

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF FLORIDA
JACKSONVILLE DIVISION

INDEPENDENT LIFE AND
ACCIDENT INSURANCE
COMPANY, a Florida
Corporation,

Plaintiff,

vs.

GENERAL ELECTRIC COMPANY,
a foreign corporation,

Defendant.

CIVIL ACTION

FILE NO. 83-613-CIV-J-12

VOLUME II

Continuation of the deposition of
HOWARD S. BERGEN, JR., taken on behalf of
the Plaintiff, pursuant to Notice, in
accordance with the Federal Rules of Civil
Procedure, before Sharon D. Upchurch, Certified
Court Reporter and Notary Public, at 1200
Candler Building, Atlanta, Georgia, on the
3rd day of January, 1986, commencing at the
hour of 8:00 a.m.

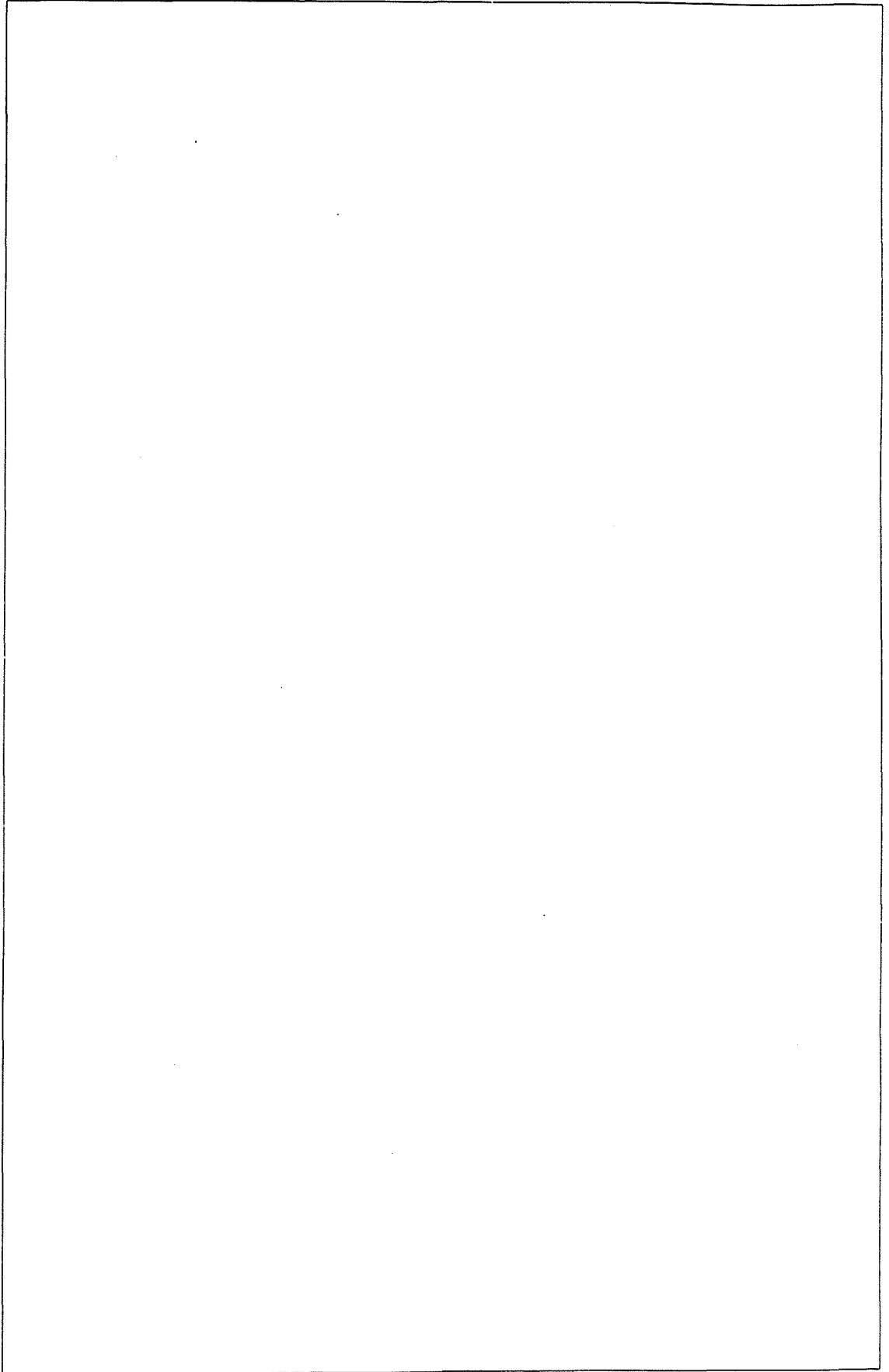
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16
 17 MR. BAUMER: This is the continuation of
 18 the deposition of Mr. Howard Bergen that was commenced
 19 originally on December 10th, 1985. It is continued by
 20 Notice.

21 HOWARD S. BERGEN,
 22 being previously duly sworn, was examined and testified as
 23 follows:

24 EXAMINATION

25 BY MR. BAUMER:

1 Q When we stopped three weeks ago, we were
2 looking at a number of documents; and I think we had
3 gotten up to No. 8. And I'll ask you to take a look
4 at what the reporter has marked as Exhibit 8 and tell me
5 if you recognize and can identify that document?

6 A It's a letter that I wrote on January 3rd,
7 1972, to General Electric, attention Ken Rice, Hudson
8 Falls, New York; and essentially, it's saying that the
9 material described in the attached acknowledgement of
10 their order contain polychlorinated biphenyls and the
11 polychlorinated biphenyls are compounds that are not
12 readily biodegradable. Therefore, placing them in the
13 environment, they may be considered contaminants and may
14 adversely effect species of animal or marine life.

15 We advised them to take any precautions to
16 prevent any entry of the polychlorinated biphenyls into
17 the environment.

18 Q Through what methods?

19 A Through spills, usage, leakage, disposal,
20 vaporization or otherwise. This material should not be
21 used by you or customers in equipment packaging
22 materials or products involved in the processing,
23 handling, or storage of food, food related products,
24 animal feeds, food wrapping or container materials,
25 potable waters or pharmaceuticals.

1 Q Who received copies of this letter, if you
2 can tell us up at the top left-hand corner? I know it's
3 difficult, but maybe you can decipher it better than we
4 can. Is that Meyers?

5 A Yes. The one above, it looks like R. T. --

6 Q A-b-b-e?

7 A I can't make it out. A-p-o-e, or --

8 Q Is there an R. T. Abbe?

9 A I think there was a fellow named Bob Abbe;
10 maybe it's A-b-b-e.

11 Q Was there an R. T. Abbe at Monsanto?

12 A No. I think he was at General Electric, I
13 believe.

14 Q And who is the next one?

15 A I don't know. I believe these are all
16 General Electric people. Lichello, I believe, was one
17 of their lawyers.

18 Q Lichello was a lawyer? How about the one
19 right above him?

20 A I think he was an engineer. Pozefry and
21 Boudieau might have been engineers or plant people.

22 Q And they were all at General Electric?

23 A I believe they were all Hudson Falls.

24 Q And Mr. Rice, to whom the letter is directed,
25 what was his job?

1 A I don't recall. I imagine he was a
2 purchasing agent; I guess a purchasing agent.

3 Q Do you recognize your signature?

4 A Yes.

5 Q Did you compose this letter as opposed to it
6 being written for you?

7 A I can't answer that, I don't remember.

8 Q Do you recall what the attachments may have
9 been to the letter?

10 A No, I don't.

11 Q When you say in the letter that the
12 polychlorinated biphenyls are not readily biodegradable,
13 what do you mean by that?

14 A Well, they don't readily break down under
15 natural environmental exposure into the primary elements
16 of chlorine and hydrogen and oxygen.

17 Q They stay in their present form as opposed to
18 breaking down into the elements; is that correct?

19 A Yes.

20 Q So they don't readily dissipate?

21 A That's correct. Well, dissipate is a
22 different word. Dissipate refers to volatility, as
23 well.

24 Q Do they dissolve in the environment and just
25 find some natural state, find their natural state, that

1 is, their various components?

2 A No, they do not break down into their natural
3 components easily.

4 Q What did G. E. manufacture, if anything, at
5 Hudson Falls, to your knowledge?

6 A Capacitors.

7 Q Did they manufacture pharmaceuticals?

8 A Not to my knowledge.

9 Q Food or food related products?

10 A Not to my knowledge.

11 Q Did they manufacture any transformers, to your
12 knowledge, at Hudson Falls?

13 A I don't believe they made transformers at
14 Hudson Falls.

15 Q Would you now, please, look at what has been
16 marked as Exhibit 9, which consists of two pages, and
17 please tell me if you recognize and can identify for us
18 that document?

19 A This is a proposed meeting and reclamation
20 meeting, setting up the meeting with an agenda, dated
21 February 19, 1971, where the subject was recovery or
22 disposal of used products. Issues to resolve will
23 include waste incineration, total fluid reclamation
24 requirements, individual and customer reactions
25 required.

1 Q And what was the reclamation meeting? Was
2 there a special committee of all of the gentlemen that
3 are listed as receiving copies of this document? Was it
4 an ad hoc committee or --

5 A It was an ad hoc committee to look at
6 reclamation of the various PCB-type fluids, products.

7 Q Now, all of the gentlemen who received copies
8 of this memo, were they at the time employees of
9 Monsanto?

10 A Yes.

11 Q And who is the author of this memorandum?

12 A Don Pogue. He was in sales, and he was kind
13 of given this project assignment, I believe. I believe
14 he worked for Larry Bradford, C. L. Bradford.

15 Q Was this committee formed as part of the
16 previous committee we discussed that was dealing with
17 the removal of the PCB's from the market or certain
18 segments of PCB's from the market?

19 A Yes, that's correct.

20 Q And this was then part of that overall plan
21 to remove the PCB's from the environment or from the
22 market?

23 A Yes.

24 Q Do you recall attending the meeting that is
25 referred to in this memorandum?

1 A No, I don't recall it.

2 Q You do recognize the memorandum as a document
3 of Monsanto?

4 A Yes.

5 Q I have another group of six documents which
6 I'm going to ask the court reporter to mark as Exhibits
7 10 through 15.

8 (Thereupon, the court reporter
9 marked Plaintiff's Exhibits 10
10 through 15 for identification.)

11 BY MR. BAUMER:

12 Q Let me ask you to take a look at Exhibit 10
13 now which consists of four pages; and first, for the
14 record, tell us what is the date of that document?

15 A May 6th, 1969.

16 Q And can you identify it as being a record of
17 the Monsanto corporation?

18 A Yes. This is a memorandum by Paul Benignus
19 to Dr. R. Emmett Kelly.

20 Q Do you know Mr. Benignus?

21 A Yes, I do.

22 Q Did he work with you at Monsanto?

23 A Yes, that's correct.

24 Q Was he part of the group that was to study
25 the removal of the PCB's?

1 A Yes.

2 Q And you received a copy of this memorandum, I
3 take it?

4 A Yes.

5 Q And the other gentlemen, could you identify
6 those for us please, who received copies?

7 A Don Olson was the director of marketing at
8 the time; W. R. Richard was the director of research;
9 E. P. Wheeler was the industrial hygienist.

10 Q And who was Mr. Raab?

11 A Mr. Raab was at General Electric Company, and
12 Dr. Emmett Kelly was our medical director at Monsanto.

13 Q Did you know Mr. Raab?

14 A I have met him, yes.

15 Q Had you met him on or before the date of this
16 document, May 6, 1969?

17 A I may have, I don't specifically recall.

18 Q What was his job, to your knowledge, at
19 General Electric?

20 A This memo reacquaints me. He was manager of
21 insulation systems at General Electric.

22 Q Do you know what that means or what his
23 function was?

24 A He was involved in the transformer side of
25 the business.

1 Q And now, were you familiar at the time you
2 received this memorandum with the wildlife studies with
3 University of Denver with respect to Aroclor?

4 A I imagine this was the first time I knew
5 about it, when I received this.

6 Q Do you recall receiving that memo?

7 A No, I don't.

8 Q Did you or anyone on your behalf or at your
9 direction have any contact with the University of Denver
10 with respect to the wildlife studies that were
11 proposed?

12 A I had no contact with them.

13 Q Do you know whether anyone at Monsanto did?

14 A I don't know.

15 Q Other than as may be indicated by this
16 memorandum?

17 A No, sir, I don't.

18 Q Did you ever receive a copy of the study?

19 A No, sir.

20 MR. BURKE: Object to the form. The
21 question assumes there is a study. There is no study
22 being reported in the document.

23 THE WITNESS: There was merely a request
24 to quote on a project, and I don't know whether we ever
25 responded or not.

1 BY MR. BAUMER:

2 Q Do you recall whether you made any response
3 to this memorandum?

4 A No, I don't.

5 Q Let me ask you to take a look at Exhibit 11,
6 which consists of three pages and is dated June 9, 1970.
7 Can you identify that as a record of Monsanto?

8 A Yes. It appears to be a memo written by Paul
9 Benignus June 9, 1970, to Ed Raab.

10 Q At General Electric?

11 A Yes.

12 Q Now, the Power Distribution Division of
13 General Electric at Pittsfield, do you know what was
14 manufactured there?

15 A Yes. This was the transformers.

16 Q Those transformers contained askarel?

17 A Yes, that's correct.

18 Q At the time this letter was written in June
19 1970?

20 A Yes.

21 Q Now, if you would look at the last page. Did
22 you receive a copy?

23 A Yes.

24 Q There are just a couple of names we haven't
25 identified. Mr. Bryant, can you identify Mr. Bryant for

1 us?

2 A No, I don't recall who he is.

3 Q Was he a Monsanto employee, to your
4 knowledge?

5 A I would assume he was; and I can't recall
6 Mr. Graham, either.

7 Q How about Mr. Wheeler?

8 A Yes. He's an industrial hygienist. That's
9 right. I don't recall Bryant or Graham.

10 Q Would you look at the second page at item
11 five. Can you read that for the record?

12 A It's difficult; I'll try. All are appraised
13 of the PCB pollution problem but outside of England and
14 the U.S.A. and Canada which are the areas where
15 Monsanto has actively informed its customers, as well,
16 there seems little evidence of active -- and that word,
17 I can't read.

18 Q Of this problem?

19 A Of this problem.

20 Q Does that statement accurately reflect what
21 Monsanto had done, that is, actively advised its
22 customers of the PCB problem in the United States?

23 MR. BURKE: Object to the form. It
24 misstates the language of the document, which is PCB
25 pollution problem.

1 BY MR. BAUMER:

2 Q As Mr. Burke has graciously modified the
3 question, can you answer it?

4 A We advised our customers of the potential PCB
5 pollution problem in the United States, uh-huh.

6 Q Now, this, of course, doesn't say potential
7 PCB pollution problem, it just says the PCB pollution
8 problem. Do you acknowledge that there was, in fact, in
9 June 1970 a PCB pollution problem?

10 A There were pollution incidents. I don't know
11 whether it was a problem yet at that time.

12 Q Mr. Benignus used the word problem, so we'll
13 talk to him about that then if you can't acknowledge
14 that. There was some concern though, I take it?

15 A Yes.

16 Q Over PCB's in the environment?

17 A That's correct.

18 Q That found their way into the environment
19 either through spills, usage, leakage, disposal,
20 vaporization, or otherwise; is that correct?

21 A That's correct.

22 Q Do you know whether Mr. Raab was charged with
23 any responsibility inside General Electric Company to
24 deal with the PCB concerns, problems, however they may
25 be discussed at this time frame, as of the date of

1 Exhibit 11?

2 A He was always one of our major contacts and
3 one of the central coordinators with G. E. for
4 transformers.

5 Q And he was then or was he then one of those
6 that Monsanto corresponded with on a routine basis with
7 respect to PCB's?

8 A Yes.

9 Q And was he one of those that Monsanto spoke
10 with through its various employees and conferred with
11 with respect to PCB's in the environment and the removal
12 of PCB's?

13 A Yes. I previously indicated he was one of
14 our major contacts.

15 Q Did you ever have a meeting with Mr. Raab?

16 A Yes.

17 Q When do you recall you first met with
18 Mr. Raab?

19 A I can't recall that.

20 Q Was it before the date of Exhibit 11, June 9,
21 1970?

22 A I can't recall it.

23 Q On how many occasions do you think you had
24 meetings with Mr. Raab?

25 A I think I perhaps met him three, four, five

1 times, something like that.

2 Q And was it at the time that that committee of
3 which we discussed last time we met was formulating the
4 plans for removal of askarel from the market?

5 A Oh, I think the first time I met him was
6 prior to all these incidents, a long time ago.

7 Q You mean back in the early, mid-60s, maybe?

8 A Yes, probably in the mid-60s sometime.

9 Q And therefore, when Monsanto became concerned
10 and commenced to remove askarel from the market, you had
11 additional discussions with Mr. Raab about that?

