the initial finding on the last
11 page of Plaintiff's Exhibit 319 relates to Jensen
12 and Widmark's work, then the statement on that page
13 is inconsistent with this statement about Widmark
14 and Jensen announcing and confirming their finding
15 of fish, bird and eggs in Exhibit 140; correct?

16 MR. CHAMBERS: I'll object to the continued
17 misreading and mishandling of these documents.
18 Things are being taken out of context. You're
19 trying to compare apples and oranges, and it
20 doesn't work.

21 To the extent you're able to respond to
22 that, you're welcome to do so.

23 THE WITNESS: I don't recall the details of
24 their work; probably never did know the details of

1 their work. I don't recall the timing involved.

2 The problem that you're in, that I don't
3 agree with, is that you assume that, at a much
4 earlier date, the world concedes that these people
5 had found PCBs.

6 The situation was they found something
7 that even they didn't know what it was, and we
8 spent most of the year, in the case of Risebrough,
9 and longer, in the case of these people from
10 Sweden, trying to identify what it was.

11 BY MR. DUFF:

12 Q. Who was Emmett Kelly?

13 A. He was the head medical doctor at
14 Monsanto.

15 Q. Would you defer to Dr. Kelly with
16 respect to understanding the implications of Jensen
17 and Widmark's work in the 1960s?

18 MR. CHAMBERS: I object to the form of that
19 question. Hypothetical. You've left out material
20 information that would be required to answer that.

21 THE WITNESS: I would defer to Dr. Kelly on
22 medical questions, not on analytical procedures.

23 BY MR. DUFF:

24 Q. Would you defer to Dr. Kelly with

1 respect to medical questions that involve questions
2 of toxicity?

3 A. I would think so, yes.

4 Q. The last sentence on the page that has
5 the number 3 at the top in Exhibit 140 states,
6 "Monsanto confirmed the presence of PCB's in
7 mid-1969 and confirmed the adequacy of work by
8 Widmark and Jensen and others; truly, the PCB's are
9 a worldwide ecological problem." Correct?

10 A. That's what it says. Again, may I say,
11 the date of this is like November 1969.

12 Q. Have you ever considered any scientific
13 research that related to products produced by
14 Monsanto to be adequate before it was independently
15 confirmed by Monsanto?

16 MR. CHAMBERS: Object to the hypothetical
17 nature of that.

18 MR. DUFF: It's not a hypothetical.

19 MR. CHAMBERS: Then I object that there is a
20 lack of foundation. You're assuming facts not in
21 evidence.

22 MR. DUFF: Would you please read the question
23 back for the witness?

24 (The pending question was read.)

1 THE WITNESS: I have no background or
2 experience that would let me answer that question
3 one way or the other.

4 BY MR. DUFF:

5 Q. You're a scientist; correct, sir?

6 MR. CHAMBERS: Object to the form.

7 THE WITNESS: No, sir. I'm an engineer. I
8 have no experience that would let me answer the
9 question you just asked. You sound like it's a
10 question between outside research and inside
11 research. I have no experience to be able to
12 answer that question.

13 BY MR. DUFF:

14 Q. You have a B.S. in chemical engineering?

15 A. Yes.

16 Q. And you also have a master's in chemical
17 engineering; correct?

18 A. Uh-huh.

19 Q. During your career, did you keep abreast
20 of developments in trade publications relating to
21 chemical engineering?

22 A. Yes, I did.

23 Q. Did some of the articles that you read
24 throughout your career relate to developments in

1 chemical engineering which, themselves, related to
2 products that Monsanto was producing?

3 A. No.

4 Q. You never read an article in a trade
5 publication that related to a chemical engineering
6 issue that, itself, related to products that
7 Monsanto was producing?

8 A. No.

9 Q. I'd like to direct your attention to the
10 next page in Exhibit 140 which has the number 4 at
11 the top of the page.

12 Do you see that?

13 A. I have a page -- yes.

14 Q. Halfway down this page, there is a
15 discussion of the seriousness of the PCB problem;
16 correct?

17 A. That's what it says, yes.

18 Q. And it spells out the seriousness of
19 that problem by listing four points; correct?

20 MR. CHAMBERS: Let me object to the form
21 again. I think you said seriousness of the PCB
22 problem. The document reads "The seriousness of
23 the problem."

24 BY MR. DUFF:

1 Q. You may answer.

2 A. I don't remember any portion of this
3 report, but there is an item on it that says,
4 "Fish - Marine or aquatic species concentrate PCB
5 in the fatty tissue. Toxic in small
6 quantities..." I don't know what that means,
7 "...down to 5 parts per billion to sensitive
8 marine life such as shrimp."

9 Q. Does that mean that PCBs are toxic to
10 shrimp?

11 MR. CHAMBERS: Object to the form of the
12 question. Calls for speculation.

13 THE WITNESS: I don't know what that means. I
14 don't recall this.

15 BY MR. DUFF:

16 Q. Do you recall that PCBs were considered,
17 in November of 1969, to be toxic to shrimp in as
18 small a quantities as 5 parts per billion?

19 A. No, I did not remember that. I
20 remembered PCBs were detected in shrimp, but I
21 don't remember the toxicity subject or the data.

22 Q. The second point under this area relates
23 to birds; correct?

24 A. Right. What it says is "Birds -

1 Predatory species feeding on the marine or aquatic
2 life can further concentrate PCB to possible
3 harmful effects. Specifically in birds PCB can
4 affect the calcium metabolism leading to eggshell
5 imperfections which prevents proper hatch of the
6 young. In fact, Monsanto has confirmed the
7 eggshell by feeding chickens, a high order of the
8 species, PCB's in controlled tests."

9 Q. And this relates to an area that you had
10 alluded to earlier today, correct, in terms of the
11 effect of PCBs on eggshells of peregrine falcons?

12 A. One of the first indications of a
13 problem in the environment was the eggshell of the
14 peregrine falcon; that's correct.

15 Q. Was that a problem with thinning of
16 eggshells?

17 A. Yes, it was.

18 Q. When you refer to the first sentence,
19 "Predatory species feeding on the marine or
20 aquatic life can further concentrate PCB to
21 possible harmful effects," is that otherwise known
22 as bioaccumulation?

23 A. I don't know because I don't know what
24 that term means.

1 Q. Are you familiar with the term
2 "biomagnification"?

3 A. I've heard the term, but I'm afraid I'm
4 not acquainted with the meaning.

5 Q. Do you understand the term
6 "biomagnification" to be consistent with the first
7 sentence in this section?

8 A. No, since I just said I don't know what
9 "biomagnification" means. That was not a term
10 that I used in my working career.

11 Q. I'd like to direct your attention to the
12 page that has the number 5 at the top, which is at
13 STR 021946 and has Roman numeral V, "Effect on
14 Monsanto" at the top.

15 Do you see that?

16 A. Yes.

17 Q. This section sets out the "Business
18 potential at stake for Monsanto on a worldwide
19 basis"; correct?

20 A. That's what it says, yes.

21 Q. Is it consistent with your understanding
22 that the potential business that Monsanto had at
23 stake in its Aroclor business in 1969 was
24 \$22 million per year?