12 A Yes, that's correct.

13 Q Do you recall specifically telling Mr. Raab
14 that Monsanto was going to remove askarel from the
15 market?

16 A We informed General Electric of that at a
17 major meeting. John Mason and I went up on that.

18 Q You went up to meet with G. E.?

19 A Yes.

20 Q When was that?

21 A I can't recall the date.

22 Q Well, was it around 1970?

23 A I believe it was later than that.

24 Q How much later than that?

25 A I don't know.

1 Q Do you remember that indemnity agreement
2 that we talked about?

3 A Yes.

4 Q It was before the indemnity agreement, was it
5 not?

6 MR. BURKE: Objection, leading.

7 THE WITNESS: I don't recall.

8 BY MR. BAUMER:

9 Q Was it before the indemnity agreement?

10 A I don't know.

11 Q Would you agree, Mr. Bergen, that it would be
12 likely to have been before the indemnity agreement as
13 opposed to after the indemnity agreement because of the
14 nature of the indemnity?

15 A No, I can't recall. We had several different
16 meetings on different subjects, and I can't recall
17 specifically the chronological events.

18 Q Let's talk about this, what you said was a
19 major meeting. You went with whom?

20 A John Mason, and we were two of the principals
21 at Monsanto. And we probably had other people with us,
22 and I can't recall who they were.

23 Q John Mason went with you from Monsanto. What
24 was Mr. Mason's position?

25 A I think his title was assistant general

1 manager of the organic division of Monsanto. He was my
2 boss.

3 Q Was he an officer of Monsanto?

4 A No.

5 Q The organic division, how large a division of
6 the company was it at that time?

7 A Oh, it was quite a large division, 300, 400
8 million dollars.

9 Q How many people?

10 A Several thousand.

11 Q Was it located in any particular location?

12 A Headquarters was St. Louis.

13 Q How soon before you retired from Monsanto did
14 you have this meeting when Mr. Mason was in attendance?

15 A I think it was probably about four years.

16 Q Four years?

17 A Three to four years.

18 Q Before you retired? And you retired when?

19 A In May, June of 1976.

20 Q So then it would have been in either, as you
21 now recall, '72 or '73?

22 A In that general time frame, yes.

23 Q And what was the purpose of the meeting?

24 A It was to inform General Electric of the
25 status of PCB's and Monsanto's position and the terms

1 under which we would continue to supply PCB's to General
2 Electric.

3 Q And the terms under which you would continue,
4 would one of the terms be the execution of the indemnity
5 agreement which we previously discussed?

6 MR. BURKE: Objection, leading.

7 THE WITNESS: I can't recall exactly what
8 all the subjects were, the proposals at that meeting.

9 BY MR. BAUMER:

10 Q Let me ask this question. Was one of the
11 terms under which Monsanto determined that it would
12 continue to supply askarel or PCB fluids that those
13 recipients or purchasers, customers, sign an indemnity
14 agreement?

15 A I don't know that this was stated at the
16 meeting, but it resulted soon after; and you do have the
17 correspondence and the dates on that, and that was one
18 of the actions taken.

19 Q Monsanto did not supply to General Electric
20 askarel after January 1972, the date of the indemnity
21 agreement, until the indemnity agreement was signed;
22 isn't that right?

23 MR. BURKE: Objection, leading.

24 THE WITNESS: Yes.

25 BY MR. BAUMER:

1 Q Who did you meet with when you met with
2 G. E.?

3 A I can't recall all of the names, but it was
4 several of the key vice presidents and officers of the
5 transformer division and of corporate G. E.

6 Q Can you give me the names of anyone that was
7 there?

8 A I believe there was a Mr. Tomafor
9 who I think was the head of their chemical division
10 at that time. I believe he was present.

11 Q And other key vice presidents of G. E., you
12 say?

13 A I can't recall names.

14 Q But that was their titles, to your knowledge?

15 A They were titles of that nature, yes.

16 Q And where did the meeting take place?

17 A I think it was in New York City; I'm not
18 sure, though.

19 Q Where in New York?

20 A I don't know.

21 Q Who went with you other than Mr. Mason?

22 A I don't recall.

23 Q Were there others from Monsanto?

24 A I believe there were.

25 Q Was Mr. Raab at the meeting?

1 A I can't say for certain.

2 Q Were there any lawyers at the meeting?

3 A I don't recall.

4 Q And you went to explain Monsanto's position
5 with respect to PCB's and askarel?

6 A Yes.

7 Q What did you explain was Monsanto's position?

8 A We talked about the problem, that we couldn't
9 be responsible for the liability of what our customers
10 did with our products, and that we would have to take
11 some kind of action to hold Monsanto harmless.

12 Q And what type of action did Monsanto have or
13 propose to hold them harmless?

14 A I believe it was this indemnification that
15 was the primary action.

16 Q And what was the response, if any, from
17 General Electric of the discussion of the need for an
18 indemnity agreement?

19 A They eventually signed it, so I guess they
20 agreed.

21 Q So we can agree, can we not then, Mr. Bergen,
22 that the indemnity agreement is executed on January 21st,
23 1972?

24 A Yes.

25 Q And if I ask again whether the meeting took

1 place before January 1972, what would be your answer?

2 A I would say it probably did.

3 Q Do you recall how long after the meeting the
4 indemnity agreement was drafted and executed?

5 A No, I don't.

6 Q Did you have anything to do with the drafting
7 of the indemnity agreement?

8 A I reviewed it, and it was primarily a legal
9 document the lawyers drafted.

10 Q But did you review it before it was
11 finalized?

12 A Yes.

13 Q Would that have been sometime in 1971, then?

14 A Probably.

15 Q So, now, would it be fair to assume that the
16 meeting we've just been discussing took place in 1971 or
17 before?

18 A It would seem logical.

19 Q Now, were there other key meetings with
20 General Electric people where Monsanto discussed with
21 them the removal of PCB containing products from the
22 market, particularly, askarel?

23 A I'm sure there were.

24 Q Were you present at those meetings?

25 A At some of them.

1 Q Had there been meetings before the New York
2 meeting that we've been discussing?

3 A Yes.

4 Q Were you were in attendance?

5 A Yeah.

6 Q And what was the next one preceeding that
7 that you can recall?

8 A I don't remember.

9 Q Can you recall who you met with at those
10 meetings for G. E.?

11 A No.

12 Q Can you recall any names?

13 A I've given you the ones that I did recall,
14 and I wasn't sure, Luke something or other at Hudson
15 Falls. Those other names that we saw at Hudson Falls.

16 Q They were on that exhibit?

17 A Yes.

18 Q On Exhibit 8? Are those the names that we're
19 talking about?

20 A Yes; and then Mr. Raab that was at the other
21 meeting.

22 Q And those then were at the meeting that
23 preceded the New York meeting; correct?

24 A Yes.

25 Q Where the subject matter was the decision by

1 Monsanto to remove askarel from the market?

2 MR. BURKE: Objection, leading,
3 repetitious.

4 THE WITNESS: The other meetings with all
5 discussing the subject and possibly actions that could
6 be taken.

7 BY MR. BAUMER:

8 Q And was one of those possible actions the
9 removal of askarel from the market?

10 A It may have been.

11 Q Well, at that time, Mr. Bergen, Monsanto was
12 discussing within its company the removal of askarel
13 from the market, was it not?

14 MR. BURKE: Objection, leading.

15 THE WITNESS: I don't recall that.

16 BY MR. BAUMER:

17 Q You don't recall those discussions?

18 A I don't recall a specific discussion at that
19 specific time.

20 Q Well, the last time we met, we had talked
21 about some documents that had some early dates in them
22 and the dates in the early '70s where this committee was
23 formulated. Do you recall that?

24 A Yes.

25 Q So that committee was dealing, was it not,

1 with the removal of askarel from the market?

2 A Not necessarily with removal from the market,
3 but how to handle the problem.

4 Q What was the problem?

5 A The basic problem of its presence in the
6 environment.

7 Q And the potential harm to the environment?

8 A And the potential harm.

9 Q And one of the solutions, of course, an
10 ultimate solution, was it not, was the removal of the
11 product from the market?

12 MR. BURKE: Objection, leading.

13 THE WITNESS: That would have been an
14 easy way out. The problem was there were no replacement
15 products. The world depended upon these products; and
16 in the United States, we were the only source and
17 supply. And so the whole world was using the
18 polychlorinated biphenyls for this purpose, and there
19 were no known replacements at that time.

20 So it was not easy to say we'll just stop
21 making it, because we would have had all sorts of
22 lawsuits from people, abandonment of a business and all
23 sort of things. We just couldn't walk away from them.
24 We had hospitals calling us and shut down because they
25 couldn't get transformers, and people's lives at stake.

1 Q Did Monsanto eventually remove the product
2 from the market?

3 A Eventually.

4 Q Had there been substitute products found by
5 that time?

6 A Yes.

7 Q Had there been substitute products found by
8 the time Monsanto required the indemnity agreement?

9 A No.

10 Q Would you look at Exhibit No. 12, please?

11 A Okay.

12 Q Do you recognize that document?

13 A Yes.

14 Q Do you recall receiving it?

15 A No.

16 Q Do you know who McFarland is?

17 A No, I don't.

18 Q Were you director of specialty products group
19 at Monsanto in February of 1972?

20 A That's correct.

21 Q Is that your address that appears on the
22 letter?

23 A Yes.

24 Q The handwriting on the letter, whose is that?

25 A My handwriting, the one is.

1 Q Tell us which is yours.

2 A The one that's mine is where I struck the
3 arrow through and addressed it to C. Paton and asked him
4 to please handle it.

5 Q Who was Mr. Paton?

6 A He was the marketing manager for the
7 dielectric fluids at that time.

8 Q And what was he going to handle?

9 A He was going to handle the return and the
10 credit; and then apparently, he passed it down to Dale
11 Smith and said, Okay, go ahead and issue full credit.

12 Q Is that Mr. Paton's handwriting, the other?

13 A I assume it is. I'm not sure.

14 Q Who is PGB, if you know?

15 A That's Paul Benignus.

16 Q Now, the statement that is contained in the
17 first paragraph of the letter, is that an accurate
18 statement?

19 A Yes.

20 Q So in February '72, Monsanto was
21 discontinuing the sale of certain products containing
22 polychlorinated biphenyls because of their danger of
23 becoming environmental contaminants?

24 A That's correct.

25 Q And which products are we talking about in

1 this respect were being returned?

2 A Well, these are the Pyranol products,
3 transformer-type products.

4 Q The fluids?

5 A Yes.

6 Q So in 1972, Monsanto was repurchasing any
7 Pyranol that had been sold to G. E.?

8 MR. BURKE: Objection to the form of the
9 question. It assumes facts not in evidence and doesn't
10 even account for the division or the section from which
11 the correspondence came. Go ahead.

12 THE WITNESS: In this particular case, we
13 accepted the return of the unopened drums, which is
14 pretty much standard policy.

15 MR. BURKE: Is there a number of that
16 exhibit, please?

17 MR. HAMILTON: Number 12.

18 BY MR. BAUMER:

19 Q Look at Exhibit No. 13, please, sir, a
20 two-page document dated April the 25th, 1972. Did you
21 receive a copy of that document?

22 A Yes.

23 Q All of those who received blind copies as
24 indicated in the upper right-hand corner, are those
25 Monsanto employees?

1 A Yes, they are.

2 Q Mr. Corey, what was Mr. Corey's job?

3 A He was my boss at that time. There were
4 several changes. I think he replaced Mr. Mason, and so
5 he was an assistant general manager.

6 Q When was Mr. Mason replaced by Mr. Corey?

7 A I don't recall exactly.

8 Q Obviously, it was before April 1972; is that
9 right?

10 A Yes.

11 Q Do you recall whether it was in '72 or '71?

12 A I would say it would be early '72.

13 Q Mr. Mason, was he promoted, or what is the
14 reason for that?

15 A He was from the Brussels office and the
16 U. K. office, and he was on a three-year assignment to
17 the United States. And I believe he went back to the
18 U. K. or Brussels or some other assignment overseas at
19 that time, still with Monsanto.

20 Q Now --

21 A I do recall Mr. Bryant now. Mr. Bryant was
22 either in research or technical sales on the dielectric
23 fluids, and he was getting involved -- I think he was
24 working for Ralph Munch, R. H. Munch there. And he was
25 being groomed as a replacement for Paul Benignus who was

1 getting ready to retire. So that is who Bryant was.

2 Slayton, the one on the bottom, was the
3 eastern sales manager for the specialty products fluids;
4 and the General Electric account would have been his
5 account.

6 Q This document indicates there was going to be
7 a meeting on May 2nd; is that correct?

8 A That's what it says.

9 Q Do you recall attending a meeting on May 2nd?

10 A No, I don't.

11 Q Look at the second page of the document which
12 is styled Agenda for the May 2nd meeting in Hudson
13 Falls. Do you recall traveling to Hudson Falls for a
14 meeting in that time frame?

15 A I traveled several times to Hudson Falls. I
16 don't recall that particular time frame.

17 Q Look at the agenda and see whether that
18 refreshes your recollection as to whether you were at
19 the meeting.

20 A No, no recollection.

21 Q Who is Dr. Munch?

22 A He was in charge of the physical chemical
23 laboratory, physical chemistry laboratory, and made most
24 of the dielectric measurements. He was a physicist.

25 Q Do you recall traveling to Hudson Falls with

1 Mr. Benignus and any of the other gentlemen that are
2 listed as receiving copies of this memo?

3 A Yes, at various times.

4 Q And when you would go to Hudson Falls, did
5 you discuss the items that are recited on the agenda at
6 any time?

7 A Yes.

8 Q Now, this says there was going to be a
9 discussion of Japanese capacitor industry replacements
10 for PCB's. Do you recall having such a discussion with
11 General Electric personnel?

12 A Not specifically.

13 Q Do you know what is meant by that item?

14 A I can't recall now.

15 Q Had the Japanese perfected a replacement for
16 PCB's back in 1972?

17 A Not to my knowledge.

18 Q What was G. E. using Aroclor 1016 for in May
19 1972?

20 A Capacitor fluids.

21 Q Was Aroclor 1016 biodegradable?

22 A Yes.

23 Q Was General Electric in 1972 using Aroclor
24 1254 and 1260 in capacitors?

25 A Yes.

1 Q The Aroclor?

2 A In capacitors?

3 Q Yes.

4 A Not in capacitors.

5 Q In transformers?

6 A Yes.

7 Q Are Aroclor 1254 and 1260 biodegradable?

8 A They're partially biodegradable. They take a
9 little bit longer.

10 Q How long is longer?

11 A How long the experiment is.

12 Q Is that how long it takes for 1254 and 1260
13 to become biodegradable?

14 A No. A number of years; it depends on the
15 circumstances and what bacteria are present and what
16 other agents are there.

17 Q Was that quality, though, of 1254 and 1260
18 that it wasn't easily biodegradable that lent itself to
19 the removal from the market?

20 A That's correct. It was more refractory. It
21 was more difficult to break down.

22 Q Now, please look at No. 14 which is a letter
23 dated March the 11th, 1974. Were you still at Monsanto
24 at that time?

25 A Yes, that's correct.

1 Q That letter was written by whom?

2 A Paul Benignus.

3 Q And directed to whom?

4 A Dr. R. C. Osthoff, General Electric
5 transformer division.

6 Q Have you ever met Dr. Osthoff?

7 A I don't recall that, no.

8 Q Did you receive a copy of this document?

9 A Yes.

10 Q And it looks like the same people who were
11 on -- well, Mr. Papageorge is added to this one. He
12 didn't get a copy of No. 13; but otherwise, it looks
13 like about the same list of people except for him and
14 Mr. Ford.

15 A Yes.

16 Q Mr. Ford's job was what?

17 A At that time, I can't really recall. I
18 believe he was in sales.

19 Q Now, do you recall the notice that is
20 referred to in the letter?

21 A No, I don't.

22 Q Do you recall this memo?

23 A No, I don't.

24 Q You don't have any reason to believe you
25 didn't receive a copy if it's listed, do you?

1 A No.

2 Q These numbers out to the left, is that an
3 address where you can --

4 A That was an office address, yes. It was a
5 building number and the office number.

6 Q Were all of these gentlemen in St. Louis?

7 A I don't believe so.

8 Q Who was not?

9 A Slayton, I don't think Slayton was there; and
10 Ford, I don't think was there. Perhaps at that time
11 Bryant had been assigned up to the New York office.
12 Slayton was up in New York, so that 1650 might be New
13 York. So Bryant might have been the salesman up there
14 at that time. I think he was.

15 Q Let me ask you to take a look at No. 15, a
16 one-page document. Had you left Monsanto as of the date
17 of that letter, October 8, 1975?

18 A No, I guess I was still there.

19 Q You got a copy of this letter?

20 A Yes, uh-huh.

21 Q Who was Robert Stenger?

22 A Excuse me?

23 Q The person who received the letter?

24 A I believe he was in a research section at
25 General Electric or their product development group.

1 Q Do you recall the problems or the events
2 surrounding any actions that were taken against G. E. by
3 any governmental agency with respect to the Hudson
4 River?

5 A This is referring to some New York state
6 hearings about pollution of the Hudson River.

7 Q With PCB's?

8 A Yes.

9 Q Do you recall when you first learned of that?

10 A It was sometime prior to this date.

11 Q Prior to October '75?

12 A Yes.

13 (Thereupon, the court reporter
14 marked Plaintiff's Exhibit 16
15 for identification.)

16 BY MR. BAUMER:

17 Q Look at Exhibit 16, please, Mr. Bergen. It
18 consists of 13 pages. Do you recall ever seeing that
19 document?

20 A No, I don't recall it.

21 Q How about the attachment to the memo which
22 appears to be guidelines for the capacitor group on
23 askarel disposal? The memo indicates that there is a
24 similar if not identical preface taken from the
25 transformer guidelines. Are you familiar with the

1 transformer guidelines?

2 A No.

3 Q Have you ever seen the attachment or a
4 similar copy?

5 A I probably did, but I don't specifically
6 recall it.

7 Q Do you ever recall any discussions that the
8 breathing of vapors or fumes of heated askarel should be
9 avoided?

10 A Yes.

11 Q Did you have discussions about that fact
12 prior to the date of this memo, which is April 1972?

13 A I don't specifically recall.

14 Q Was that one of the concerns with respect to
15 the environment that Monsanto had when it considered
16 the removal of Pyranol from the market?

17 A It was not the major one, no.

18 Q Would that be a vaporization?

19 A Yes.

20 Q Would you agree, Mr. Bergen, that gases are
21 produced when askarel is decomposed by very high
22 temperatures such as that of an electric arc in the
23 presence of air or organic insulating materials, contain
24 a high percentage of hydrogen chloride, and small
25 percentages of carbon dioxide and carbon monoxide and

1 oxygen?

2 A Yes, I believe that's possible.

3 Q Now, on page ten. Did Monsanto ever
4 undertake incineration of products that contain PCB's?

5 A Yes.

6 Q And where did they do that?

7 A At our Sauget, Illinois, East
8 St. Louis plant.

9 Q And was there a residue that was then
10 disposed of or was it all --

11 A Totally incinerated.

12 Q Before incineration, where did Monsanto
13 dispose of used products that contained PCB's?

14 A I don't recall.

15 Q Did they put them in landfills?

16 A There may have been some of that, yes.

17 Q Were they put in landfills that were
18 designated toxic or hazardous liquids?

19 A May have been.

20 Q Do you recall that occurring?

21 A I don't specifically, no.

22 Q When did incineration commence?

23 A In the same general time frame.

24 Q Early '70s?

25 A Yes.

1 Q Why were they being incinerated as opposed to
2 being put in their natural state somewhere else?

3 A Well, incineration would completely break
4 them down into their elements which did not pose any
5 problem to the environment.

6 Q Were there toxic landfills, landfills for
7 toxic materials, in the St. Louis area?

8 A I don't recall.

9 Q Who in your judgment could best discuss with
10 us at Monsanto the disposal of liquids containing PCB's
11 prior to incineration?

12 A Bill Papageorge.

13 Q Seems like Mr. Papageorge is being identified
14 by everybody.

15 A He's the key.

16 Q I have 41 documents here, Mr. Bergen, that
17 I'm going to ask the court reporter to mark 17 through
18 whatever it gets through, the 41 documents in the order
19 in which I've placed them here.

20 (Thereupon, the court reporter
21 marked Plaintiff's Exhibits 17
22 through 58 for identification.)

23 BY MR. BAUMER:

24 Q Let me give you a document there which has
25 been marked Exhibit 17. It appears to be a letter

1 from Mr. Clark to a Mr. Jenkins dated April 4, 1941.

2 Do you know Mr. Clark or Mr. Jenkins?

3 A No, I don't.

4 Q I guess it's Dr. Jenkins. He was with
5 Monsanto in Anniston, Alabama. Have you ever been to
6 Anniston, Alabama?

7 A Yes.

8 Q Does Monsanto have a plant there?

9 A Yes.

10 Q What was produced?

11 A We made some of the Aroclors there,
12 polychlorinated biphenyls.

13 Q The PCB's?

14 A Yes.

15 Q I've forgotten, when did you tell us that you
16 joined Monsanto?

17 A In '46.

18 Q You never ran across Dr. Jenkins?

19 A No. I believe he had retired by that time.

20 Q Do you recognize his name?

21 A Yes. I had heard of him, yes.

22 Q And he resided in Anniston?

23 A I presume so.

24 Q Now, the people who received copies of this
25 letter, can you identify any of them up in the upper

1 right-hand corner?

2 A The only ones that I knew were Metzner and
3 Hitchens.

4 Q Mr. Metzner?

5 A And Hosmer.

6 Q Was he with Monsanto?

7 A Yes. They were all with Monsanto.

8 Q Hitchens was with Monsanto?

9 A Yes. He was in research, and Hosmer was in
10 manufacturing.

11 Q Do you know what Pl.B., what that is?

12 A I think that's plant B.

13 Q Plant B? In what location?

14 A I think that was in East St. Louis, what we
15 later called Sauget, Illinois.

16 Q How about Mr. Gerber?

17 A I didn't know him.

18 Q Did you know Mr. F. F. Clark?

19 A No, I did not.

20 Q Did you ever hear his name?

21 A No, not that I recall.

22 Q Did you ever have occasion to read the
23 Journal of Industrial Hygiene and Toxicology?

24 A Not that I recall.

25 Q Do you know who Dr. Drinker is?

1 A No.

2 A Look at No. 18, please, sir. What is the
3 date of No. 18?

4 A November 8th, 1968.

5 Q Who is the author of that letter?

6 A Roy Sullivan, sales manager, eastern region.

7 Q Did you know Mr. Sullivan?

8 A Yes.

9 Q He worked for Monsanto?

10 A Yes.

11 Q Who received the letter?

12 A It was addressed to Mr. L. L. Barker, Senior
13 Buyer, General Electric in Hudson Falls.

14 Q Did you know Mr. Barker?

15 A I had met him, yes.

16 Q Do you recall when you met him?

17 A No, I don't.

18 Q Did you meet him in the course of selling
19 askarel to him?

20 A That's correct.

21 Q And to General Electric for whom he
22 represented?

23 A Yes.

24 Q The people receiving copies of the letter,
25 Mr. Graham I think may be a new name up in the upper

1 right-hand corner. Do you know him?

2 A I think that was Randy Graham, and he was a
3 salesperson up there in the New York office; he called
4 on General Electric.

5 Q Are all those people Monsanto employees?

6 A Yes, that's correct.

7 Q Look at the second page of the letter, if you
8 would. It appears to indicate that Monsanto is
9 attempting to assist General Electric in finding a
10 location for disposal of scrap material?

11 A That's correct.

12 Q Is that accurate?

13 A Yes.

14 Q And what was the method that Monsanto was
15 using, to your recollection, in November 1968 in that
16 time frame, for disposal of scrap Pyranol?

17 A We were working with the Findett Company in
18 St. Charles, Missouri, and they were doing some
19 reclamation of the material.

20 Q What was the process for reclamation?

21 A I forget the details of it.

22 Q Was it incineration or disposal in landfills?

23 A It was not incineration. It was some form of
24 a separation, filtering, separation, some other
25 technique.

1 Q And I notice that Mr. Sullivan suggested that
2 Findett could not accommodate the 400 drums, and they
3 suggested that they be placed in the toxic dump. Is
4 that what it says?

5 A That's what it says.

6 Q Was Monsanto suggesting that scrap Pyranol be
7 placed in toxic dumps back in 1968?

8 A Appears to be that, yeah.

9 Q Do you have any information to the contrary,
10 that is, that they were suggesting that it be put in
11 some other type of landfill or dump?

12 A No.

13 Q Was Monsanto putting any notices on their
14 drums that contained Pyranol that they were in any way,
15 that the product was in any way, toxic, harmful, or
16 dangerous to the environment at any time during your
17 employment with Monsanto?

18 A Yes, I believe we did. I forget exactly
19 when.

20 Q Did not you start doing that when the
21 committee was formed?

22 A Yes, I think maybe we did.

23 Q And you were appointed to determine the
24 process for the elimination of the sale of askarel?

25 A We developed various labels for the

1 containers.

2 Q And the label indicated there were some
3 harmful qualities about the product; is that correct?

4 A Yes.

5 MR. BURKE: Objection, leading.

6 BY MR. BAUMER:

7 Q What did the labels indicate?

8 A I think they indicated they should not be
9 discharged indiscriminately into the environment.

10 Q And would that have been in the early '70s?

11 A Yes.

12 Q And those labels placed on the drums, they
13 were sold to all of Monsanto's customers?

14 A Yes.

15 Q That would include General Electric?

16 A Yes.

17 Q Did you assist in the preparation of the
18 wording of the label?

19 A I reviewed it.

20 Q And what was the purpose of the label?

21 A It was a warning label.

22 Q Did it say warning, have the word warning?

23 A I can't recall the wording.

24 Q Did it use the word caution?

25 A I don't recall.

1 Q Let's look at Exhibit No. 19, if you would,
2 please, sir. And that document is dated October 10,
3 1969?

4 A That's correct.

5 Q And it's written by whom?

6 A Elmer Wheeler.

7 Q Mr. Wheeler was employed by whom?

8 A Monsanto.

9 Q And was he manager of environmental health in
10 1969?

11 A Yes.

12 Q Did he work for you?

13 A No.

14 Q Did he work in the same area in which you
15 worked?

16 A He worked in all the areas of Monsanto
17 products; and whenever my product areas were involved,
18 then we worked together.

19 Q And do you know, who was the letter directed
20 to?

21 A Directed to Mr. Don McBournie.

22 Q Do you know Mr. McBournie?

23 A No, I don't.

24 Q Can you read for us, there is a highlighting
25 of a word; it says Aroclors 1268. Is that --

1 A Yes.

2 Q What was Aroclor 1268 used for?

3 A It had very limited use, as I recall; and it
4 was more of a processing aid for a pigmenting-type
5 material because it had such a high melting point.

6 Q Look at the third paragraph, if you would.
7 Would you read that?

8 A Says, "These data indicate that under only
9 the most extreme conditions of temperature should there
10 be significant volatilization which could present any
11 hazard from the inhalation of vapors."

12 Q Do you understand that to mean that under
13 some temperature conditions, that Aroclor 1268 would
14 vaporize?

15 A Yes, taking an extreme condition of
16 temperature.

17 Q How about for Aroclor 1254? Was it
18 your knowledge that it would likewise vaporize
19 under certain conditions?

20 A Yes.

21 Q And you knew this back in 1969?

22 A Yes.

23 Q And did you also know that those vapors could
24 be harmful to humans if they were breathed?

25 A I don't know the extent of our knowledge on

1 that. I don't recall that.

2 Q Well, they posed a hazard, did they not, the
3 vapors?

4 A Yes. It's a good industrial practice to say
5 you wouldn't go around breathing in concentrated forms.

6 Q Would 1254 and 1260 vaporize at lower
7 temperatures than 1268?

8 A Yes.

9 Q I don't recall whether I asked you this last
10 time. Do you know whether Mr. Wheeler is still with
11 Monsanto?

12 A I understand he's left.

13 Q Is he retired or does he have other
14 employment, to your knowledge?

15 A I don't know.

16 Q People who received copies of this letter, do
17 you know those gentlemen?

18 A No, I don't know either one of them.

19 Q Let's look at Exhibit 20, if you would. Do
20 you know Dr. M. E. Scoville?

21 A No, I don't.

22 Q Do you recall seeing the San Francisco
23 article of March 19 that is referred to in this letter
24 of April 8, 1969?

25 A Not specifically.

1 Q Do you have any indication or recollection of
2 the content of that article?

3 A Not specifically.

4 Q Let's look at Exhibit 21. Do you know
5 Mr. James S. Nelson?

6 A No, I don't.

7 Q Are you looking at the same thing I'm looking
8 at, the article? Is that the San Francisco article
9 which was referred to in the previous exhibit?

10 A I believe it is, probably.

11 Q Did you read that article when it was
12 published?

13 A I assume I read it at some time.

14 Q Well, was it an article that was generally
15 discussed at Monsanto?

16 A Yes.

17 Q For what reason was it discussed at Monsanto?

18 A Well, because of the alleged inferences about
19 PCB's and the effect on the environment.

20 Q And Mr. Wheeler, by Exhibit 21, sent,
21 according to that document, a copy of that article and
22 several other reports or articles to Nelson at General
23 Electric?

24 A That's correct.

25 Q But you did tell us you didn't know

1 Mr. Nelson?

2 A That's correct.

3 Q Had you seen these other articles that are
4 attached?

5 A Yes.

6 Q Did you see them at the time they were
7 published, on or about that time?

8 A Some months or years later.

9 Q How about in 1969 when Mr. Wheeler was
10 sending them to Mr. Nelson and also sent Mr. Bryant and
11 Mr. Benignus a copy of this? Did you see them around
12 that time?

13 A Around that time, yes.

14 Q And were they articles that were of common
15 discussion at Monsanto?

16 A Yes.

17 Q Do you recall discussing these articles with
18 anyone at General Electric?

19 A Myself, personally?

20 Q Yes, sir.

21 A No.

22 Q Do you know whether any of those that worked
23 for you or for Monsanto, as a matter of fact, discussed
24 these articles with General Electric employees?

25 A I believe they were, yes.

1 Q Do you recall any specific meeting or time
2 when that was done?

3 A No.

4 Q Let's look at Exhibit 22.

5 A Okay.

6 Q We, of course, know who Mr. Wheeler is. Do
7 you know who the recipient of this letter is?

8 A Yes. I've met him once or twice, Dr. Al
9 Pozefsky, capacitor department.

10 Q Did you meet him on or about the time this
11 letter was written?

12 A About that same time frame.

13 Q Did you ever have any discussions with
14 Dr. Pozefsky relative to the vaporization of Aroclor
15 1242 or 1254?

16 A The subject I think was generally discussed
17 by our people. I don't recall specifically talking
18 about it.

19 Q What was the nature or the reasons for
20 discussing toxicity of the vapors of Aroclor 1254 and
21 1242 with General Electric people?

22 A I think General Electric was interested in
23 their plant hygiene practices.

24 Q Did you ever read the article that is
25 referred to in this letter that was published in 1956?

1 A I don't recall it.

2 Q You don't recall it?

3 A No.

4 Q Look at Exhibit 23. Do you recall ever
5 seeing that document?

6 A Not specifically.

7 Q Do you recall discussing any of the items
8 enumerated in the document with first of all,
9 Mr. Benignus?

10 A Pardon?

11 Q Do you recall discussing any of the items
12 that are enumerated in the document with Mr. Benignus?

13 A No, not specifically.

14 Q Do you recall ever having a discussion with
15 anyone at General Electric about the subject of the
16 possible effects on cost at General Electric should
17 Monsanto curtail its market of Aroclors for certain
18 non-electrical applications?

19 A I don't recall specifically.

20 Q Do you recall generally discussing that item
21 with General Electric people?

22 A There was some general discussion about it.

23 Q Let's look at the next document, if you
24 would, please, No. 24, dated April 15th, 1970. Do you
25 know the author?

1 A Yes. That's Ed Raab - no, Edward Dobbins. I
2 don't know him personally.

3 Q Have you met him at all?

4 A I may have met him, I don't recall.

5 Q Mr. Raab received a copy as is indicated?

6 A Yes.

7 Q Do you recall reviewing this letter or the
8 attachment?

9 A No, I don't.

10 Q Do you recall any discussions concerning a
11 letter similar to the attachment being sent by General
12 Electric to its customers?

13 A The broad general subject we discussed, yes.

14 Q Do you know whether General Electric sent a
15 letter to its customers similar or identical to the
16 attachment to Exhibit 24?

17 A I don't know for a fact that they did.

18 Q In 1970, was Monsanto accepting scrap Pyranol
19 from anyone that wanted to send it in?

20 A I don't recall.

21 Q Look on the first page of the attachment down
22 at the bottom. It says if you should have scrap
23 Pyranol, you should place it in closed drums and ship it
24 at your expense to Monsanto.

25 A Yes.

1 Q Did Monsanto just accept it if it arrived and
2 then charge the owner of the scrap Pyranol \$.03 for
3 each pound of scrap material?

4 A We did accept some. I forget the exact
5 procedure that we had employed at the time.

6 Q Do you know or recall whether Monsanto
7 authorized General Electric to circulate a letter to its
8 customers that would contain information that we've just
9 discussed, that is, to ship scrap Pyranol back to
10 Monsanto?