1 A. That's what it says. It says
2 \$22 million per year sales volume.

3 Q. And is that consistent with your
4 understanding of what the sales volume was at that
5 time?

6 A. Yes. I would guess that. As a matter
7 of fact, my recollection, my guess would have been
8 that it was bigger than that. I didn't realize it
9 was that small.

10 Q. Under the section noted as "Effect on
11 Monsanto," there's also a section on "Legal
12 Liability"; correct?

13 A. Yes. That's what it says.

14 Q. And this section states that "Direct
15 lawsuits are possible." Correct?

16 A. That's what it says.

17 Q. And it also states that, "The materials
18 are already present in nature having done their
19 'alleged damage'"; correct?

20 A. That's what it says.

21 Q. If that was true, then cleanup of the
22 materials that had done the alleged damage was
23 crucial; correct?

24 MR. CHAMBERS: Object to the form. What do

1 you mean by "crucial"? It's vague and confusing.

2 THE WITNESS: I think that's not correct. I
3 think we're talking about three different things.
4 There was a problem with the PCBs in the waterways
5 of the United States and even in the Gulf Coast
6 with the shrimp. So that's existing PCBs. Now,
7 that's already present in nature; that's there.

8 Secondly, there were PCBs that were in
9 use, such as in capacitors and transformers of the
10 electrical system of the United States. They
11 exist; they are there.

12 Then the third part of it is we were
13 still in the business, still manufacturing and
14 still shipping. Now, we're feeding into a system
15 of PCBs in use, which in turn is probably feeding
16 into the environmental contamination problem.

17 So, as I would read this, what's already
18 at the bottom of a river is there. That's alleged
19 damage. But what exists in tanks and transformers
20 is not in nature, and it could be recovered.

21 BY MR. DUFF:

22 Q. It was the materials that were in nature
23 at this time that had done damage to the
24 environment; correct?

1 MR. CHAMBERS: Object to the form of that
2 question. Assumes facts not in evidence and lacks
3 foundation.

4 THE WITNESS: You could argue all day about
5 how much damage had been done to nature.

6 MR. CHAMBERS: If any.

7 THE WITNESS: If any. But at this point in
8 time, I believe Monsanto was agreeing that there
9 was, somewhere in the waterways and systems, some
10 PCBs that were being picked up by aquatic life.

11 BY MR. DUFF:

12 Q. As of November 10, 1969, all of
13 Monsanto's customers using PCB-containing products
14 had not been officially notified about known
15 effects, nor did Monsanto's product labels carry
16 that information; is that right?

17 MR. CHAMBERS: Object to the form. What do
18 you mean by "officially notified"?

19 THE WITNESS: And I can't answer that. I
20 don't know.

21 BY MR. DUFF:

22 Q. That's what this document indicates;
23 correct?

24 A. Where did you find that?

1 Q. Under the legal liability section.

2 A. It says, "All customers using these
3 products have not been officially notified about
4 known effects nor do our labels carry this
5 information." That's what it says. I don't
6 remember it, but that's what it says.

7 Q. When you notified your plasticizer
8 customers, did you tell them how to clean up PCB
9 contamination?

10 MR. CHAMBERS: Object to the form of the
11 question.

12 THE WITNESS: That's not a very practical
13 situation.

14 Our largest plasticizer customer was
15 National Cash Register, who had made carbonless
16 carbon paper. We told them that this was becoming
17 an environmental problem, and they were the
18 distributor, and that we were going to discontinue
19 the manufacture of the product, and National Cash
20 Register, you have a problem. You have been
21 distributing PCBs, and you may want to stop, and
22 you'd better be concerned about your
23 responsibility. National Cash Register, your
24 responsibility.

1 BY MR. DUFF:

2 Q. So did you leave it to your customers to
3 determine how to clean up PCB contamination caused
4 by PCBs that Monsanto had supplied to them?

5 A. And the customer had used, yes.

6 Q. Did you supply your customers with all
7 information relating to PCBs that was available to
8 you?

9 MR. CHAMBERS: Object to the form.

10 THE WITNESS: You have a practical problem
11 again. There's no point in supplying more
12 information than the customer can handle or can
13 use.

14 So, again, at the point in time when we
15 decided that we were going to have to discontinue
16 this business, we had a program to notify the
17 customers of what the problem was, how we got --
18 what we thought about -- how we got to where we
19 are, and the fact that we were going to discontinue
20 the product.

21 Now, up until that point in time, I'd
22 say we had more or less conversation with different
23 customers, depending on whether the customer came
24 back and asked questions, because all of this had

1 appeared in the public press. Not to have heard
2 about PCBs and the contamination, you would have
3 had to have not read the trade journals and not
4 read the newspapers, because this appeared. Some
5 people asked more questions than others, and
6 therefore we had more communication with some
7 companies than others.

8 MR. DUFF: Move to strike the nonresponsive
9 parts of the last answer.

10 MR. CHAMBERS: What parts do you consider
11 nonresponsive? That might help clarify things for
12 everybody.

13 MR. DUFF: Would you please read the answer
14 back?

15 (Record read as requested.)

16 MR. DUFF: I move to strike the portion of the
17 sentence with the language "depending on whether
18 the customer came back and asked questions." I
19 move to strike from that point to the end of that
20 sentence as nonresponsive.

21 Q. Sir, do you see, also, on the same page,
22 where there is the letter B with the title "Public
23 Image"?

24 A. Yes, I see that.

1 Q. This document states that -- I'm
2 referring here to the second sentence under that
3 section, "The evidence proving the persistence of
4 these compounds and their universal presence as
5 residues in the environment is beyond
6 questioning."

7 Do you see that?

8 A. Yes, I see that.

9 Q. Was that statement incorrect when it was
10 made in November of 1969?

11 A. I have no reason to question the
12 statement. I don't recall this package, and I
13 don't recall the factors at this specific point in
14 time.

15 Q. The next section is letter C, "Customer
16 Relations."

17 Do you see that?

18 A. Yes.

19 Q. The first sentence indicates that, "Some
20 customers who presently use these materials will be
21 'scared off' to other competitive products";
22 correct?

23 A. That's what it says.

24 Q. Was that one of your concerns in

1 November 1969?

2 A. Not that I recall.

3 Q. You weren't concerned that, when
4 customers learned that PCBs were environmental
5 contaminants, they would switch to competitive
6 products?

7 A. That was not a major item. It was not a
8 large share of our total product line, and I don't
9 remember that being a major problem with this.

10 Q. Directing your attention to the next
11 page, which has the number 6 at the top, do you see
12 that?

13 A. Yes.

14 Q. Do you see the section which is Roman
15 numeral VII, "Involvement With Other Producers"?

16 A. Yes.

17 Q. Do you see the language in the first
18 sentence of that page where it indicates that
19 "Monsanto is most probably responsible for the
20 U.S. contamination"?

21 A. I can read that, yes; that's correct.

22 Q. Was that statement incorrect when it was
23 made?

24 MR. CHAMBERS: Object to the form.

1 THE WITNESS: I think the debatable question
2 would be what does the word "responsible" mean.
3 I'm sure that I don't have to pursue that with
4 you. Other people will do that.

5 BY MR. DUFF:

6 Q. You'll leave that to the lawyers. Is
7 that what you're saying?

8 A. Correct; that's right.

9 Q. But that sentence does make that
10 statement; correct?

11 A. It is written the way you read it.

12 Q. I'd like to direct your attention to the
13 next page, which has Roman numeral VIII, "Sources
14 of Contamination."