11 MR. BURKE: Objection to the form of the
12 question. It assumes such authorization is required.

13 THE WITNESS: I don't know that we really
14 instituted that policy or not. There were discussions
15 about it, and we may have done it for a brief period of
16 time.

17 BY MR. BAUMER:

18 Q Let's look at Exhibit 25, please, sir.

19 A Yes, sir.

20 Q Do you have any knowledge of the analysis
21 that's discussed or potential analysis that's discussed
22 in Exhibit 25?

23 A Not specifically.

24 Q Do you know any of the gentlemen who either
25 wrote the letter or received the letter?

1 A Yes. I know Tucker.

2 Q Mr. Tucker was a Monsanto employee in 1970?

3 A That's correct.

4 Q Do you know the gentleman at General Electric
5 who received the letter?

6 A No, I don't recall him.

7 Q Let's look at Exhibit 26, a two-page document
8 dated December 29, 1970. Do you recognize this
9 document?

10 A No.

11 Q Do you know the writer or the recipient?

12 A Yes, Randy Graham.

13 Q Who was Mr. Graham?

14 A He was a sales specialist.

15 Q How about the recipient, Mr. Crowe?

16 A No, I don't recall him either.

17 Q He apparently worked in Rome, Georgia. Did
18 you know any of the people at G. E. in Rome, Georgia
19 back in 1970?

20 A I did visit the plant some time in that
21 general time frame, but I don't recall the names of the
22 people.

23 Q There is a new name in the upper right-hand
24 corner, Mr. Hail. Who is Mr. Harold Hail?

25 A I think it's spelled wrong. I think it's

1 H-a-l-e, and he was in our traffic department.

2 Q Who is Alice Keen?

3 A I don't recall.

4 Q When did Monsanto have a press release
5 concerning the PCB environmental pollution problem back
6 in 1970?

7 A I don't recall.

8 Q Do you know Don Olson?

9 A Yes.

10 Q Who is he?

11 A He was director of marketing at that time.

12 Q For Monsanto?

13 A Yes, the fluids group.

14 Q Do you know Frank McCan?

15 A I don't recall him.

16 Q Let's look at Exhibit 27, a one-page document
17 dated January 4, 1971. Do you know any of the parties,
18 either the writer or the recipient?

19 A The recipient is Bill Richard, director of
20 research, and the writer is Al Pozefsky, manager of
21 engineering at Hudson Falls.

22 Q Do you know Mr. Pozefsky?

23 A Yes.

24 Q How about Dr. Donnelly, who received a copy?

25 A I don't recall.

1 Q Was there some problem with the flash point
2 on the product that is discussed in this letter?

3 A Nothing I specifically recall.

4 Q Was Monsanto in 1971 performing tests on the
5 biodegradability of MCS 1016?

6 A We ran various biodegradation tests during
7 that period of time.

8 Q What is MCS 1016?

9 A That was a low chlorinated biphenyl.

10 Q Did it contain PCB's?

11 A Yes.

12 Q Please look at Exhibit 28, a one-page
13 document dated May 27th, 1972. Do you know either the
14 writer or recipient?

15 A Yes. The writer was Bryant, who was one of
16 the sales people out of the New York office. It's
17 addressed to a Mr. Frank -- I can't make the name out.
18 I don't know him, General Electric at Pittsfield.

19 Q And it discusses, does it not, a piece of
20 legislation?

21 A Yes, pending legislation.

22 Q That would effect the discharge of chemical
23 solutions containing polychlorinated biphenyls into the
24 environment?

25 A Yes.

1 Q Did you work with anyone or were you involved
2 in any way with commenting on legislation back in 1972
3 concerning PCB's and their introduction into the
4 environment?

5 A I don't recall that, no.

6 Q Was Monsanto following what was being done?

7 A Yes. Our Washington office followed any
8 legislation that pertained to any of our products.

9 Q Did you have a legislative office in
10 Washington at that time?

11 A Yes.

12 Q Who was in charge of the legislative office?

13 A I forget his name.

14 Q Wasn't Mr. Bryant?

15 A No.

16 Q To your knowledge, did Monsanto disseminate
17 the information that was contained by the legislative
18 office in Washington with its customers, and
19 particularly, as it related to PCB's?

20 A I think if anything formal came out, just on
21 pending legislation, it would probably not be our
22 practice to discuss each and every item.

23 Q This letter does discuss pending legislation
24 with General Electric, does it not?

25 A Right. This is a very specific issue.

1 Q Were you involved at all in this issue?

2 A No, other than the standpoint of the
3 potential import of it.

4 Q Were you aware of it?

5 A Yes.

6 Q Were you kept aware of everything that was
7 occurring that would impact on the use of Aroclors from
8 the standpoint of governmental regulation?

9 A Hopefully.

10 Q The expense was there to do so?

11 A Yes.

12 Q Look at No. 29, please. It's a two-page
13 document dated October 5, 1971. Do you know the writer
14 or the recipient?

15 A The writer is Roger Hatton, who is the
16 technical manager of our hydraulics group for Monsanto.
17 And it's addressed to Mr. Worthington, the General
18 Electric nuclear energy division, Wilmington, North
19 Carolina. I do not know him.

20 Q Santovac, is that an accurate pronunciation,
21 Santovac 1 and 2 fluids?

22 A Yes. As I recall, they were fluids that were
23 used in vacuum pumps to create high vacuums on whatever
24 you wanted to put it on.

25 Q Did they contain polychlorinated biphenyls?

1 A Yes.

2 Q Would you look at Exhibit 30, a one-page
3 letter dated October 8th, 1971. Do you know either the
4 writer or recipient?

5 A The writer was Don Roush, who was a product
6 specialist in our heat transfer fluids of Monsanto, and
7 addressed to Miss Kay Weintraut of General Electric at
8 Mount Vernon, Indiana. I do not know her.

9 Q What is FR, Therminol FR?

10 A Therminol FR is Therminol fire resistant,
11 heat transfer fluids.

12 Q It's a category of various fluids?

13 A That's correct.

14 Q Do those fluids contain PCB's?

15 A That's correct.

16 Q The people who received copies of this
17 letter, can you identify them? Are they all Monsanto?

18 A They're all Monsanto people, yes.

19 Q Let's look at Exhibit 31, please. It's dated
20 October 8th -- it's a duplicate of 30, is it not?

21 A I believe so.

22 Q Let me have that back, please.

23 No. 32 please, sir, dated November 15th,
24 1971. Do you know either the writer or the recipient?

25 A The writer is Don Roush of Monsanto. The

1 recipient is Mr. Eschen of General Electric at Morris,
2 Illinois. I do not know him.

3 Q This is, again, discussing Therminol; right?

4 A That's correct.

5 Q Look at No. 33, please. Do you know the
6 writer?

7 A Yes. Al Pozefsky of G. E.

8 Q What is ANSI Working Group?

9 A That's a trade group. I forget what the
10 letters stand for.

11 MR. BURKE: American National Standards
12 Institute. Does that sound familiar?

13 THE WITNESS: Could be, yeah.

14 BY MR. BAUMER:

15 Q Is it a group to which Monsanto was a member
16 or individuals at Monsanto?

17 A I don't know whether we were members or not,
18 but we participated in some of the meetings.

19 Q Would this memo have gone to people at
20 companies other than General Electric and Monsanto?

21 A That's correct.

22 Q Westinghouse, McGraw-Eddison?

23 A Right.

24 Q Were Westinghouse and McGraw-Eddison
25 customers for Aroclors from Monsanto?

1 A That's correct.

2 Q Are all the other companies that are
3 mentioned here, were they also customers for Aroclors?

4 A Yes.

5 Q Let's look at Exhibit 34, two pages, dated
6 December 9, 1971. The writer, again, is Mr. Raab at
7 General Electric; is that correct?

8 A Yes.

9 Q Look at the second page of that. Was there
10 some concern at Monsanto as to the failure rate of
11 transformers that contained PCB's?

12 A I don't believe we knew what it was.

13 Q What would be the reason, to your knowledge,
14 for ascertaining that information?

15 A If you knew that, you could determine what
16 the potential exposure might be to the environment.

17 Q From the release of the PCB's from the
18 transformers?

19 A Yes.

20 Q So it was known, or was it known then to
21 Monsanto that on occasion transformers would fail, and
22 as a result of failure, there would be a release of the
23 fluid that contained PCB's?

24 A That's correct.

25 Q You didn't by any chance go to the meeting on

1 December the 15th in Chicago that is referred to here,
2 did you?

3 A I don't recall; I don't think so. I didn't
4 go to many of the ANSI meetings.

5 Was that an ANSI meeting?

6 Q Yes.

7 A I didn't go to them.

8 Q How about a meeting on November the 11th with
9 Mr. Reinhardt and Mr. Raab?

10 A I don't recall.

11 Q Concerning failures rates?

12 A I don't recall it.

13 Q Look at 35, please, sir. It's two pages,
14 dated September 24th, '71. Do you know Mr. Ames?

15 A I believe I met him at one of those meetings.

16 Q The meetings discussing removal of certain
17 Aroclors from the market?

18 A Yes.

19 Q Do you recall seeing a copy of this letter
20 or the article referred to?

21 A I don't specifically recall it, no.

22 Q Does it appear that what is attached here is
23 the response of General Electric? Is that what it
24 appears to be to you?

25 A It appears to be, yes.

1 Q The article was not attached?

2 A No.

3 Q Do you recall any discussion about the
4 article that is referred to?

5 A No.

6 Q Mr. Mason, that's the same gentleman that
7 went with you to the New York meeting; is that right?

8 A Yes.

9 Q Please look at No. 36. It's dated
10 February 2nd, 1972, and it's four pages. Have you seen
11 this letter before?

12 A I don't specifically recall it.

13 Q This letter is written by Mr. Papageorge and
14 is being sent to Mr. Raab and Mr. -- can you read that?

15 A Pozefsky.

16 Q Do you recall seeing this attachment which is
17 Questions and Answers for ANSI, PCB?

18 A I don't specifically recall it.

19 Q Look at the second page. Look at the second
20 page where it talks about is PCB toxic, question five.

21 A Yes.

22 Q Do you recall discussing the answer with
23 anyone at Monsanto?

24 A Not specifically.

25 Q That's the position Monsanto was taking at

1 this time, was it not?

2 A That's correct.

3 Q All right. Let's go to No. 7, which you
4 were pointing to a moment ago. No. 7 says, Is the
5 public in any eminent danger.

6 A Immediate danger.

7 Q Excuse me. And the answer is that the
8 federal government had a press conference in September
9 of '71, and at that time the government stated there was
10 no danger from the present levels of PCB's now in the
11 environment; right? Do you remember that press
12 conference?

13 A Not specifically. I remember the government
14 action and the general work that we had done to inform
15 the government.

16 Q What do you mean by the general work you had
17 done to inform the government?

18 A Well, again, this was primarily John Mason
19 and Dr. Kelly. There was, to my knowledge, what they
20 call the President's Scientific Counsel of Advisors at
21 that time. And because this was a national issue, we
22 were seeking government help.

23 And so we openly discussed the whole problem
24 with the various levels of government, and they
25 basically agreed that everything we were doing -- we

1 were doing everything possible, there were no
2 replacements, and that this was the right action.

3 Q Was General Electric involved in those
4 discussions?

5 A They might have been.

6 Q Were they part of that presidential --

7 A They might have been part of the presentation
8 to them.

9 Q Was there a written presentation to this
10 body?

11 A Might have been.

12 MR. BURKE: By who.

13 MR. BAUMER: By anyone.

14 THE WITNESS: Might have been by
15 Monsanto.

16 BY MR. BAUMER:

17 Q On PCB's?

18 A Yes.

19 Q The answer to question 7 goes on to say that
20 proper steps were being taken to reduce further escape
21 of PCB's which could ultimately reduce even the lower
22 levels currently being found in the environment. What
23 were those steps?

24 A I think here, again, they're referring to the
25 controlled release, the controlled sale of the product,

1 and all that.

2 Q How about the proposed governmental
3 regulations eliminating the use of PCB's?

4 A I don't believe there were any at that time
5 that existed.

6 Q Were there some from the Federal Drug
7 Administration at that time?

8 A Not that I recall.

9 Q How about the water rules? Were they under
10 discussion at that time?

11 A They may have been. But there was nothing at
12 that time banning PCB's, to my knowledge.

13 Q But the water rules were going to materially
14 restrict the use of PCB's, were they not?

15 MR. BURKE: Objection, leading.

16 BY MR. BAUMER:

17 Q If you know.

18 A The water rules would control all chemicals.

19 Q They would control PCB's, would they not, in
20 conjunction with all chemicals, as you say?

21 A PCB's would be involved, yes.

22 Q Let's look at Exhibit 37. It's two pages,
23 dated the 30th of March, 1972. Who is the writer?

24 A Garnsworthy. He's the product manager of
25 chemicals in Monsanto Australia.

1 Q Was this letter, to your knowledge, sent to
2 customers of Monsanto?

3 A Let me finish reading it, please.

4 Q Okay.

5 A I've read it.

6 Q I'll rephrase the question. Does this state
7 the policy under which Monsanto would sell products
8 containing PCB's after March 30th, 1972?

9 A That's correct.

10 Q Do you know whether a copy of this letter was
11 sent to General Electric?

12 A No, I don't.

13 Q One of the conditions, that is, condition
14 five, was that, "You agree to notify your customers of
15 hazards of PCB's." Was that, to your recollection, a
16 requirement for the purchase of products containing
17 PCB's?

18 A I'd have to refer back to that
19 indemnification letter.

20 Q This letters says that --

21 A Yes. This is to Australian customers.

22 Q Only went to Australian customers?

23 A That's right, and maybe New Zealand
24 customers.

25 Q Would there be any difference in what would

1 be required from the standpoint of notice to Australian
2 customers as opposed to United States customers?

3 A There were commercial differences because our
4 competitors were not as far advanced in imposing these
5 controls as we were, and so you had a competitive
6 situation where we were imposing restrictions that our
7 competitors were not.

8 Q What I'm asking is would Monsanto require
9 notice to customers of the hazards of PCB's in Australia
10 and not in the United States?

11 A Not likely.

12 Q Look at 38, if you would. Do you recognize
13 No. 38?

14 A It's a poor copy.

15 Q It's the best one Monsanto gave me.

16 A Looks like an invoice.

17 Q It bears the date of 9/20/72, date shipped;
18 right?

19 A That's correct.

20 Q And it's a shipment to General Electric
21 Ft. Edward, New York?

22 A Yeah.

23 Q And it was shipped from where; do you know?
24 Is there anything to tell on here?

25 A Shipped from Sauget, Illinois.

1 Q Is that --

2 A It was made there, yeah.

3 Q Do you see the bottom, the stamp,

4 "Important"?

5 A Yes.

6 Q When was that first introduced or applied to

7 invoices?

8 A I don't recall the exact date.

9 Q That is a stamp as opposed to something that

10 is printed on the form, was it not?

11 A That's correct.

12 Q Did that go on all invoices to customers

13 after a particular point in time?

14 A I believe so.

15 Q Would it have been about the time that

16 Monsanto considered taking certain products off the

17 market that contained Aroclor?

18 A Approximately that time.

19 Q When the committee was formed of which you

20 were a member?

21 A Yes.

22 Q Look at No. 39; and that, likewise, is

23 another copy of an invoice, is it not?

24 A That's correct.

25 Q Bearing the date 9/20/72?

1 A That's correct.

2 Q And that was sold to General Electric and
3 shipped to Rome, Georgia; right?

4 A Correct.

5 Q And was shipped from where?

6 A Sauget, Illinois.

7 Q And it, likewise, contains the "Important"
8 stamp on the bottom?

9 A That's correct.

10 Q Can you tell us what product was sold? Can
11 you read --

12 A Pyranol.

13 Q I see the word Pyranol.

14 A Pyranol something. Looks like 1301 or -- I
15 can't make out the numbers, but Pyranol.

16 Q Some Pyranol product?

17 A That's correct.

18 Q G. E. gave Pyranol different names than the
19 numbers or the different numbers than the Aroclors?

20 A That's correct.

21 Q Look back at 38 for a minute. On 38, the
22 product sold was Aroclor 1016?

23 A That's correct.

24 Q Anything else? Was it a tank car?

25 A That was a tank car, yes.

1 Q How many gallons does a tank car normally
2 hold?

3 A We had several different sizes. We had
4 eight, ten, twelves.

5 Q How many gallons would be in an eight?

6 A Eight thousand gallons.

7 Q Ten would be 10,000 gallons?

8 A Right. This was an 8,000 gallon car and also
9 an 8,000 gallon Pyranol.

10 Q On Exhibit 39?

11 A That's correct.

12 Q Let me show you Exhibit 40. I think we know
13 who everybody is except for is it Salazar down at the
14 bottom?

15 A He was secretary of the transformer
16 section of ANSI.

17 Q Looks like there is an ANSI committee C-107.
18 Do you know what C-107 was to do?

19 A No, sir, I don't.

20 Q Now, are you familiar with the incident
21 that's described in this letter dated May the 2nd, 1973?

22 A No, not specifically.

23 Q Are you aware of any spills of transformer
24 fluids that contained PCB's during transport?

25 A It's quite a rare occasion.

1 Q Are you aware of some, though, or one or
2 more?

3 A This one.

4 Q This one because you have the letter? Do you
5 know where this one took place?

6 A No, I don't.

7 Q Are you aware of any that took place as a
8 result of transformers manufactured by General Electric
9 in Georgia?

10 A No. I'm not aware of the general problem.

11 MR. BURKE: Could we take five
12 minutes? I've got a federal judge in Orlando that
13 expects me to call him right now.

14 MR. BAUMER: Sure.

15 (Thereupon, there was a brief recess.)

16 BY MR. BAUMER:

17 Q You have in front of you, Mr. Bergen, I
18 think, Exhibit 40. It consists of one page, dated
19 May 2nd, 1973.

20 A Yes.

21 Q From Mr. Papageorge to two gentlemen we've
22 already identified at General Electric. I think you've
23 told us who Mr. Salazar was, and I think we were
24 discussing any information you might have about the
25 particular spill that is referred to in Exhibit 40. Do

1 you know where that spill took place?

2 A No, I don't.

3 Q It appears that it was a transformer, though,
4 that was leaking in some fashion?

5 A Correct.

6 Q Were you ever told of several spills such as
7 this that took place from transformers manufactured in
8 Rome, Georgia, as they were being transported either in
9 Alabama or Tennessee?

10 A No, I don't recall.

11 Q Do you know what corrective action was taken
12 as a result of this spill or cleanup action, I guess I
13 should better say?

14 A No, I don't.

15 Q Let's look at the next document, 41, which is
16 three pages, dated June 26, 1973. Do you know either
17 the writer or recipient?

18 A No, I don't. Well, the recipient is Jim
19 Bryant who is a Monsanto salesperson.

20 Q You do not know the writer, Mr. Frahm?

21 A I do not know him.

22 Q Have you seen the article that is attached to
23 the letter?

24 A Okay.

25 Q Are you familiar with that article?

1 A I am now.

2 Q Had you seen it before today?

3 A I probably did, but I didn't recall it.

4 Q Did you see it about the time of the letter?

5 A I would guess so.

6 Q Let's go to the next exhibit, No. 42. This
7 consists of two pages. Dr. McKerr who got a copy, who
8 is he?

9 A I don't know. I would guess a G. E. person.

10 Q Do you know whether Monsanto took any action
11 to protest the article as suggested by Mr. Raab?

12 A I do not recall.

13 Q Let's look at No. 43. This is two pages,
14 dated 15 March, 1974. Do you know Mr. Putzell or
15 Mr. Schlotterbeck?

16 A Mr. Putzell was the vice president and
17 general counsel of Monsanto, and I'm reminded that
18 Mr. Schlotterbeck is vice president, corporate
19 counsel of G. E. in New York.

20 Q Are you aware of the litigation as described
21 in this letter?

22 A Not specifically.

23 Q Were you generally aware of it?

24 A Yes.

25 Q You received a copy of this letter, I think,

1 did you not?

2 A I imagine I did, yes.

3 Q Were you involved at all in litigation? Were
4 you ever a witness or have a deposition ever taken?

5 A No.

6 Q Was Monsanto insured by Travelers Insurance
7 Company back in 1974, to your knowledge?

8 A That's what it says.

9 Q Do you know what disposition of the
10 litigation as described may have been?

11 A No, I don't.

12 Q Do you know the nature of the claims that
13 were made?

14 A Not specifically.

15 Q What do you know about it?

16 A Just what I'm reading here.

17 Q Just what you've read here?

18 A Yes.

19 Q You know nothing more than what is in this
20 letter?

21 A No.

22 Q You know nothing more about the incident?

23 A Nothing specifically.

24 Q Do you know generally then?

25 A I'm just reminded of the incident now, that's

1 all.

2 Q But did the litigation cost Monsanto any
3 money?

4 A Not that I'm aware of.

5 Q Let's look at No. 44, please. This is two
6 pages dated 21 March, '74. It's another lawsuit?

7 A Yes.

8 Q It appears to be arising out of the same
9 incident. Do you know any differently than that?

10 A No; but it appears that way to me.

11 Q And Monsanto is asking that under this
12 special undertaking, which was the indemnity, is it not,
13 that we discussed earlier on in this deposition?

14 A Yes, that's correct.

15 Q And do you know whether General Electric
16 undertook its responsibilities under the undertaking and
17 defended Monsanto?

18 A I assume they did.

19 Q You don't have any knowledge?

20 A I have no specific knowledge, no.

21 Q Let's look at No. 45 then. No. 45 is two
22 pages, dated October 10, 1974. Do you know either the
23 writer or the recipient?

24 A The writer is Dr. Ralph Munch of Monsanto;
25 and Dr. Robert Stenger is the recipient, General

1 Electric, Hudson Falls.

2 Q What is MCS 1588; do you know?

3 A 1588? No.

4 Q Is it a product that's sold by General
5 Electric which contains Aroclor 1016?

6 A I don't recall.

7 Q Look at the handwriting on this letter. Do
8 you recognize the handwriting?

9 A No, I don't.

10 Q Can you read --

11 A That's dielectric G. E. I think it's
12 dielectric G. E.

13 Q Was there a Monsanto file styled or entitled
14 dielectric G. E.?

15 A Probably some person's file since the arrow
16 down there is Cumming Paton. It's either David Woods'
17 or Cumming Paton's file, I assume.

18 Q You believe that the copy of this letter that
19 we have is the one that went to Mr. Wood or Mr. Paton?

20 A I would guess so, I don't know.

21 Q Let's look at No. 46. This is two pages,
22 dated November 6, 1974. Mr. Johnson, who is he?

23 A Lee Johnson was a salesman up in New York.

24 Q For Monsanto?

25 A Yes, New England area.

1 Q Mr. Barker, do you know him?

2 A Yes, he's the purchasing man at General
3 Electric.

4 Q The emergency procedures that are attached to
5 the letter, do you know when they were first instituted?

6 A No, I don't.

7 Q Did you have anything to do with the
8 preparation of the emergency procedures?

9 A I probably reviewed them. They were probably
10 prepared by the plant traffic people.

11 Q The letter also says that he was enclosing a
12 copy of the label. Unfortunately, we don't have that.
13 Would that be the same label we talked about earlier
14 that's placed on the drums?

15 A Yes.

16 Q Let's look at No. 47. It's three pages on
17 Monsanto letterhead dated August 11, 1975. Do you know
18 either the writer or the recipient?

19 A Yes. The writer is Phil Slayton of Monsanto;
20 and the recipient, I do not know, Dr. Ostoff, General
21 Electric at Pittsfield.

22 Q Have you ever seen this letter before?

23 A I don't specifically recall it.

24 Q Let me show you No. 48, which is a one-page
25 form. It bears the date down in the lower right-hand

1 portion of 6/20/75?

2 A That's correct.

3 Q Have you ever seen this form before or any
4 one similar to this?

5 A I don't specifically recall it.

6 Q What was being shipped according to this
7 form, Exhibit 48?

8 A An 8,000 gallon tank car of Aroclor 1016 was
9 rejected and was being returned for full credit.

10 Q Mr. Barker, do you know him?

11 A Yes. He's the purchasing man at Hudson
12 Falls.

13 Q For General Electric?

14 A For General Electric.

15 Q Do you recall why this tank car was rejected?

16 A No, I don't.

17 Q Was Monsanto having problems with the quality
18 of Aroclor 1016 at that time or can you think of any
19 reason why it would have been rejected?

20 A Not that I recall, no.

21 Q Can you ever recall General Electric
22 rejecting carloads of Aroclor 1016 or any of the Aroclor
23 products for any reason?

24 A It was generally a very rare exception.

25 Q What can you recall as the reason for

1 rejection?

2 A I don't recall what their reasons were.

3 Q Let me show you Exhibit 49, which is three
4 pages. It's not dated on the front page, but it's dated
5 on the second page August 13, 1975; is that correct?

6 A Yes.

7 Q And was Monsanto incinerating scraps for
8 contaminated PCB fluids at that time?

9 A Yes.

10 Q Look at the second page, if you would, up at
11 the top. It is discussing several incidents or
12 previously discussed several incidents, and it said that
13 these incidents led to the inability of the industry to
14 use chlorinated biphenyls in spite of the industry's
15 efforts on ANSI C-107 and EIA Ad Hoc Committee.

16 Now, we've already talked about the ANSI
17 C-107 committee. That's the one we identified in which
18 Mr. Papageorge and Mr. Benignus were a member as
19 shown on Exhibit 40. What is EIA Ad Hoc Committee; do
20 you know?

21 A I'm not certain, no. I think it was another
22 industry association, maybe electrical industry
23 association or something like that, I don't know.

24 Q Do you know Mr. Crowe who received this
25 letter from Mr. Ford?

1 A No, I don't. I may have met him, but I don't
2 recall it.

3 Q Do you recall any problem with respect to
4 receiving drums from General Electric that didn't have
5 warning labels on them?

6 A Well, the letter refers to general problems.
7 I don't know that it was particularly General Electric
8 that caused them.

9 Q Well, the letter was directed to General
10 Electric, was it not?

11 A That's correct.

12 Q Look at item two on the second page.

13 A Yes.

14 Q It indicates that Monsanto was still
15 receiving drums without warning labels?

16 A That's correct.

17 Q And asked that General Electric give prior
18 contact befor each return so that Monsanto can send the
19 required number of PCB warning labels.

20 A Right.

21 Q When the did the warning label program
22 commence?

23 A I think that was back at the beginning there.

24 Q '70, '71, in that period?

25 A Yes.

1 Q Let's go back for a moment to Exhibit 48.
2 You see the information that's there under "Important"?

3 A Yes.

4 Q Which is similar to that that was stamped, I
5 think, on the invoices that we previously looked at,
6 Exhibit 38?

7 A Somewhat similar.

8 Q Is that the type of orange label that we were
9 discussing that was generated back in '70, '71?

10 A The Exhibit 48 is a General Electric
11 statement, not a Monsanto statement. The one on
12 Exhibit 38 is a Monsanto statement.

13 Q They are similar in content, are they not?

14 A In general terms.

15 Q Let me ask you this about the No. 38 one.
16 That is the one we're talking about when we mentioned in
17 this last exhibit the warning labels, that's the type of
18 information we're talking about?

19 A That's right.

20 Q Which appears on No. 38?

21 A That's correct.

22 Q Let's look at No. 50.

23 MR. BURKE: I have to call the federal
24 judge back.

25 (Thereupon, there was a brief recess.)

1 BY MR. BAUMER:

2 Q We're now on Exhibit 50, which is four pages
3 and is a letter of August 21, 1975, addressed to
4 Mr. Papageorge from Dobbins, right, at General Electric?

5 A That's correct.

6 Q Had you left in August of '75?

7 A I think I had, yes.

8 Q No, you told me '76; '46 to '76, 30 years?

9 A Yes, that's correct.

10 Q So you were still there then. Do you recall
11 receiving a copy of this letter?

12 A No.

13 Q Do you recall discussing any of the
14 information that's contained in it?

15 A Let me finish reading it.

16 Q Let me ask you, have you ever seen the
17 attachment which is the Service Performance Quality
18 Reliability Memo?

19 A I don't specifically recall it.

20 Q Produced by G. E.? Are you aware or were you
21 aware back in the early '70s that General Electric was
22 requiring an indemnification from people to whom they
23 sold Pyranol?

24 A I don't recall.

25 Q You notice that it says that in the last

1 paragraph of the letter, that G. E. is requiring an
2 indemnification?

3 A Yes.

4 Q And the field letter that he refers to, I take
5 it, is this Service Performance Quality Reliability Memo,
6 the second and third page of the exhibit, and perhaps
7 the fourth. I can't tell whether it's part of the
8 memorandum. You've not seen that before?

9 A I don't recall it, no.

10 Q The memorandum says that since early 1970,
11 Monsanto has advised that this material under the
12 generic term askarel contains polychlorinated biphenyls.
13 It also goes on to say all customers were advised
14 through sales channels to take every precaution to
15 prevent any entry of this material into the environment
16 through spills, usage, leakage, disposal, vaporization,
17 or otherwise.

18 Did you ever see any information from General
19 Electric to the effect that customers should take
20 precaution to prevent the events that are described in
21 the second paragraph?

22 A I don't specifically recall any.

23 Q Let me show you the next exhibit, Exhibit 51,
24 which consists of five pages. And the cover is a letter
25 dated August 27, 1975. Do you know Mr. Miller, David B.

1 Miller?

2 A We had a Dr. Miller in research, but I don't
3 think this is the same one. I don't know who this is.

4 Q Look at the attachment which is a trip
5 report, August 3-4, 1975. Do you recognize the
6 travelers?

7 A No, it doesn't ring a bell.

8 Q Look at the list of the people who
9 represented G. E. at the meeting. Apparently, there was
10 a meeting. How many of those gentlemen do you know?

11 A As I indicated previously, I met Ed Raab,
12 that's the only one. I may have met Robert Osthoff, but
13 I don't recall him. The others, I don't know.

14 Q Look at the third page of the trip report.
15 Three B, under combustion, it indicates that UL, which I
16 take to be Underwriters Laboratories, conducted a report
17 or study in 1934 for Pyranol, and I presume that's
18 a combustant. Do you know of that report?

19 A No, I'm not aware of it.

20 Q Let's look at the next document, please,
21 No. 52. This is a one-page letter from Mr. Papageorge
22 to Dr. Simons at General Electric dated September 12,
23 1975. Have you any knowledge of the various articles
24 that are referred to in the letter, or reports, I should
25 say?

1 A Well, this appears to be the results of some
2 of the tests that we were having conducted for us at
3 Monsanto by various people.

4 Q Can you help me figure out what some of the
5 numbers are? For instance, look at the acute vapor
6 inhalation study with MCS 1016. What is MCS 1016?

7 A That's the Aroclor 1016.

8 Q What does the IBT number N9379 mean; do you
9 know?

10 A I think IBT is Industrial Biotests.
11 They were the labs that conducted testings.

12 Q Do you know whether those tests were
13 performed?

14 A A period prior to this.

15 Q How far back?

16 A Well, I think they went on for some time.
17 Even though we say 90 days, it takes longer than 90 days
18 to set them up and do them.

19 Q Do you know when they commenced?

20 A I think we covered some reference there that
21 referred to them, that we were doing them or undertaking
22 them, and I forget what that date was.

23 Q When did Monsanto first, to your knowledge,
24 start undertaking tests of any nature to determine
25 the toxicity of Aroclors?

1 A I don't recall the dates.

2 Q Would it have been prior to the time the
3 committee was formed to start removing them, though?

4 A I think you have some references there in
5 some of those exhibits where they list the toxilological
6 data, and that's probably the best biography that's
7 available.

8 Q You just don't have any recollection?

9 A No, I don't. There were toxicity tests done
10 by a lot of people over many years, going way back; and
11 this work was done because it was a new compound, a new
12 specific compound that we wanted specific data.

13 Q 1016 was?

14 A Yes.

15 Q How about the Aroclor 1221, 5432, 5442, and
16 5460? Were those new compounds, too?

17 A No. Those were established products, and I'm
18 sure they were put in there for relative testing
19 purposes.

20 Q That was the Four Day Static Fish Toxicity
21 Study that I read that from.

22 A Right.

23 Q Let's look at the next one, 53, which, again,
24 is one page, dated September 23rd, 1975. It's from
25 Mr. Papageorge to Dr. Simons at General Electric.

1 A Yes.

2 Q Did you see the open letter that's referred
3 to?

4 A I don't recall it.

5 Q Look at No. 54, if you would, which is an
6 eight-page exhibit dated October 3, 1975. Do you know
7 Mr. Joyce, to whom the letter is directed?

8 A No, I don't.

9 Q Do you know David Wood?

10 A Yes.

11 Q Who wrote the letter?

12 A Yes.

13 Q What was Mr. Wood's job? It says market
14 manager, but what? Dielectrics?

15 A Yes. I believe by this time Mr. Benignus had
16 retired or was about to retire, and David Wood took over
17 that job.

18 Q It refers to an askarel handling and
19 maintenance guide. Do you recall when that guide was
20 first published?

21 A No, I don't.

22 Q Would it have been in the early '70s?

23 A Somewhere in that time period.

24 Q Look at the third or fourth page of the
25 exhibit. Do you recall that form letter being sent out

1 to customers?

2 A No, I don't.

3 Q Do you remember an article by Carl G.
4 Gustafson of the United States Federal Water Quality
5 Administration as referred to in the second paragraph?