15 Do you see that?

16 A. Yes.

17 Q. There is a section with the letter A,
18 titled "Open Pollution," correct?

19 A. Correct.

20 Q. And there are four items, fluids,
21 electrical, heat transfer and industrial; correct?

22 A. Correct.

23 Q. Fluids are indicated as "probably the
24 most open source of pollution because of their

1 mobility"; correct?

2 A. That's what it says, yes.

3 Q. Was that consistent with your
4 understanding in November 1969?

5 A. I don't have a recollection of what my
6 understanding was at that time.

7 Q. Industrial is No. 4 here; correct?

8 A. That's correct.

9 Q. What are industrial PCB products?

10 A. I'm going to beg off of this entire
11 area. This was not the plasticizer business which
12 I was responsible for. This is the other half of
13 the business. I had no responsibility here. I had
14 very little knowledge of their products and how
15 they were used, so I am not informed here. I never
16 was, but I'm certainly not now.

17 Q. Did you know, in November 1969, that
18 industrial fluids containing PCBs were generally
19 sprayed down into drains, washed into sewers and
20 generally regarded as harmless?

21 A. I did not know that, even at that time,
22 if that's true.

23 Q. I'd like to direct your attention to the
24 last two pages of this document.

1 Do you see those? There are two pages
2 of graphs indicating profit and liability versus
3 time.

4 Do you see those?

5 A. Okay.

6 Q. Have you seen these graphs before?

7 A. Not that I recall.

8 Q. Do you recognize this handwriting?

9 A. No, I don't.

10 Q. Did you discuss, with anyone at Monsanto
11 in 1969, what the effect of different alternatives
12 for dealing with the PCB pollution problem would
13 be?

14 MR. CHAMBERS: Object to the form of the
15 question. It's vague. Confusing.

16 THE WITNESS: I don't remember specifically
17 doing that.

18 MR. DUFF: Off the record.

19 (There was a brief recess.)

20 MR. DUFF: Mr. Springgate, I'd like to show
21 you a document that's been previously marked as
22 Plaintiff's Exhibit 136.

23 (Previously marked Exhibit 136
24 was shown to the witness and is annexed

1 hereto.)

2 BY MR. DUFF:

3 Q. This document has the date
4 November 17, 1969 at the top, and bears production
5 numbers TRAN 024713 through 37.

6 Please take as much time as you need to
7 review this document.

8 A. Okay.

9 Q. Is this a copy of the PCB presentation
10 that you made to the Corporate Development
11 Committee on November 17, 1969?

12 A. It apparently is, but I don't remember
13 that particular presentation.

14 Q. Your name is written at the top of the
15 first page of this document; correct?

16 A. That is correct.

17 Q. As you sit here today, do you recall
18 that you were one of the individuals primarily
19 responsible for formulating Monsanto's overall PCB
20 plan to manage the PCB pollution problem?

21 A. I would say yes, I was.

22 Q. I'd like to direct your attention to the
23 page that has production number TRAN 024724. It
24 has the heading "Sources of Fluids Pollution" at

1 the top.

2 A. Uh-huh.

3 Q. Do you see that?

4 A. Yes.

5 Q. This page indicates the sources of
6 fluids pollution from greatest to least by
7 application; correct?

8 A. That's what it says.

9 Q. And it indicates that the greatest
10 source of -- strike that.

11 It indicates that the application with
12 the greatest source of fluids pollution is
13 industrial fluids; correct?

14 A. That's what the wording says. I don't
15 recall this specific presentation, and furthermore,
16 we're now talking about the fluids group where I
17 had no responsibility and very little know-how.

18 Q. This was the presentation that was given
19 to the Corporate Management Committee on November
20 17, 1969; correct?

21 A. That is correct.

22 Q. And, on this page, it also indicates
23 that industrial fluids have the greatest intensity
24 of pollution because they are a direct pollutant to

1 the environment; correct?

2 A. I can only read the words. I don't
3 remember the presentation; and, again, I had no
4 responsibility for the fluids group. So I would
5 not have put this page together or even reviewed
6 it. This is the other half of the business.

7 Q. That was part of the presentation that
8 was made to the Corporate Management Committee on
9 November 17, 1969; correct?

10 A. Apparently. I have no reason to doubt
11 that.

12 Q. Directing your attention to the page
13 that has the number 16 at the top and bears
14 production number TRAN 024727, do you see that
15 page?

16 A. Yes.

17 Q. There is the handwriting at the bottom
18 that says "Turn over to Jim Springgate"; right?

19 A. Correct.

20 Q. Is it your understanding that the
21 program or floor was turned over to you at this
22 point?

23 A. That would be a reasonable assumption,
24 yes. Even though I don't remember that, that's a

1 reasonable assumption.

2 Q. This was the end of the discussion of
3 the fluids business; correct?

4 A. Apparently, yes.

5 Q. And the following pages indicate a
6 discussion of plasticizers; correct?

7 A. That appears to be correct.

8 Q. That was the area that you were business
9 director for; right?

10 A. That is correct.

11 Q. If you would -- I direct your attention
12 to the page that has TRAN 024729 at the bottom.

13 A. Okay.

14 Q. This page has distinctions from
15 functional fluids on it; correct?

16 A. That's correct.

17 Q. And this section lacks the type of
18 narrative that appears in the earlier pages
19 discussing fluids; correct?

20 A. Correct.

21 Q. At this point in the presentation, you
22 told the Corporate Development Committee how the
23 plasticizer group was different from the functional
24 fluids group; correct?

1 MR. CHAMBERS: Object to the form. Lacks
2 foundation.

3 THE WITNESS: Apparently that's what it says,
4 although, again, I don't remember this.

5 BY MR. DUFF:

6 Q. One of the points that you made was that
7 50 percent of domestic Aroclor 1254 and 1260 sales
8 were through distributors; correct?

9 MR. CHAMBERS: Object to the form. Lacks
10 foundation.

11 THE WITNESS: That's what it says, but I don't
12 happen to remember that.

13 BY MR. DUFF:

14 Q. Were 50 percent of your domestic
15 plasticizer sales in 1969 of Aroclors 1254 and 1260
16 through distributors?

17 A. I think, what the line says, 50 percent
18 of the domestic A-1254 and Aroclor 1260 sales were
19 through the distributors, difficult to police.
20 That's what the line says. I don't happen to
21 remember that.

22 Q. Do you remember any of your distributors
23 of Aroclor 1254 or Aroclor 1260?

24 A. No, I don't.

1 Q. Why was it difficult to police sales of
2 Aroclors through distributors?

3 A. I don't recall what the thought was
4 there.

5 Q. I'd like to direct your attention to the
6 page that has TRAN 024733 at the bottom.

7 Do you see that?

8 A. Yes, I do.

9 Q. This page has "Recommended Action Plan"
10 at the top; correct?

11 A. Correct.

12 Q. And this page, together with the
13 following page, has twelve points; correct?

14 A. Yes, that appears to be a correct --

15 Q. This was a joint action plan developed
16 by the functional fluids and plasticizer business
17 groups and the medical and law departments;
18 correct?

19 A. That's what it says, yes.

20 Q. One of the parts of this plan was to
21 notify all Aroclor customers of the PCB problem;
22 correct?

23 A. That's what it says, yes.

24 Q. And that was to happen within 60 days;

1 correct?