6 A Not specifically.

7 Q Do you have some recollection of having read
8 that article?

9 A I'm sure I read it.

10 Q Did that article, to your recollection,
11 discuss the environmental problems with PCB's from the
12 standpoint of water quality?

13 A I'm not aware of the exact contents. I think
14 it generally was referring to the effect on the
15 environment, water.

16 Q Do you recall whether or not a letter of this
17 nature went out to all customers of Monsanto for PCB
18 containing fluids?

19 A I don't specifically recall.

20 Q Look at the last two pages, if you would.
21 This appears to be a letter to Mr. Tucker which was
22 responded to, I take it, by Mr. Wood, which was the
23 first three pages. Would that be --

24 A That would be my understanding.

25 Q Do you recognize the handwriting on the

1 letter?

2 A No, I don't.

3 Q Do you know whose initials those are down
4 there with the note to David Wood? It looks like --

5 A That is what I was trying to figure out. I
6 don't know; I don't recognize it.

7 Q Who might have received this letter in
8 Mr. Tucker's absence that would have referred it to
9 Mr. Wood for reply?

10 A I don't know, somebody in the London office.

11 Q Let's look at Exhibit 55. This is one page.
12 Do you know either the author or recipient?

13 A Yes. The author is Jim Mieure, research
14 group leader; and it's to Dr. Robert Stenger, General
15 Electric, Hudson Falls.

16 Q Look at No. 56, please. No. 56 consists of
17 two letters, one, October 24, 1975, and one, October 17th,
18 1975. One I think is a reply to the earlier letter; is
19 that correct?

20 A Yes.

21 Q How about the people who received copies of
22 this letter? Hammann, who is he?

23 A I don't recall, specifically. I think he was
24 in research.

25 Q At Monsanto?

1 A Yes, and so was Keller. I don't recall who
2 Weber was either.

3 Q Let's look at No. 57. Is that Michael Modan?

4 A Yes.

5 Q Did you know Dr. Modan?

6 A No, I did not.

7 Q Let's look at No. 58.

8 A Excuse me. Can I see the date of that
9 letter?

10 Q Which one?

11 A The last one.

12 Q November 7, 1975. And No. 58 is dated
13 November 10, 1975. And it is from Bueche?

14 A I don't know how to pronounce it. I don't
15 know him.

16 Q He's at General Electric? How about
17 Throdahl?

18 A Monte Throdahl. He's the vice president of
19 technology.

20 Q At Monsanto?

21 A Yes.

22 Q Do you know what dibenzofurans are?

23 A Vaguely.

24 Q Do you know how they were produced?

25 A No, not exactly.

1 Q Do you know whether they were a byproduct of
2 the combustion of askarel?

3 A No. There are some claims made that they
4 were, and there might be some very minute quantities;
5 but that's a detailed analytical discussion of which I'm
6 not qualified to talk about.

7 Q Are you familiar with the Binghamton, New York
8 fire?

9 A No, I'm not.

10 MR. BURKE: 1981.

11 MR. BAUMER: Mr. Burke, when I ask a
12 question of Mr. Bergen, I don't need an answer from you.

13 MR. BURKE: Just trying to help.

14 MR. BAUMER: You're not helping and never
15 have.

16 MR. BURKE: Sorry you feel that way, sir.

17 BY MR. BAUMER:

18 Q Are you familiar with that fire?

19 A No, sir, I'm not.

20 Q I take it you've not seen No. 58 before; is
21 that correct?

22 A I don't recall it.

23 (Thereupon, the court reporter
24 marked Plaintiff's Exhibits 59
25 through 61 for identification.)

1 BY MR. BAUMER:

2 Q Look at Exhibit 59, please, sir. Are you
3 familiar with this type of bulletin?

4 A Yes.

5 Q Was it produced by Monsanto around the time
6 indicated in Exhibit 59?

7 A That's correct.

8 Q What was the circulation of this memo?

9 A This was an internal sales information
10 bulletin to our sales people.

11 Q The no-harm agreement that's referred to in
12 the first paragraph, can you help us out and tell us is
13 that the indemnification agreement?

14 A Yes, that's correct.

15 Q Did you review these bulletins before they
16 were published?

17 A Not always. If they were within general
18 policy and procedures, I may not have.

19 Q Now, it talks in the second paragraph about
20 hundreds of annual requests for top-up fluid. Was does
21 that mean?

22 A Exactly what it says.

23 Q Is that orders? By requests, does that mean
24 orders?

25 A Yes, five gallons, one drum.

1 Q And what is top-up fluid?

2 A Meaning material added to make up fluid.

3 Q If the transformers weren't filled to
4 capacity, is that when you sell drums or containers of
5 it?

6 A That's correct.

7 Q To be added?

8 A That's correct.

9 Q The fourth paragraph requires special
10 referral for future orders, does it not?

11 A That's correct.

12 Q Why was that instituted?

13 A Well, again, because the indemnification
14 letter, only these people that had signed the
15 indemnification agreement.

16 Q Do you know Mr. Raymond Frahm?

17 A No.

18 Q Where these the only two companies that as of
19 this time had signed the indemnification letter, to your
20 knowledge, that is, General Electric and Westinghouse?

21 A I'm not sure of that because the last
22 paragraph kind of infers that the other people may have
23 signed it, and you've got to send it to them; so I'm not
24 sure.

25 Q For the record, this is the Sales Information

1 Bulletin, No. 59, dated February 24th, 1972; correct?

2 A That's correct.

3 Q Let's look at the next exhibit which consists
4 of four pages, Exhibit No. 60; and it's Sales
5 Information Bulletin No. 85, dated June 21, 1972; is
6 that correct?

7 A That's right.

8 Q Did all of the companies that are listed on
9 the second and third pages of Exhibit 60 sign
10 indemnification agreements?

11 A I believe they did.

12 Q The last page, do you recognize that as being
13 a Westinghouse produced document?

14 A Yes.

15 Q Have you seen it before today?

16 A I may have; I don't recall it, specifically.

17 Q Do you recall back in 1972 there being
18 occasions that the Food and Drug Administration was
19 looking into the PCB problem and considering a ban on
20 PCB's?

21 MR. BURKE: Object to the form of the
22 question. It's an inaccurate statement of what is
23 contained in the document.

24 MR. BAUMER: It's not related to the
25 document, Mr. Burke. It's a general question.

1 THE WITNESS: I was not of the opinion
2 that the FDA was about to take any serious action.

3 BY MR. BAUMER:

4 Q Now, let's look at the document that
5 Mr. Burke wants us to look at, and it says, "The FDA is,
6 therefore, considering banning most industrial uses of
7 the chemical in plants that process or make food, feed,
8 or packaging material."

9 Were you aware that the FDA was considering
10 that with respect to products that contained PCB's back
11 in 1972?

12 A I don't recall.

13 Q Inerteen, which is referred to, was the trade
14 name of the Aroclor products sold by Westinghouse, was
15 it not?

16 A That's correct.

17 Q Let's look at Exhibit 61, please. This is
18 another Sales Information Bulletin No. 104, dated
19 February 13th, 1973; is that right?

20 A That's correct.

21 Q And New Dielectric Fluid Drums was the
22 subject?

23 A Yes.

24 Q Did Monsanto design a different drum at this
25 time in which to ship Aroclors?

1 A Yes.

2 Q Why was that?

3 A To minimize any damage or leaking in

4 shipment.

5 Q And the drum was introduced in 1972; is that

6 right?

7 A Yes.

8 Q And it was yellow?

9 A Yes.

10 Q In color?

11 A Yes.

12 Q And had warning statements and precautions on

13 the side?

14 A That's correct.

15 Q With respect to PCB's?

16 A That's correct.

17 Q This says that the same wording will be used

18 for all dielectric fluids; is that correct?

19 A That's correct.

20 Q And was that done?

21 A Yes.

22 Q The yellow color, was that first introduced

23 in 1972 for drums that contained PCB's?

24 A Either '72 or early '73.

25 Q This says introduced in '72. Was it a

1 different color in '72 as opposed to --

2 A I don't know.

3 Q What color were the drums before?

4 A I don't know.

5 Q Were yellow and black colors introduced at
6 this time and for only Aroclor drums?

7 A I don't recall.

8 Q Did Monsanto make an effort to choose colors
9 that were definitive and that became associated with
10 PCB's?

11 A I think we just tried to pick a definitive
12 color.

13 Q And that was yellow?

14 A Yes.

15 Q It was a bright yellow, was it not?

16 A Yes.

17 Q And it used black lettering?

18 A I don't recall.

19 (Thereupon, the court reporter
20 marked Plaintiff's Exhibit 62
21 for identification.)

22 BY MR. BAUMER:

23 Q Would you please look at Exhibit 62, which
24 consists of three pages. Do you recognize this document
25 as being a copy of either a brochure or publication by

1 Monsanto?

2 A Yes.

3 Q Do you note that what it says on the first
4 page is that it was a distinctive new yellow drum?

5 A Yes.

6 Q And its bright yellow color makes
7 identification easy, quick, and certain? Do you see
8 that?

9 A Yes.

10 Q Was it the intention of Monsanto to have a
11 drum that when someone saw it, that would readily
12 identify it with PCB's?

13 A Yes.

14 Q Look at the third page. Is that the warning
15 label that went on the drum?

16 A Yes.

17 Q What were PCB's shipped in? Drums of the
18 size of 30 and 55 gallons?

19 A Yes.

20 Q Is that the same warning that went on tank
21 cars, too, when it was shipped in tank cars?

22 A Yes.

23 Q And the second page of the exhibit, does that
24 indicate the location of the warning?

25 A Yes.

1 Q Look at Exhibit 61 again for me. Exhibit 61,
2 of course, indicates that the drum, the new drum, was
3 introduced in 1972.

4 A Well, it was early '73 because it says you
5 will soon be seeing a new drum. The new drum will have
6 the following features. So it was really not until '73
7 that the whole package came out.

8 Q So the new drum is what we're looking at when
9 we look at Exhibit 62?

10 A Yes.

11 (Thereupon, there was a brief recess.)

12 (Thereupon, the court reporter
13 marked Plaintiff's Exhibits 63
14 through 81 for identification.)

15 BY MR. BAUMER:

16 Q Mr. Bergen, let me next show you an exhibit
17 that's been marked as No. 63. It is dated May 20th,
18 1968, and it appears that you received a copy; correct?

19 A Yes.

20 Q Do you recall this memo?

21 A No, I don't.

22 Q Do you recall the FDA inquiring for samples
23 of Aroclor?

24 A No, not particularly.

25 Q Do you recall the FDA testing Aroclor for

1 toxicity?

2 A No.

3 Q And on residues in wildlife?

4 A No.

5 Q What was Mr. Richard's job back in 1968?

6 A He was director of research for the
7 functional fluid group.

8 Q Would he have been the one that the FDA would
9 generally contact seeking the type of information
10 reflected on Exhibit 63?

11 A No. I would say normally they would just
12 inquire of the sales group or the company in general.
13 They wouldn't necessarily go to the research department.

14 Q In this case Mr. Richard indicates that
15 Monsanto -- I guess when he uses we there, he refers to
16 Monsanto?

17 A Yes.

18 Q They had an FDA inquiry?

19 A Yes.

20 Q If the FDA had inquired, Monsanto would have
21 provided the materials requested, would they not?

22 A Right.

23 Q But you have no knowledge of that or
24 recollection of that inquiry?

25 A Not specifically.

1 Q How about generally? Do you have some
2 general recollection of it?

3 A We had hundreds of customers and laboratories
4 and universities requesting samples all the time, and I
5 just don't try to keep track of all those things.

6 Q The FDA is a little different posture than
7 universities and customers, is it not?

8 A Yes.

9 Q It is a regulatory agency, is it not?

10 A That's correct.

11 Q Now, how about the second paragraph where it
12 says, "Are we preparing ourselves and customers to
13 minimize and prevent process, stream and air pollution."
14 Did Monsanto undertake such a policy and practice?

15 A He raised the question are we preparing
16 ourselves, so it's kind of a rhetorical question. Bill
17 was one of the leaders in recognizing the potential
18 problems, and he was a strong leader in our taking
19 aggressive action.

20 Q To what?

21 A To minimize the exposure and also to come up
22 with replacement-type products. Being research leader,
23 that was his job; and he was doing it very well.

24 Q Back in 1968, did you undertake at that time
25 a program of advising customers of potential

1 harmful effects?

2 A You have the time table of the actions that
3 we did take; and like I said, he was our early
4 conscience.

5 Q Do you have any recollection of a discussion
6 before the committee was formed that we've discussed
7 earlier in which you were charged with the
8 responsibility for removing askarel and Aroclors from
9 sales? Do you have any recollection of discussions
10 prior to that time concerning such matters and notifying
11 customers?

12 A Prior to May of '68?

13 Q No; prior to the time the committee was
14 formulated in the early '70s.

15 A I don't recall specific meetings. We had
16 many different meetings, but I don't recall a specific
17 one on that suggested.

18 Q There is a time lapse, of course, between '68
19 and, say, '70 or '71. And I'm trying to fill in that gap
20 with what knowledge you have had or what knowledge
21 Monsanto had at that point and what they were
22 communicating to their customers relative to PCB's and
23 potential problems, and I'm trying to determine if you
24 have any recollection of discussions at that time with
25 General Electric, specifically, and with customers,

1 generally?

2 A Well, I more or less refer to that period of
3 time before we started taking definitive action and this
4 date as our learning curve, and where we were all trying
5 to get up the speed as to what was really happening in
6 the environment and being sure we were identifying
7 Aroclors and PCB's and not DDT and not something else,
8 and talking to the Swedish scientists and all these
9 different people and finding out what were the facts. So
10 we couldn't make any decisions or take any actions until
11 we had the facts.

12 So that was really the fact-finding period,
13 from around this period on until we did take the action.

14 Q Were you sharing that information in this
15 fact-finding period with your customers and with your
16 colleagues in the industry?

17 A With our major customers. We were asking
18 them questions and involving them in the issues and
19 questions, yes.

20 Q And one of those major customers was, of
21 course, General Electric?

22 A Yes.

23 Q Let me ask you to please look at the next
24 exhibit which is No. 64, which is dated April 28th,
25 1970. And I believe you received a copy of this

1 memorandum, did you not?

2 A That's correct.

3 Q This is a memorandum in which the subject
4 matter is Aroclor Analytical Program; right?

5 A Right.

6 Q And it was prepared by Mr. Papageorge?

7 A Yes.

8 Q Are all the people who received copies, are
9 those Monsanto employees?

10 A Yes.

11 Q Springgate, that's a new name. What did he
12 do?

13 A He was at that time the general manager of
14 the plasticizer group. The plasticizer group also sold
15 Aroclors.

16 Q Farrar?

17 A Farrar, he was the research director for the
18 plasticizer group.

19 Q He's a doctor?

20 A Yes.

21 Q M. D. or --

22 A Ph.D.

23 Q Do you recall receiving this memorandum?

24 A No.

25 Q Mr. Keller, what was his function again?

1 A He was in research. And I don't know his
2 exact title, analytical chemistry or something.

3 Q The personnel that are listed as members of
4 the various teams to perform the projects outlined, were
5 they all Monsanto employees?

6 A Yes.

7 Q Now, look at the analytical program that's
8 attached. One of them, of course, was to inform
9 customers -- Objective No. 2, "Inform customers of
10 the PCB problems and the importance of preventing
11 environmental pollution both at their plants and by
12 their products;" is that right?

13 A That's correct.

14 Q And the target date for that was May 1st,
15 1970; is that correct?

16 A Yes.

17 Q Were those target dates achieved?

18 A Essentially.

19 Q So now we can assume, can we not, or is it
20 true that in at least May 1970, Monsanto was advising
21 General Electric, one of its principal customers, of the
22 PCB problems and the importance of preventing
23 environmental pollution?

24 MR. BURKE: Objection, leading.

25 THE WITNESS: During this general time

1 frame. I can't say this is precisely on May 1.

2 BY MR. BAUMER:

3 Q What was the target date?

4 A That was the target date. I said
5 essentially we met the target date. We were basically
6 following the management plan.

7 Q Look at Objective 5, "Examine gas samples
8 from John Zinc Co. incineration study." Can you tell
9 us a little bit about that?

10 A John Zinc Co. made the incinerator that we
11 used, and the gas samples would be the effluent, any
12 effluent gas coming out of the stack, to be certain that
13 we weren't emitting any PCB's from the stack.

14 Q Was there such a study performed?

15 A I believe it was.

16 Q By Monsanto or third parties?

17 A I don't recall who did it.

18 I'd just like to comment that looking at the
19 various target dates on here, a lot of them were not
20 achieved; so my earlier answer of saying we were
21 essentially on was applying primarily to working with
22 the customers. But some of the other dates, we did not
23 meet.

24 Q You meant working with the customers, that
25 was more easily achievable than running the tests?

1 A Yes; and one of the objectives of replacement
2 products, we did not achieve that on time either due to
3 the difficulty of the assignment.

4 Q Let's look at the next document. This is
5 document No. 65, and it's styled Compiled for
6 Independent Life SDT, prepared by Monsanto law
7 department. And what I'll ask you to do is to turn to
8 the last page of this document to the letter that
9 apparently is signed by you.

10 A Yes.

11 Q Do you recall that letter?

12 A Vaguely.

13 Q Was this a letter that was sent to all
14 customers of Monsanto who bought polychlorinated
15 biphenyl products?

16 A I don't know. I can't recall seeing it out
17 of context here. It could have been such a letter.

18 Q Is the letter accurate, in fact, to the
19 extent of its content?

20 A Yes.

21 Q And that is your signature?

22 A Yes.

23 Q And was it the practice of Monsanto to send
24 out letters such as this to its customers to advise them
25 of the type of information contained in this letter?

1 A Yes.

2 Q And was it the practice and did Monsanto, in
3 fact, start corresponding since early 1970 with its
4 customers relating to potential PCB problems?

5 A That's correct.

6 Q The second paragraph on the back, we've seen
7 that in a number of other exhibits here; is that
8 accurate?

9 A Yes.

10 Q Let's look at the next document, please,
11 No. 66. First of all, let me go back to 65 and get the
12 number of pages. Exhibit 65 has 14 pages; 13 consist of
13 cities and dates, and the last page is the letter that
14 you signed. Is that accurate?

15 A Yes, that's correct.

16 Q Now, Exhibit 66 consists of one, two, three,
17 four pages, the first page having names and addresses of
18 three individuals; correct?

19 A Yes.

20 Q Do you know those three gentlemen?

21 A Only Raab is a familiar name.

22 Q Scoville, do you know Mr. Scoville?

23 A No, I don't recall him.

24 Q Kinney?

25 A Don't recall him.

1 Q Now, the letter that is the second, third,
2 and fourth page which is dated March 3, 1969, is signed
3 by or prepared by apparently Mr. Wheeler, Mr. Wheeler as
4 manager, Environmental Health of Monsanto, in March,
5 1969?

6 A Yes.

7 Q Do you recall this letter?

8 A No, I don't.

9 Q Have you ever seen this letter?

10 A I may have.

11 Q A few moments ago you mentioned that you had
12 to start contacting a number of people, and one of them
13 was Dr. Risebrough. Who was
14 Dr. Risebrough?

15 A I did not contact him, but the medical group
16 did; and I believe Bill Papageorge did. And he was a
17 West Coast scientist that had published some information
18 about PCB's. He was from the University of California.

19 Q Did you ever talk to him?

20 A Not personally.

21 Q Have you ever looked at the letter that's
22 dated March 3, 1969, as part of Exhibit 66?

23 A Yes.

24 Q Do you recognize the letter?

25 A In general, the format.

1 Q Was it a letter that Monsanto sent to various
2 of its customers if not all of them?

3 A I'm not sure. I don't know, it may have been
4 a draft. It's not signed, and it's got no people that
5 it's sent to; so I can't really confirm who sent it out.

6 Q I'm not certain what it means either; but as
7 soon as we get to St. Louis, we'll find out. But I
8 believe what it means is that these three gentlemen
9 whose names appear on the front received copies or
10 received this letter. I think that's what that
11 indicates. But you don't have any information about
12 that?

13 A No, I don't.

14 Q Let's look at the next document, Exhibit 67,
15 which consists of 16 pages. The first number of pages
16 have names and addresses, and then there is a letter
17 prepared by Mr. Olson dated February 9, 1970. Mr. Olson
18 was director of sales in 1970?

19 A That's correct.

20 Q Do you recognize this letter?

21 A It appears to be authentic.

22 Q Does it contain information that you had
23 knowledge of back in February of 1970?

24 A Yes.

25 Q How about the Chemical Week article that was

1 dated October 28, 1969, that's attached and referred to
2 in the last paragraph? Had you seen that article in
3 1969?

4 A I don't recall.

5 Q Do you recall seeing that article at all?

6 A No, not specifically.

7 Q Did you ever read Chemical Week?

8 A Yes.

9 Q Did you read it regularly?

10 A Yes.

11 Q Did you read it regularly in 1969?

12 A Probably.

13 Q Did you subscribe to it?

14 A Yes.

15 Q Was it delivered to your home or your office?

16 A Office, I believe.

17 Q So if you read it routinely, you probably
18 read this article when it was published. Is that
19 accurate?

20 MR. BURKE: Objection, calls for
21 speculation.

22 BY MR. BAUMER:

23 Q You can answer the question.

24 A I probably read it.

25 Q Now, let's look at the names that are on the

1 front or the first page of this. The first one doesn't
2 have names or titles. The second page, Dion, Mr. E. L.
3 Dion, do you know him?

4 A No.

5 Q The last page of names, Mr. Raab, do you
6 recognize him?

7 A I don't seem to have that.

8 Q Right there, that page you're on.

9 A Yes.

10 Q Mr. Raab, he was in Pittsfield?

11 A Yes.

12 Q Mr. Barker?

13 A Yes.

14 Q And Mr. Kinney, do you recognize those names?

15 A Yes.

16 Q Did you tell us you had met Mr. Kinney?

17 A I may have. I just can't recall him.

18 Q You did visit the Rome, Georgia, plant?

19 A Yes. I probably met him.

20 Q All right, sir. Let's look now at

21 Exhibit 68, a three-page document, the second page being
22 a letter dated August 14, 1970. Do you know the author
23 of that letter?

24 A Yes.

25 Q How does he pronounce his name?

1 A Walter Schalk.

2 Q And he was director of sales?

3 A Plasticizers, yes.

4 Q Were there PCB's used in the plasticizers?

5 A Yes.

6 Q What Aroclors were used in the plasticizers?

7 A 1242, 1248, 1254, 5460.

8 Q The first page, do you recognize those
9 various offices or locations for General Electric
10 Corporation?

11 A No. I knew they had a laminated products
12 department. I've heard of the ballast department.

13 Q Now, in 1970, were you aware that the Food
14 and Drug Administration either had or was establishing
15 guidelines for maximum levels of PCB's allowable in
16 certain foods?

17 A I'm getting my memory reacquainted here by
18 reading this. Apparently, they were, if I remember,
19 because the letter says it has apparently established
20 guidelines.

21 Q I think my question was either had or were
22 establishing?

23 A Yes, right.

24 Q Upon reading this, does it refresh your
25 recollection as to the facts that are set forth in this

1 letter?

2 A Yes.

3 Q And that was knowledge that you possessed in
4 August of 1970?

5 A Yes, that's correct.

6 Q And was that information that was likewise
7 communicated to the customers of Monsanto?

8 A Yes.

9 Q Specifically, General Electric?

10 A I imagine we communicated it to all of our
11 customers. That is our policy.

12 Q You don't have any reason to believe that
13 General Electric would have been eliminated?

14 A No.

15 Q It says here that Monsanto, therefore,
16 strongly recommends that PCB's not be used in
17 applications which would lead either directly or
18 indirectly to the contamination of food and water
19 supplies for humans and animals. What type of water
20 supplies do you have reference to, if you know?

21 A Drinking water.

22 Q Would that include rivers?

23 A Any source of drinking water.

24 Q For either animals or humans?

25 A Right.

1 Q And is it accurate as stated in the second
2 paragraph on the second page that after August 31, 1970,
3 only Aroclor 1221 and monochlorinated biophenyls which
4 are readily biodegradable and Aroclors 5442 and 5460
5 would be sold?

6 A That's correct.

7 Q The rest were taken off the market?

8 A Right. As the next paragraph indicates, we
9 also sold the blends of 1221 and 5460.

10 Q But they were sold as replacements for
11 polychlorinated biphenyls?

12 A Yes.

13 Q Now, look at the last paragraph. Is that an
14 accurate representation of what Monsanto's policy was?

15 A Yes.

16 Q Let's look at Exhibit 69, which consists of
17 five pages. It's a letter dated November 30th, 1970; is
18 that accurate?

19 A Yes.

20 Q Do you know either the author or the
21 recipient?

22 A Yes. The author is Tom Gossage, who was
23 director of sales at that time, and I do not know the
24 recipient, Frank Argersinger.

25 Q He was with General Electric Corporation?

1 A Yes.

2 Q That's what it says?

3 A Yes.

4 Q Is that your handwriting on this letter?

5 A No.

6 Q It says General Electric?

7 A That's correct.

8 Q Look at the second page. You received a copy

9 of this letter, did you not?

10 A Yes.

11 Q Along with Mr. Graham and Mr. Benignus?

12 A Right.

13 Q This letter indicates, does it not, that as

14 of November '70, Monsanto had withdrawn from the market

15 Aroclors for use in non-electric product applications?

16 A That's correct, certain Aroclors.

17 Q Those that were less biodegradable than

18 others; is that correct?

19 A In general, yes.

20 Q Do you know whether Mr. Gossage is still with

21 Monsanto?

22 A Yes.

23 Q Is he in St. Louis?

24 A Yes.

25 Q How about Mr. Graham?

1 A I don't know. I think he left the company.

2 Q Let's look at Exhibit 70. Exhibit 70
3 consists of 16 pages. Do you know Mr. McCann?

4 A No, I don't.

5 Q For the record, the document is dated
6 December 22nd, 1970. It's from Mr. Papageorge to
7 Mr. McCann, General Electric Company in Rome, Georgia.

8 Did Mr. Papageorge ever discuss with you that
9 people in Rome, Georgia, were interested in literature
10 and correspondence from Monsanto relating to PCB
11 environmental control problems?

12 A I don't recall it.

13 Q Is this the type of information, though, that
14 is contained in this exhibit that would have been sent
15 to the customers?

16 A Yes.

17 Q Either upon request or without request?

18 A Yes.

19 Q I think we've already seen the Olson letter,
20 which is the first attachment, the February 18th, 1970,
21 letter.

22 A Yes.

23 Q That had the Chemical Week article.

24 A Yes.

25 Q Now, the next item that is attached is a news

1 release dated April 10, and I'm not sure what year.

2 Look at the letter.

3 A The cover letter says 1970.

4 Q Was it Monsanto's practice back in April of
5 1970 to release such information as is contained in the
6 April 10 news release?

7 A Yes, that's true.

8 Q And was that release generally to the media?

9 A Yes.

10 Q Are you familiar with the charges by
11 representative Ryan?

12 A In General.

13 Q Was Monsanto concerned about those charges?

14 A Yes.

15 Q The next item is a news release dated
16 July 16, 1970. Do you recall this release?

17 A Not specifically.

18 Q Mr. Minckler, he was the vice president and
19 general manager?

20 A Yes.

21 Q Did he participate in the decision to
22 restrict the sale of Aroclors?

23 A Yes.

24 Q And this news release says that a program
25 began in '68 with the proper identification and measure

1 of PCB's in the environment and will conclude this year
2 by our unilateral action to restrict its use. By
3 unilateral restriction, what does that mean?

4 A That is where we restricted some of the sales
5 of plasticizers and some of the other applications.

6 Q Such as the use in transformers?

7 A Could include that general statement.

8 Q Do you agree with the last sentence
9 attributed to Mr. Minckler that "We have taken decisive
10 action based on the evidence that PCB is a persistent
11 chemical which builds up in the environment"?

12 A As a general statement.

13 Q It's not an incorrect statement, is it?

14 A It would have been more gramatically correct
15 if it said based on evidence, certain PCB's are
16 persistent chemicals.

17 Q Did you review this news release before it
18 went out?

19 A I don't recall.

20 Q Did you generally review news releases before
21 they were published in this area dealing with this
22 subject?

23 A In general; but when the corporate officer
24 puts them out, he didn't always ask my opinion.

25 Q Well, you don't recall whether or not you

1 reviewed this one?

2 A No, I don't.

3 Q Mr. Minckler, is he still with Monsanto.

4 A No, he's not.

5 Q Is he retired?

6 A I believe he's a consultant now.

7 Q Where does he live?

8 A I'm not sure.

9 Q St. Louis?

10 A I'm not sure. The last I heard of him, he
11 was up somewhere in the New York area.

12 Q New York City area?

13 A New York City area.

14 Q Let's look at the next document, No. 71.

15 It's three pages, the first two containing addresses,
16 and the third page being a letter. Mr. Larry Bradford,
17 who was he?

18 A He was the product manager for the hydraulics
19 and lubricants in our functional fluids group.

20 Q And this letter is dated April 15th, 1971.

21 Do you recognize the letter?

22 A Yes.

23 Q Do you remember it?

24 A No. I remember the contents.

25 Q You do remember the contents?

1 A Yes.

2 Q The contents is information that Monsanto was
3 disseminating to its customers.

4 A Yes.

5 Q Look at the first two pages at the various
6 divisions of General Electric that got copies of this
7 letter.

8 MR. BURKE: Object to the form of the
9 question. There is no showing that anybody got a copy
10 of the letter.

11 BY MR. BAUMER:

12 Q And let me ask you, are you familiar with the
13 divisions that are listed on the first two pages?

14 A The Ternstedt Division I'm familiar with.

15 Q Home Laundry Department, Outdoor Lighting?

16 A Not familiar with that. Not familiar with
17 the Atomic Power Equipment.

18 Q Are those divisions, though, that would
19 generally be receiving communications from Mr. Bradford
20 in his capacity as product manager, hydraulics and
21 lubricants?

22 A These were probably taken from a mailing list
23 that we had of people that either had shown interest or
24 had samples or some such reason. They were taken from a
25 mailing list.

1 Q It was new fluid developed for hydraulics as
2 a substitute for the Aroclors?

3 A Yes.

4 Q And that was in 1971 or before, I take it?

5 A That's correct.

6 Q Did Monsanto market it widely?

7 A Yes.

8 Q As a substitute for hydraulic fluids
9 containing PCB's?

10 A Yes.

11 Q Let's look at Exhibit 72. It's a two-page
12 letter dated October 11, 1971. Who is Mr. Hatton?

13 A Roger Hatton.

14 Q And he's with Monsanto?

15 A Yes.

16 Q And he wrote Mr. George Johnson at General
17 Electric in Pittsfield; is that right?

18 A That's what the letter says here. It's not
19 signed, but it looks like he did.

20 Q You say it's not signed. Do you mean when
21 you sent letters to people, when you kept a copy in your
22 file, did you normally sign the copy?

23 A No.

24 Q You don't see anything unusual about the fact
25 that this is a copy not signed?

1 A No.

2 Q Santovac 2, we discussed earlier, it does
3 contain PCB's; right?

4 A Yes.

5 Q Are you familiar with the contents of this
6 letter?

7 A Yes.

8 Q Is this information that was disseminated by
9 Monsanto to its customers?

10 A Yes.

11 Q All right, sir. Take a look at Exhibit 73.

12 A Yes.

13 Q It's a two-page letter dated November 15th,
14 1971. Do you know the writer?

15 A Yes, Don Roush.

16 Q How about the recipient?

17 A No, I do not know him.

18 Q Is it Eschen?

19 A That's what it appears to be.

20 Q You don't know the gentleman?

21 A No, I don't.

22 Q What is the product that's described in the
23 letter?

24 A They're talking about the Therminol FR
25 series. They're heat transfer fluids.

1 Q They contain PCB's?

2 A That's correct.

3 Q Would you go back and look at Exhibit 72. Do
4 you see a similar pattern between the language in the
5 second and third paragraphs of both of those letters
6 except for, perhaps, change in the product name?

7 A Yes, very similar.

8 Q Effectively identical in the second paragraph
9 except for the first couple of lines?

10 A Yes.

11 Q That's standard information that was
12 communicated by Monsanto to its customers?

13 A That's correct.

14 Q The second paragraph is about the same, is it
15 not?

16 A That's true.

17 Q Let's look at the next document, which is
18 Exhibit 74, consisting of ten pages. It contains a
19 letter dated December 31st, 1971, which bears your
20 signature, does it not?

21 A That's correct.

22 Q Did you write that letter?

23 A I signed it.

24 Q Was it for the purpose of disseminating to
25 customers?

1 A Yes.

2 Q General Electric?

3 A Yes.

4 Q Now, look at the first two pages. Do you
5 recognize Mr. George Johnson? Do you recognize that
6 name?

7 A No, I don't recognize any of them there.

8 Q Were you ever in Pittsfield, Massachusetts,
9 at the General Electric on Woodlawn Avenue?

10 A I don't recall.

11 Q It does have your signature on the letter?

12 A Yes.

13 Q How about the article that's attached? Do
14 you recognize that article?

15 A I was just looking at it again, yes.

16 Q You read it at that time?

17 A Yes.

18 Q The last sentence of the letter, the last
19 paragraph, you say, "We sincerely regret any hardship
20 that this decision may cause you." Is that the decision
21 to remove certain products from the market?