2 A. That's what it says.

3 Q. Which would be by the middle of January,
4 1970; correct?

5 A. Well, 60 days from November 17th, 1969.

6 Q. And another point was to relabel
7 containers; correct? Under point No. 2?

8 A. Correct. That's what it says, relabel
9 containers within 60 days.

10 Q. How were the containers to be relabeled?

11 A. I don't recall that.

12 Q. Do you know what type of label Aroclor
13 containers had on them prior to this date?

14 A. I do not recall that, no.

15 Q. Directing your attention to the fifth
16 point on this recommended action plan, do you see
17 that?

18 A. Yes, I do.

19 Q. That says, "Educate customers for need
20 for a clean-up at their plants - within 4 months";
21 is that correct?

22 A. That's correct.

23 Q. Did you do that?

24 A. I don't recall that specifically, but

1 anything we told the CDC we were going to do, we
2 did.

3 Q. Did you educate customers on the need
4 for cleanup at their plants?

5 A. Again, I don't recall specifically.
6 Again, I would say, if we said we were going to do
7 it, we did it. This is our top management.

8 Q. Why did you recommend this point?

9 A. I don't recall that.

10 Q. Directing your attention to the page
11 with the number TRAN 024735 at the bottom, do you
12 see that page?

13 A. Yes, I do.

14 Q. This page says "What Could We Expect
15 From This Program" at the top; correct?

16 A. That's correct.

17 Q. And this page contains estimates
18 regarding retaining or converting a good portion of
19 Monsanto's business and profits; correct?

20 A. That's what it says, yes.

21 Q. That was based on whether or not the PCB
22 problem could be confined to Aroclor 1254 and 1260
23 as opposed to spreading into the lower-chlorinated
24 Aroclors; correct?

1 A. Apparently. That would be the
2 impression I have from reading this, although I
3 don't remember that.

4 Q. Point 3 on this page is "Clean up the
5 major contributing PCB pollution factors"; correct?

6 A. That's what it says.

7 Q. What were the major contributing PCB
8 pollution factors at this time?

9 A. I don't recall what the thought was
10 behind that line.

11 Q. The next page of this document indicates
12 what the proposed PCB management plan would result
13 in; correct?

14 A. Apparently, yes, in terms of costs and
15 publicity and customer discontent.

16 Q. One of the things that Monsanto
17 recognized in this document, arising out of the
18 plan that was proposed to the Corporate Development
19 Committee on November 17, 1969, was that there
20 would be possible lawsuits; correct?

21 A. The line says, the program would, among
22 other things, "Expose us to continued adverse
23 publicity and possible lawsuits." That's what it
24 says, even though I don't recall that.

1 Q. You don't recall what type of lawsuits
2 it would expose Monsanto to?

3 A. No, I don't.

4 Q. The summary of this PCB presentation to
5 the Corporate Development Committee is stated on
6 the last page of this document; correct?

7 A. Yes, it appears to be.

8 Q. One of the statements that's made in the
9 summary is that the PCB pollution problem is a
10 worldwide ecological problem; correct?

11 A. That's what it says, yes.

12 Q. You knew the PCB pollution problem to be
13 a worldwide ecological problem as of November 17,
14 1969; correct?

15 A. I don't recall what the thought was
16 behind that line. I assume that's what we thought
17 or we wouldn't have written that line. I don't
18 recall.

19 Q. Mr. Springgate, this document has been
20 previously marked as Plaintiff's Exhibit 370. It
21 has the printed date December 1969 at the top of
22 the page with the heading and bears production
23 numbers TRAN 058368 through 69.

24 Please take as much time as you need to

1 review this document.

2 (Previously marked Exhibit 370
3 was shown to the witness and is annexed
4 hereto.)

5 THE WITNESS: Okay. I've reviewed that.

6 BY MR. DUFF:

7 Q. This is a public relations report that
8 you received on or about December of 1969; correct?

9 A. That's apparently correct, although I
10 don't remember the document.

11 Q. Your name is indicated on the first page
12 as a recipient; correct?

13 A. That is correct.

14 Q. This document was prepared by Ed John;
15 correct?

16 MR. CHAMBERS: Object to the form. Lacks
17 foundation.

18 THE WITNESS: Apparently it was.

19 BY MR. DUFF:

20 Q. His name, in fact, appears at the bottom
21 of the second page of this document; correct?

22 A. Yes, it does.

23 Q. What happened on the English coast in or
24 about December 1969 relating to an unusual increase

1 in the number of seal deaths?

2 A. I do not recall.

3 Q. Do you recall that incident?

4 A. No, I don't.

5 Q. Directing your attention to the second
6 page of this document, and particularly the first
7 paragraph on the second page, do you see that?

8 A. Yes.

9 Q. Does this refer to the Santicizer plant
10 that you oversaw the construction of in Texas City?

11 A. Yes, it does.

12 Q. Did you hold a press conference in New
13 York City in or about December of 1969 related to
14 that facility?

15 A. It says we did, but I don't happen to
16 remember that either.

17 Q. Do you see the two lawsuits that are
18 referred to in the next paragraph?

19 A. Yes, I see that. It says, "Working with
20 the legal department, one preparedness statement
21 and a news release were drafted during the month in
22 connection with two lawsuits underway. The news
23 release will be issued to news media simultaneously
24 with a filing of a lawsuit in January."

1 Q. Do you recall those lawsuits?

2 A. No, I don't recall.

3 Q. Who was Bill Papageorge?

4 A. Bill Papageorge was the plant manager of
5 the Anniston, Alabama plant. He was brought in to
6 the headquarters to help with a PCB task force,
7 since his background is in manufacturing of
8 Aroclors at Anniston, and he joined the group task
9 force, if you will. I think in that last
10 presentation to the CDC, we said we were going to
11 form a larger project group to handle the PCB
12 contamination problems, and he joined that group at
13 that time.

14 Q. Did you bring Bill Papageorge in to
15 oversee Monsanto's management of the PCB pollution
16 problem?

17 A. That's very close to my recollection,
18 yes. We still had a group of research people,
19 marketing people; but Papageorge was brought in to
20 help handle Monsanto's own contribution to the
21 pollution problem, meaning that, if we had any PCBs
22 escaping in our own manufacturing plants. Then, I
23 remember he got into the subject of how do you
24 dispose of Aroclor products that were sent back to

1 Monsanto.

2 So yes, he was in the general area of
3 how do you reduce environmental contamination of
4 PCB.

5 Q. Is it correct to say that he was brought
6 in to coordinate the overall effort of Monsanto
7 with respect to the PCB pollution problem?

8 A. I don't recall that specifically, but I
9 think that's a bit of an overstatement. I think
10 his contribution had to do with -- from the
11 manufacturing point of view and from a disposal of
12 Aroclors after we went out of the business, because
13 we still had research people working on the
14 subject. We had the toxicologists working on the
15 subject, meaning Wheeler. So -- and we had the
16 marketing people doing their own thing. So I think
17 Papageorge originally was brought in to handle more
18 of the manufacturing, engineering end of it.

19 I think I should also specify that
20 that's my recollection of the way it was in late
21 '69, early '70. Papageorge stayed with it over an
22 extended period of time, and I didn't. By 1974, I
23 was away from that scene, and I don't know what he
24 did after that.

1 Q. Was there an effort to notify Monsanto's
2 customers of the PCB pollution problem in the
3 beginning of 1970?

4 A. There was an effort to notify them.
5 Again, I'm vague about the time frame. Those
6 papers we just looked at indicated that would be
7 early in 1970. So I assume that is correct. I'm
8 vague as to time, but yes, customers were notified.

9 Q. Did Monsanto notify all of its PCB --
10 strike that.

11 How did Monsanto go about notifying its
12 customers related to the PCB problem?

13 MR. CHAMBERS: Object to the form. Are you
14 referring to plasticizer customers now, or are you
15 asking him to speak to customers across the board?

16 THE WITNESS: My first qualification was going
17 to be I can only respond with regard to plasticizer
18 customers because I had no responsibility for the
19 functional fluids and they had their own program,
20 whichever it was, and I don't remember what it
21 was.

22 In the case of plasticizers, though, I
23 remember that we did notify customers of the PCB
24 problem sometime in, say, early 1970. I couldn't

1 give you a lot of detail about how we did it, but
2 we did it.

3 BY MR. DUFF:

4 Q. Was there any effort to coordinate the
5 message that was going out among different product
6 groups to those customers?

7 A. You mean the fluids group versus the
8 plasticizer group?

9 Q. Was there any -- let me ask the question
10 this way.

11 Was there any effort to coordinate the
12 message that went out to, for instance, the
13 plasticizer group and the functional fluids group,
14 to the customers of those groups?

15 A. I don't recall that. I don't recall.

16 Q. Did some customers receive more
17 information relating to the PCB problem than
18 others?

19 MR. CHAMBERS: Object to the form, to the
20 extent it calls for speculation on Mr. Springgate's
21 part about what somebody else received or didn't
22 receive.

23 MR. DUFF: Let me rephrase the question.

24 Q. Did Monsanto send different information

1 to -- strike that.

2 Did Monsanto send more information to
3 some of its customers than others?

4 A. I can only speak for the plasticizer end
5 of the business, because I didn't have firsthand
6 knowledge of the functional fluids end.

7 In the plasticizer end of the business,
8 we notified customers and we provided them with
9 some information about PCBs, but then you say did
10 you provide more information to some than others.
11 The answer is probably yes, because some companies
12 came back and simply asked more questions than
13 others. So you probably had -- I would have
14 recalled that we had greater amounts of information
15 with certain customers than with others because
16 they asked for more information.

17 Q. I'd like to show you a document which
18 has been previously marked as Plaintiff's
19 Exhibit 159. This document has the date February
20 27, 1970 written at the top and bears production
21 numbers TNGS 004288 through 95.

22 Please take as much time as you need to
23 review this document.

24 (Previously marked Exhibit 159)

1 was shown to the witness and is annexed
2 hereto.)

3 THE WITNESS: Okay.

4 BY MR. DUFF:

5 Q. Was this a letter that Monsanto sent to
6 its direct plasticizer customers on February 27,
7 1970?

8 A. It appears to be, although I don't
9 remember the specific letter.

10 Q. Do you recognize the handwriting on the
11 first page of this document?

12 A. No, I don't.

13 Q. The author of this letter -- the
14 individual who signed this letter is W.E. Schalk;
15 correct?

16 A. That's correct.

17 Q. Was he your director of sales for
18 plasticizers?

19 A. Yes, he was.

20 Q. Did he report directly to you?

21 A. Yes, he did.

22 Q. Did you work with Mr. Schalk to prepare
23 this letter?

24 A. I don't recall that, one way or the

1 other. Normally, this letter would have been
2 written by Mr. Schalk with input from the PCB task
3 force, and I would have reviewed it. That would
4 have been the normal approach, but I don't really
5 recall specifically.

6 Q. Did you approve this letter before it
7 went out?

8 A. I don't recall, but I most likely did.

9 Q. Was this letter shown to the legal
10 department before it went out?

11 A. I don't recall, but it most likely was.

12 Q. The first page of this letter indicates
13 that recently several newspaper and magazine
14 articles have been published indicating that PCBs
15 have been discovered at some points in some marine,
16 aquatic and wildlife environments; correct?

17 A. That's what it says.

18 Q. There's no reference in this paragraph,
19 or anywhere else in this letter, to any published
20 reports that appeared in any scientific
21 publications; correct?

22 A. It doesn't say that, and I don't know.
23 I can only take it on face value. It says what it
24 says. I don't recall anything else.

1 Q. There's no reference in here to the work
2 of Soren Jensen and Gunnar Widmark; correct?

3 MR. CHAMBERS: Object to the form. Assumes
4 facts not in evidence.

5 THE WITNESS: I don't know. I also haven't
6 bothered to read the detail of the attachments. I
7 don't know what the attachments say.

8 BY MR. DUFF:

9 Q. Please take as much time as you need to
10 review this document.

11 A. Your question again was what?

12 (The pending question was read.)

13 THE WITNESS: Apparently not. Not directly,
14 no. That's apparently true.

15 BY MR. DUFF:

16 Q. In the second paragraph of this letter,
17 it says, "It is claimed that the PCBs fond strongly
18 resemble polychloronated biphenyl containing 54
19 percent and 60 percent chlorine by weight";
20 correct?

21 A. That's what it says, yes.

22 Q. In fact, by this time, hadn't Monsanto
23 confirmed that PCBs that were 54 and 60 percent
24 chlorine by weight were present in the

1 environment?

2 MR. CHAMBERS: Object to the form.

3 THE WITNESS: I don't know. I can't either
4 confirm or deny that. I don't know what
5 information they had at this point in time.

6 BY MR. DUFF:

7 Q. This letter has an attachment, which is
8 an article from Chemical Week dated October 29,
9 1969; correct?

10 A. Yes, it does.

11 Q. Are PCBs mentioned anywhere in this
12 attachment?

13 A. I don't know. I'm looking through it to
14 see if they are.

15 Q. This article really only relates to
16 water quality standards; correct?

17 A. Apparently that's what the first couple
18 of paragraphs refer to.

19 Q. As far as you can tell, there's no
20 reference to PCBs anywhere in this article; right?

21 A. If there is, I have not yet found it.

22 MR. DUFF: Mr. Chambers, to move things along,
23 can you stipulate that Mr. Springgate won't find
24 any reference to PCBs in this article?

1 MR. CHAMBERS: Well, having not reviewed it
2 myself, I'm a little hesitant to even go that far.
3 I agree, I don't see the initials PCB in there
4 anywhere.

5 MR. DUFF: Or polychlorinated biphenyl?

6 MR. CHAMBERS: I haven't seen it yet, if it's
7 even there.

8 BY MR. DUFF:

9 Q. Mr. Springgate, you don't see any
10 reference to PCBs or polychlorinated biphenyls
11 anywhere in this article, do you?

12 A. No, I don't, but the last paragraph of
13 Mr. Schalk's letter says, "This article reflects
14 the view that good manufacturing practice in the
15 future may require that no products used by any
16 company be lost or discharged in such a manner as
17 to ultimately be found in the waterways."

18 That was apparently the reason he sent
19 this. I don't remember the details. I'm just
20 reading the words.

21 Q. This was the message that Monsanto gave
22 to its plasticizer -- strike that.

23 This was the message that you gave to
24 your plasticizer customers on February 27, 1970;

1 correct?

2 A. It appears to be that, yes. It's a
3 message on that date.

4 Q. And Mr. Schalk signed this letter and
5 sent it to your plasticizer customers with your
6 approval; correct?

7 A. Apparently. I'll point out you brought
8 this letter to me. I didn't take it to you. I
9 don't know where this letter came from, and there
10 could have been two or three others. I don't
11 know. I also don't remember; right?

12 Q. Would it have been your custom and
13 practice to approve a letter such as this before it
14 went out to all of your customers?

15 A. Right. But there may have been
16 additional letters, too.

17 Q. Prior to February 27, 1970, had you ever
18 sent a letter to all of your plasticizer customers
19 before?

20 A. I don't recall. Any subject, you mean?
21 The answer to that would be sure, we did. You
22 notified all of your customers if you had a price
23 change, for instance. If you had a new product,
24 you notified all your customers. So there was some

1 mechanism to broadly notify customers.

2 Q. Was Mr. Schalk responsible for
3 overseeing your sales force?

4 A. You mean did the salesmen, the specific
5 salesmen, report to him or to his organization?

6 Q. Yes. Were the sales representatives for
7 the plasticizer group overseen by Mr. Schalk?

8 A. Yes.

9 BY MR. DUFF:

10 Q. I'd like to show you a document that's
11 been previously marked as Plaintiff's Exhibit 251.
12 This document bears production numbers TRAN 012547
13 through 71.

14 Please take as much time as you need to
15 review this document.

16 (Previously marked Exhibit 251
17 was shown to the witness and is annexed
18 hereto.)

19 THE WITNESS: Okay.

20 BY MR. DUFF:

21 Q. Have you had an opportunity to review
22 this document?

23 A. Right.

24 Q. I'm sorry? Your answer?

1 A. Yes.

2 Q. You have had an opportunity to review
3 this document?

4 A. Yes, I have.

5 Q. This document is a presentation that was
6 made to the plasticizer field sales force; correct?

7 A. Apparently. I don't recall this
8 specifically, but that seems to be what it was,
9 yes.

10 Q. And you approved the information that
11 was given to Monsanto's plasticizer customers;
12 correct?

13 A. Yes, either directly or indirectly
14 through Walter Schalk. Again, I don't remember it
15 specifically, but that seems to be what this is.

16 Q. On the first page of this document,
17 there is a description of the PCB contamination
18 problem; correct?

19 A. It says, "There have been several
20 newspaper and magazine articles in the U.S. in 1969
21 indicating that polychlorinated biphenyls (PCBs)
22 have been discovered in some marine, aquatic and
23 wildlife environments."

24 Is that the sentence you had in mind?

1 Q. There is an introduction here to the PCB
2 problem in general; correct?

3 A. Yes. "There have been several magazine
4 and newspapers articles published in the U.S. in
5 1969 indicating that PCBs have been discovered in
6 some marine, aquatic and wildlife environments."

7 Q. And, in this presentation, the
8 plasticizer sales force was also told about the
9 letter that was going to Monsanto's Aroclor
10 customers; correct?

11 MR. CHAMBERS: Object to the form. Lacks
12 foundation to the extent you're assuming this was
13 actually presented; but certainly as to what the
14 document says on it's face, it's fine to proceed
15 with.

16 THE WITNESS: It says, "Accordingly, a letter
17 has been cleared by our Legal Department for
18 mailing to each of our direct Monsanto customers."

19 BY MR. DUFF:

20 Q. Where are you reading from?

21 A. I'm reading from the bottom of Page 2.
22 I was trying to answer your question, is this the
23 letter that went to customers.

24 Q. Does that refresh your recollection

1 regarding whether or not the letter sent to your
2 plasticizer customers was cleared with the legal
3 department?

4 A. My recollection is we did send letters
5 to customers. I don't remember the details. It's
6 very logical that it would have been cleared by the
7 legal department.

8 Q. One of the things that the field sales
9 force was told on the bottom of the first page of
10 this document was that Monsanto had a duty to alert
11 its Aroclor customers to a potential problem of
12 environmental contamination; correct?

13 A. Yes. It says that, "It was felt that
14 Monsanto, as responsible member of the business
15 community, had a duty to alert its Aroclor
16 customers to a potential problem of environmental
17 contamination."

18 Q. And directing your attention to the
19 second page of this document, and specifically the
20 bottom of that page, it's stated that the letters
21 will be mailed from St. Louis at the end of
22 February; correct?

23 A. That's what it says, yes.

24 Q. It says that the letter will be

1 addressed to the Office of the President of your
2 plasticizer customers; correct?

3 A. That's what it says, yes.

4 Q. Directing your attention to Page 3 of
5 this document, specifically in the middle of this
6 page, the sales force was told, "It is not our
7 responsibility to alert our distributors'
8 customers." Is that correct?

9 A. That's what it says, but right above
10 that it says we will notify our distributors -- "We
11 will recommend that our distributors mail a similar
12 letter promptly to each of their Aroclor
13 customers. Copies of our letters will be made
14 available to our distributors in quantities
15 sufficient to meet their needs."

16 Q. Did Monsanto's distributors have the
17 technical knowledge and understanding, the same
18 technical knowledge and understanding of the PCB
19 problem as Monsanto had?

20 MR. CHAMBERS: Object to the form of the
21 question to the extent you're asking Mr. Springgate
22 to speculate about what somebody else knew or
23 didn't know.

24 If you're able to respond to that, you

1 can.

2 THE WITNESS: I could not respond to that
3 clearly, except to say one of our distributors was
4 called Central Solvents Company in the Chicago
5 area. They were distributors of chemical product,
6 and they had reasonable know-how in terms of how to
7 handle and respect for chemical products. I don't
8 remember the other distributors.

9 BY MR. DUFF:

10 Q. Was it important to you, in the
11 beginning of 1970, that your distributors, such as
12 Central Solvents, had a technical understanding of
13 the PCB problem so that they could answer their
14 customers' questions?

15 A. I don't recall that specifically, but
16 let me comment that we were providing some
17 information to the distributors, and a normal
18 activity would have been to say, "If you need more
19 detailed technical information, contact Monsanto's
20 plasticizer group."

21 Q. The letter is summarized at the bottom
22 of Page 3 and on Page 4 and the top of Page 5;
23 correct?

24 A. That's what it says. It says, "Let me

1 summarize what Monsanto's letter says."

2 Q. And there are five points made
3 relating -- summarizing the letter; correct?

4 A. Yes, that appears to be correct.

5 Q. And the first point that's made is that
6 the primary function of the letter is to alert
7 Monsanto's customers to the potential environmental
8 pollution problem; correct?

9 A. That is correct.

10 Q. And then the sales force was told
11 "Confidentially, our Legal Department believes
12 this will minimize and, hopefully, eliminate claims
13 made against us for environmental pollution
14 damage"; correct?

15 A. That's what it says, yes.

16 Q. Directing your attention to Page 5 of
17 this document, do you see the section 3 titled
18 "Customer Reaction"?

19 A. Yes, I do.

20 Q. The first sentence says, "We expect this
21 letter will lead to customer reaction"; right?

22 A. Correct.

23 Q. What customer reaction did you expect to
24 receive?

1 A. I don't recall what I had in mind.

2 Q. Directing your attention to the top of
3 Page 6, this is still under the customer reaction
4 section.

5 Do you see that?

6 A. Yes.

7 Q. Was it important that Monsanto's
8 customers react appropriately when they received
9 this letter from Monsanto?

10 MR. CHAMBERS: Object to the form of the
11 question. It's vague, confusing, ambiguous.

12 THE WITNESS: Can I ask for that to be read
13 back?

14 MR. DUFF: Certainly. Please read the
15 question back for the witness.

16 (The pending question was read.)

17 MR. CHAMBERS: Same objection.

18 THE WITNESS: I guess I don't understand the
19 question. We were trying to notify the customers
20 that there was potentially a problem. When you
21 notify your customer that there is potentially a
22 problem, you worry about several things. Will your
23 customer be without a product to continue his
24 business, or will your customer be able to find an

1 alternate so he can continue his business. Each of
2 those has different implications, but the thought
3 within Monsanto was that we owed our customers an
4 update and information on possible PCB
5 contamination. That's what we were trying to
6 accomplish.

7 BY MR. DUFF:

8 Q. The sales force was told to remember
9 that the letter was "...going to the 'Office of the
10 President' so it may get down to his subordinates
11 in a variety of different ways leading to a variety
12 of reactions"; correct?

13 A. That's what it says, yes.

14 Q. And then the sales force was told the
15 reason behind why the letter was sent to the office
16 of the president; correct?

17 A. Correct.

18 Q. And that reason was because Monsanto's
19 legal department felt that, by sending the letter
20 to the office of the president, that Monsanto would
21 have really notified a company officially of the
22 potential problem; correct?

23 A. That's what the letter says, and my
24 experience is that that's the only way to do

1 things. If you want to notify a company, you
2 notify the CEO of the company. That's the formal,
3 official, legal way to do things.

4 Q. Is that because, if there is a -- I'm
5 picking up on the language here again on Page 6 --
6 "If there is any legal litigation later, the
7 courts might feel that sending a letter to Joe Doe,
8 Plant Purchasing Agent, was not legal notification
9 because Joe Doe may not be an officer of the
10 company"?

11 MR. CHAMBERS: Object to the form of the
12 question.

13 MR. DUFF: Would you please read the question
14 back for the witness?

15 (The pending question was read.)

16 THE WITNESS: That is exactly what this paper
17 says. I don't happen to remember the details of
18 this presentation, this paper, but what you said is
19 exactly what the paper said.

20 BY MR. DUFF:

21 Q. And that's the justification that was
22 given for -- strike that.

23 That's the reason that was given for
24 sending the letter to the office of the president;

1 correct?

2 MR. CHAMBERS: Object to the form of the
3 question. Lacks foundation.

4 THE WITNESS: I don't know what the reason
5 was. I can only read it as it exists. I don't
6 remember what any other reason might have been.

7 BY MR. DUFF:

8 Q. Well, the information that was given to
9 the sales force here was that sending a letter to
10 Joe Doe, plant purchasing agent, would not be legal
11 notification if Joe Doe was not an officer of the
12 company; is that right?

13 MR. CHAMBERS: Object to the form of the
14 question. You haven't established that this was
15 ever given to the sales field force, for one
16 thing. Again, if you're asking about what's
17 written in the document --

18 THE WITNESS: I can only say that that's what
19 is written in the document because I don't recall
20 the details of this at all.

21 MR. DUFF: Off the record for a moment.

22 (Discussion off the record.)

23 BY MR. DUFF:

24 Q. Attached to this presentation to field

1 sales is a list of dos and don'ts for regional
2 managers; correct?

3 A. Yes, that appears to be true.

4 Q. And also a list of likely customer
5 questions; correct?

6 A. That appears to be true.

7 Q. And the information to be given to
8 customers was approved by yourself and by
9 Monsanto's legal department; correct?

10 A. I don't recall specifically, but it's
11 logical that that's true.

12 Q. And, in fact, it says that on Page 7 of
13 this document; correct?

14 A. Okay, right.

15 Q. Is that right?

16 A. Right.

17 Q. That's correct?

18 A. Yes, that's correct.

19 Q. Directing your attention to the page
20 which has the title at the top, "Dos and Don'ts for
21 Regional Managers," do you see that?

22 A. Yes, I do.

23 Q. There are eleven things that regional
24 managers are told to affirmatively do here;

1 correct?

2 A. Correct.

3 Q. How many regional managers did you have
4 for plasticizers at this time?

5 A. My recollection would be five or six.

6 Q. Do you recall any of their names?

7 A. Probably Joe McNamara in New York.
8 Somebody in Chicago. We had somebody in Boston and
9 somebody in Cincinnati. Tim Eddie, E-D-D-I-E, I
10 think. They are the only names I can recall at the
11 moment.

12 Q. Did your regional managers report
13 directly to Walter Schalk?

14 A. No, they reported to an intermediate
15 sales manager at this time. I think his name was
16 Jim Wright, W-R-I-G-H-T.

17 Q. Did Jim Wright report to Walter Schalk?

18 A. Correct.

19 Q. One of the things that the regional
20 managers were told to do was to stick to the
21 answers given to specific questions if these are
22 the ones asked; correct?

23 A. Which point are you here?

24 Q. No. 6. Do you see that?

1 A. Yes. That's what it says. Let me back
2 up to the prior question. I gave you some names of
3 people.

4 Q. Okay.

5 A. I got my businesses confused. Too many
6 businesses over that period of time. There was a
7 man -- Joe McNamara was, I think, maybe the Boston
8 regional manager. The New York regional manager
9 was a man named Ed Fording, F-O-R-D-I-N-G. Tim
10 Eddie was in Boston, but in a different business.
11 I give the names of the others.

12 Q. Were you right about Jim Wright's
13 position?

14 A. Yes. Jim Wright is correct, and he
15 reported to Walter Schalk.

16 Q. Directing your attention to the second
17 page of this list of dos, do you see numbers 7
18 through 11 listed on this page?

19 A. Correct.

20 Q. In No. 7, the plasticizer sales
21 representatives were told to direct customer
22 questions back to St. Louis; correct?

23 A. Correct.

24 Q. No. 10, the point was to minimize calls

1 to St. Louis relating to the customer-notification
2 letter; correct?

3 A. That's what it says, but I don't know
4 why it says that. I don't remember the line of
5 reasoning there.

6 Q. It seems contrary to the previous point,
7 doesn't it?

8 MR. CHAMBERS: Object to the form. When you
9 say "previous point," you're referring to No. 7?

10 MR. DUFF: Yes, I am. Let me clarify that.

11 Q. Point 10 seems to be contrary to point
12 7, doesn't it?

13 MR. CHAMBERS: I'll still object to the form
14 of that question.

15 THE WITNESS: It does, but I don't remember
16 the reason for that.

17 BY MR. DUFF:

18 Q. I direct your attention to the next
19 page, which has a list of don'ts for regional
20 managers; correct?

21 A. Correct.

22 Q. One of the things that regional managers
23 were told not to do, and I'm specifically referring
24 to point 2 here, was to "Bring up the subject of

1 the Aroclor letter with their customers"; correct?

2 A. That's what it says. I don't know why
3 the writer suggests that. I don't know why.

4 Q. As the director of the plasticizer
5 business group, wouldn't you want your sales force
6 to actively promote the information that was
7 contained in the Aroclor letter to your customers?

8 A. From where I sit today, I would think
9 so. I don't have any idea what the background was
10 of that line.

11 Q. Did Walter Schalk run this list of
12 don'ts by you before he presented it to the
13 plasticizer sales force?

14 A. I don't remember it specifically, but it
15 would be logical that he did.

16 Q. Another point that was made in this list
17 of don'ts for plasticizer regional managers was
18 No. 8, where the regional managers were told to not
19 give indications that Aroclor 1254 and 1260 will be
20 discontinued; correct?

21 A. That's what it says.

22 Q. But the plan at this time was to
23 eliminate that product; correct?

24 A. I don't recall it. It's not logical.

1 Apparently, at that point in time, the decision had
2 not been made to eliminate those products.
3 Apparently.

4 Q. Yet the letter that went out to the
5 customers told them that this is the potential
6 environmental contaminant; right?

7 A. That is correct.

8 Q. Did you not want your customers to stop
9 buying the product before you told them it was
10 discontinued?

11 A. I don't know. I don't recall what the
12 line of reasoning was behind that.

13 MR. DUFF: Off the record.

14 (Discussion off the record.)

15 (Time noted: 5:25 p.m.)

16

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19

JAMES E. SPRINGGATE

20

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24

1 STATE OF CALIFORNIA) ss.

2 CITY AND COUNTY OF SAN FRANCISCO)

3

4 I hereby certify that the witness in
5 the foregoing deposition, JAMES E. SPRINGGATE, was
6 by me duly sworn to testify to the truth, the
7 whole truth and nothing but the truth, in the
8 within-entitled cause; that said deposition was
9 taken at the time and place herein named; that the
10 deposition is a true record of the witness's
11 testimony as reported by me, a duly Certified
12 Shorthand Reporter and a disinterested person, and
13 was thereafter transcribed into typewriting by
14 computer.

15 I further certify that I am not
16 interested in the outcome of the said action, nor
17 connected with, nor related to, any of the parties
18 in said action, nor to their respective counsel.

19 IN WITNESS WHEREOF, I have hereunto
20 set my hand and affixed my signature this 11th day
21 of December, 1995.

22

23

24

25

-----*Deirdre F. Cram*-----

DEIRDRE F. CRAM, C.S.R. 9339

INTERIM COURT REPORTING

1 I N D E X

2 VOLUME I

3

4 THURSDAY, NOVEMBER 30, 1995

5

6 WITNESS

EXAMINATION

7

8 JAMES E. SPRINGGATE

9

10 (BY MR. DUFF)

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1	DEPOSITION EXHIBITS		
2	JAMES E. SPRINGGATE		
3	NUMBER	DESCRIPTION	IDENTIFIED
4			
5	401	Handwritten notes of a	57
6		Friday Meeting	
7		Nos. TRAN 057762-66	
8			
9	402	Letter - August 25, 1969	64
10		from E.V. John	
11		Prod. No. TNGS 009431	
12			
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PREVIOUSLY MARKED DEPOSITION EXHIBITS

JAMES E. SPRINGGATE

3	NUMBER	DESCRIPTION	IDENTIFIED
4			
5	172	Memo - March 6, 1969 from	41
6		W.R. Richard to E. Wheeler	
7		Prod. Nos. TRAN 058343-45	
8			
9	311	Letter - August 25, 1969	61
10		from E.V. John	
11		Prod. No. TNGS 009432	
12			
13	312	Handwritten notes headed	65
14		"Aroclor - Wildlife Meeting	
15		8-25-69"	
16		Prod. Nos. TNGS 009429-30	
17			
18	313	Handwritten notes headed	72
19		"PCB Committee August 25, '69	
20		Prod. Nos. TNGS 009421-28	
21			
22			
23			
24			

	1	PREVIOUSLY MARKED DEPOSITION EXHIBITS	
	2	JAMES E. SPRINGGATE	
	3	NUMBER	IDENTIFIED
	4	DESCRIPTION	
5	316	Multipage document dated	94
6		October 2, 1969, Subject:	
7		"Report of Aroclor 'Ad Hoc'	
8		Committee"	
9		Prod. Nos. TNGS 009475-87	
10			
11	369	Two-page document entitled	107
12		"Public Relations Report"	
13		dated October 1969	
14		Prod. Nos. TRAN 058372-73	
15			
16	319	Memo - November 10, 1969	109
17		from E.V. John	
18		Prod. Nos. TNGS 009488-93	
19			
20	140	Multipage document headed	132
21		"Outline - PCB Environmental	
22		Pollution Abatement Plan"	
23		Prod. Nos. STR 021938-61	
24			

1	PREVIOUSLY MARKED DEPOSITION EXHIBITS		
2	JAMES E. SPRINGGATE		
3	NUMBER	DESCRIPTION	IDENTIFIED
4			
5	135	Three-page document entitled	133
6		"Minutes of Meeting of the	
7		Corporate Development Committee"	
8		dated November 17, 1969	
9		Prod. Nos. TRAN 091377-79	
10			
11	136	Multipage document entitled	159
12		"PCB Presentation to Corporate	
13		Development Committee" dated	
14		November 17, 1969	
15		Prod. Nos. TRAN 024713-37	
16			
17	370	Two-page document headed	170
18		"Public Relations Report"	
19		dated December 1969	
20		Prod. Nos. TRAN 058368-69	
21			
22	159	Two-page form letter to	176
23		"Dear Customer" with attachment	
24		Prod. Nos. TNGS 004288-95	

INTERIM COURT REPORTING

LEXOLDMON007981

1	PREVIOUSLY MARKED DEPOSITION EXHIBITS		
2	JAMES E. SPRINGGATE		
3	NUMBER	DESCRIPTION	IDENTIFIED
4			
5	251	Multipage document entitled	183
6		"Presentation to Field Sales	
7		Personal and Confidential"	
8		Prod. Nos. TRAN 012547-71	
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1 JAMES E. SPRINGGATE DECEMBER 12, 1995

2 C/O ROLLY L. CHAMBERS, ESQ.

3 227 NORTH TRYON STREET

4 CHARLOTTE, NORTH CAROLINA 18202

5 Re: TENNESSEE GAS vs. MONSANTO

6 DEPOSITION OF: JAMES E. SPRINGGATE, VOL. I

7 TAKEN ON: THURSDAY, NOVEMBER 30, 1995

8 Dear Mr. Springgate:

9 The transcript of your deposition taken in the
10 above matter is available at this office for your
11 review. If it is more convenient, you may read
12 your attorney's copy.

13 In the event you have not read, corrected and
14 signed your deposition within thirty (30) days of
15 receipt of this letter, it may be used with the
16 full force and effect as though it had been read,
17 corrected and signed.

18 If you have any questions in this regard,
19 please contact this office.

20 cc: ORIGINAL INTERIM COURT REPORTING

21 cc: ALL COUNSEL CERTIFIED DEPOSITION REPORTERS

22 ONE EMBARCADERO CENTER, SUITE 360

23 SAN FRANCISCO, CALIFORNIA 94111

24 (415) 362-6666

INTERIM COURT REPORTING

LEXOLDMON007983