22 A Yes.

23 Q Do you see the insert on the article, the
24 first page of the article in the lower left-hand corner?
25 Is that an accurate statement?

1 A It was a statement by Carl Gustafson.

2 Q Does it accurately reflect what Monsanto said
3 to Congressman Ryan, the fact that we no longer sell it,
4 PCB, to customers for use in general plasticizers; is
5 that correct?

6 A The rest of the statement is Mr. Gustafson's
7 statement.

8 Q Is it accurate or inaccurate?

9 A Basically, it's accurate.

10 Q Did Monsanto write a reply to this article by
11 Mr. Gustafson?

12 A I don't recall.

13 Q Did you circulate this article to your
14 customers?

15 A Yes.

16 Q You were doing so by letter dated
17 December 31, 1971?

18 A That's correct.

19 Q The next exhibit is Exhibit 75. Exhibit 75
20 consists of eight pages, and it's a letter dated
21 March 30, 1972; and it's from Mr. Garnsworthy of
22 Monsanto Australia Limited to the manager of General
23 Electric Company of Australia. Have you ever seen this
24 letter?

25 A I think we saw it earlier today.

1 Q Did we?

2 A I believe so.

3 Q It contains a copy of the Gustafson article
4 which was attached to your letter in Exhibit 74,
5 correct, the preceding exhibit?

6 A Yes.

7 Q What was the relationship with Monsanto
8 Australia Limited and the Monsanto Company?

9 A It's a subsidiary company.

10 Q Look at the third paragraph. Is the
11 information in the third paragraph the type of
12 information that Monsanto U.S. was distributing to its
13 customers?

14 A Yes.

15 Q Did you suggest to your customers back in
16 1970, '71, and '72, that they advise their customers or
17 put warnings to their customers of the PCB problems?

18 A In that general time period, yes.

19 Q Let's look at No. 76, which consists of five
20 pages, the fourth and fifth being a letter of April 1972
21 authored, apparently, by Mr. Papageorge. Do you
22 recognize that letter?

23 A No, not particularly.

24 Q Do you recognize the letterhead, though?

25 A Yes.

1 Q Do you recognize Mr. Papageorge's signature?

2 A Yes.

3 Q Do you recognize and recall the contents as
4 being the position of Monsanto at that time?

5 A Let me have time to read it. Yes, I do
6 recall it.

7 Q Do you recall a governmental pollution
8 control agency contacting Monsanto for information on
9 PCB sales?

10 A I don't remember specifically, but the letter
11 brings it back to mind, the event.

12 Q Was it the Environmental Protection Agency?

13 A I don't recall who it was.

14 Q Look at the second page. Are you familiar
15 with the FDA notice of proposed rule making on PCB's
16 published in the Federal Register of March 18, 1972?

17 A Not specifically. My memory is refreshed by
18 reading this.

19 Q Back in '72, though, you would have been
20 aware of that?

21 A Yes.

22 Q Look at the first two pages of this exhibit,
23 the first three pages, and see whether there are any
24 names you recognize and whether there aren't any names,
25 rather.

1 A No names given.

2 Q Dion, Mount Vernon, Indiana. You don't know
3 him?

4 A Don't know him.

5 Q I notice that there is the address of the
6 president of General Electric on Lexington Avenue, New
7 York. Were items generally and routinely sent to that
8 office?

9 A I would think not normally.

10 Q Would you now look at No. 77. Exhibit 77
11 consists of 59 pages by my count. Let's look at the
12 third page, the letter dated January 15th, 1974.
13 Mr. Gossage wrote it?

14 A Yes.

15 Q Are you familiar with that letter or the
16 contents?

17 A Yes.

18 Q Is this information that would have been sent
19 to customers of Monsanto?

20 A Yes. It would be specifically sent to
21 customers for Pyranol, Aroclor, and all customers.

22 Q As a matter of fact, Pyranol, as this
23 indicates, is a registered trademark of General Electric
24 Company; is that right?

25 A That's correct. I think the letter was just

1 directed to dielectric fluid applications, so it's
2 probably a specific letter just for that.

3 Q So that would have gone, though, to General
4 Electric?

5 A Yes.

6 Q Was General Electric the largest purchaser or
7 dielectric fluids?

8 A Yes.

9 Q Let's look at the notice or the attachment to
10 this letter. One was, of course, pages out of the
11 Federal Register; is that correct?

12 A Yes.

13 Q Relating to the Environmental Protection
14 Agency and Water Pollution Prevention and Control?

15 A Right.

16 Q Proposed list of toxic pollutants?

17 A Yes.

18 Q Do we find polychlorinated biphenyls in that
19 list?

20 A I believe it was listed there somewhere.

21 Q Look at number 8, polychlorinated biphenyls,
22 PCB's.

23 A Yeah, right.

24 Q It says the Federal Register of July 6, 1973;
25 correct?

1 A November 6. I think you said July.

2 Q Look at the bottom of the page of the one
3 that we were just reading from.

4 A You're right.

5 MR. BURKE: For the record, there is also
6 a document right in front of it dated November 6.

7 BY MR. BAUMER:

8 Q For the record, we were reading another one
9 where --

10 A The one we read, the PCB's, was dated July 6,
11 1973.

12 Q Thank you.

13 Are you familiar with what the Federal
14 Register is?

15 A Yes.

16 Q Did you read it routinely back in the early
17 '70s?

18 A No.

19 Q Did you read it routinely with respect to
20 matters containing PCB's?

21 A Yes.

22 Q Would you have read the July 6th proposed
23 rules?

24 A I imagine so.

25 Q If you hadn't read them, would someone have

1 called them to your attention?

2 A Yes.

3 Q Monsanto was, by this letter, forwarding
4 copies of those various items to certain of its
5 customers?

6 A That's correct.

7 Q We also find other portions of the Federal
8 Register in here dated, as we have been advised by
9 Mr. Burke, one dated November 6th, 1973, one dated
10 July 17th, 1973. Do you see that one?

11 A Yes.

12 Q And September 7, 1973. Do you see that one?

13 A Yes.

14 Q Now, do you come to another issue of the
15 Federal Register with a title page for December 27,
16 1973?

17 A Yes.

18 Q That's in there also; right?

19 A Yes.

20 Q Then you go on over to January 4th, 1974?

21 A Yes.

22 Q And then after that, do you find a letter
23 dated July 13, 1973, on Monsanto letterhead?

24 A Yes.

25 Q Do you know the recipient of that letter?

1 A I don't know her personally. I know of her.

2 Q Dr. Sager?

3 A Yes.

4 Q And with the Environmental Protection Agency?

5 A Yes.

6 Q And that letter was written by

7 Mr. Papageorge; correct?

8 A Yes.

9 Q It's, likewise, one of the items that are

10 referred to in the later letter of January 5th, 1974,

11 which is the first item, is it not?

12 A Yes.

13 Q Let's look at the next item. Do you find

14 another letter dated August 6th, 1973, to Dr. Thompson

15 at the Environmental Protection Agency from

16 Mr. Papageorge, one page?

17 A Yes.

18 Q Now, Monsanto was commenting on the various

19 rules that were proposed under the air and water

20 program. To your knowledge, was General Electric

21 commenting, likewise, on those rules?

22 A I don't specifically recall.

23 Q Was Monsanto sharing its comments on the

24 rules, though, with General Electric?

25 A Yes.

1 Q Look at a letter that's in there from General
2 Electric to Dr. Sager at the Environmental Protection
3 Agency. Do you find that one dated November 21, 1973?

4 A Yes.

5 Q So General Electric was likewise commenting,
6 were they not?

7 A Yes.

8 Q Had you seen that letter before today?

9 A I imagine so.

10 Q Contemporaneously with its being authored?

11 A Pardon?

12 Q At the time it was written, would you believe
13 you saw it?

14 A Yes, or closely thereto.

15 Q Did you participate in the preparation of
16 Monsanto's comment to the Environmental Protection
17 Agency?

18 A I may have reviewed it.

19 Q Do you see the attachment to the G. E.
20 letter, The Impact of a Ban on the Use of PCB in
21 capacitors?

22 A Yes.

23 Q Did you review that document at the time it
24 was prepared?

25 A It was probably afterwards that I saw it.

1 Q Look at the next letter which is another
2 letter from General Electric dated November 21, 1973, to
3 Dr. Thompson at the Environmental Protection Agency,
4 authored by Dr. Simons. Do you know Dr. Simons, manager
5 of environmental operations at General Electric?

6 A No, I don't recall him.

7 Q The last item that's on here is a brochure of
8 polychlorinated biphenyls prepared by Monsanto in
9 November 1973. What was the purpose for the preparation
10 of that document, if you know?

11 A I don't recall.

12 Q Do you know for whom it was prepared or
13 circulated?

14 A No.

15 Q Look at the front of it.

16 A That's all I know.

17 Q Presentation to the Effluent Standards and
18 Water Quality Advisory Committee.

19 A Yes.

20 Q Is that a committee within Monsanto or is
21 that a committee of some other organization?

22 A It was not within Monsanto; it was some other
23 organization, but I don't know who.

24 A Was it the Environmental Protection Agency?

25 A I don't know.

1 Q Was that paper disseminated to Monsanto's
2 customers?
3 A I don't know.
4 Q Let's look at the next document. Look at
5 No. 78. Do you know Mr. Slayton?
6 A Yes.
7 Q He was a Monsanto employee?
8 A Correct.
9 Q Do you recognize his signature?
10 A Yes.
11 Q This letter is directed to Mr. Hoyt at
12 General Electric Company; correct?
13 A Correct.
14 Q It looks like it's a form letter. Was this a
15 form letter, to your knowledge?
16 A Yes, it looks that way.
17 Q Dated August 11, 1977?
18 A Yes.
19 Q Let's go on to the next letter. Exhibit 79 is
20 a three-page letter to Mr. Larry Crowe at General
21 Electric, Rome, Georgia, and from Mr. Ford. Do you know
22 Mr. Ford?
23 A Yes.
24 Q Do you know Mr. Crowe?
25 A I may have met him.

1 Q Let's go to the next one, No. 80, consisting
2 of 11 pages, dated September 23rd, 1975, to Dr. Simons
3 at General Electric from Mr. Papageorge. Do you recall
4 the circumstances under which this letter was written?

5 A No, not specifically.

6 Q Look at the second page, which is a General
7 Electric memorandum dated May 11, 1970. Have you seen
8 that before?

9 A I don't recall.

10 Q Let's go to the next one, No. 81. I think
11 you may have still been there.

12 A No, I had left by then.

13 Q Had the decision to take the action indicated
14 in the letter been made before you left?

15 A I don't believe so.

16 Q Mr. Bergen, were you ever involved in the
17 preparation of what has been called the Monsanto White
18 Paper on PCB's?

19 A I probably was involved in it.

20 Q Well, let's --

21 A I'm not even sure I recall.

22 (Thereupon, the court reporter
23 marked Plaintiff's Exhibit 82
24 for identification.)

25 BY MR. BAUMER:

1 Q Exhibit 82, a document styled Polychlorinated
2 Biphenyls, PCB's, A Report on Uses, Environmental Health
3 Effects and Disposal, have you seen that document?

4 A I don't recall. Does it have a date on it?

5 Q That's a good question.

6 A I think it was after I left.

7 Q This one is, of course, undated; so we can't
8 tell. But you haven't seen that document?

9 A It takes it out to '77.

10 Q Goes back, really, years. It traces, does it
11 not, the knowledge and development of the PCB problem?

12 A Yes.

13 Q Let's pass on that one.

14 Do you know what the Interdepartmental Task
15 Force on PCB's was?

16 A Vaguely, yes.

17 (Thereupon, the court reporter
18 marked Plaintiff's Exhibit 83
19 for identification.)

20 BY MR. BAUMER:

21 Q Look at EXHIBIT 83. It is styled
22 Presentation to the Interdepartmental Task Force on
23 PCB's, Washington, D. C., May 15th, 1972, by Monsanto
24 Company. Are you familiar with that document?

25 A Yes.

1 Q Do you know Dr. E. S. Tucker?

2 A Yes.

3 Q Is he a Monsanto employee?

4 A Yes, he was.

5 Q Was?

6 A Yes.

7 Q In 1972, anyway?

8 A Yes.

9 Q Did you read that document before it was
10 presented?

11 A I believe so.

12 Q Were you present when it was presented?

13 A No.

14 Q You don't know what the task force consisted
15 of or its purpose?

16 A I don't recall what all agencies were
17 involved.

18 Q Why don't we take a couple of minutes here,
19 and I'll get my thoughts together. I think I may be on
20 the verge of finishing.

21 (Thereupon, there was a brief recess.)

22 BY MR. BAUMER:

23 Q Mr. Bergen, are you familiar with the YUSHO
24 incident?

25 A Yes, vaguely.

1 Q When did you learn of that?

2 A I think it was a case if certain
3 polychlorinated biphenyls were ingested with rice in the
4 diet, that it was not very good for some of the people;
5 it caused death.

6 Q Did you learn of that, though, in '67, '68?

7 A Somewhere along that time, yes.

8 Q Was that a subject of conversation between
9 you and your people and employees of General Electric?

10 A Yes. I think we were all aware of it.

11 Q And discussed it?

12 A To some length. Not to any great length.

13 Q It had some impact? It had an impact?

14 A Yes; we knew about it.

15 Q And it generated some concern and some
16 discussion at Monsanto and between Monsanto and General
17 Electric?

18 A I wouldn't put it out of perspective. I
19 think it was a fact that any time you ingest any
20 industrial chemical, it's not going to be very good for
21 you.

22 Q In this case, we were talking about
23 polychlorinated biphenyls, were we not?

24 A Yes.

25 Q And that was the subject that was paramount

1 for discussion at Monsanto?

2 A Right.

3 Q And between Monsanto and G. E. in that time
4 frame?

5 A Right. But we made many other hundreds of
6 chemical products; and occasionally, children would
7 ingest them. So it was not uncommon for Monsanto to
8 have many cases of people swallowing some of our
9 chemicals.

10 Q But this was a large incident; this was not
11 just a couple of people.

12 A I forget the exact number. It was more than
13 ten.

14 Q It resulted in substantial literature being
15 written about that incident, did it not?

16 MR. BURKE: Objection, leading.

17 THE WITNESS: I don't recall reading
18 substantial literature, no.

19 BY MR. BAUMER:

20 Q Do you recall reading any literature about
21 it?

22 A Some, limited.

23 Q In scientific periodicals?

24 A I forget where they were.

25 Q Are you aware that ferrons are byproducts of

1 the combustion of Aroclors?

2 A What type of ferrons?

3 Q Dibenzoferrons.

4 A Yes.

5 Q When did you become aware of that fact?

6 A Somewhere in this general period.

7 Q In '68, '71?

8 A I can't be precise, but somewhere in that
9 period, yes.

10 Q And did Monsanto advise its customers of that
11 fact?

12 A I think in general we divulged everything we
13 knew, and it was in the literature.

14 Q Dibenzoferrons, was that in the literature?

15 A There were some references to it. Not all
16 PCB's contained that.

17 Q Your literature, though, did indicate that
18 people should be concerned about vaporization?

19 A Yes.

20 Q And would that include the dibenzoferrons
21 that were created when the Aroclors were combusted?

22 A The general statement was just for good
23 industrial hygienics and not specifically because of any
24 possible dibenzoferrons.

25 Q But that's vaporization? That's included in

1 that category of vaporization?

2 A Not necessarily.

3 Q Was it included in the warnings that were
4 given by Monsanto?

5 A I don't recall.

6 Q Where there any administrative actions
7 brought against Monsanto with respect to PCB's at any
8 time while you were employed?

9 A None that I can recall.

10 Q Any lawsuits other than the two that we've
11 referred to earlier because of the Tennessee incident?

12 A Yes. There was another one, I believe.

13 Q When and where was that?

14 A I forget the details, but there was something
15 at a silo.

16 Q Did that result in an adverse decision?

17 A I don't believe so. Whether it was settled
18 whilke I was still there, I'm not sure.

19 Q It was or was not settled?

20 A During my time there, I don't think it was
21 settled. I think it was still pending. I don't recall.

22 Q Any other incident that you're aware of?

23 A No.

24 Q Are you aware that at any time General
25 Electric painted over any of the warnings that were on

1 the drums containing askarel?

2 A No.

3 Q Did you ever receive any reports that that
4 had been done?

5 A Not to my knowledge.

6 Q The indemnification agreement that we've
7 talked about early on in the deposition, did General
8 Electric sell to anyone who would sign that
9 indemnification agreement?

10 A I don't know what their policies were.

11 Q To your knowledge, did you or anyone on your
12 behalf ever decline to sell to a customer even though he
13 or it would sign the indemnification agreement?

14 A Well, if they couldn't meet the financial
15 criteria, we did not sell them.

16 Q Were there financial criteria?

17 A Yes.

18 Q What was the financial criteria?

19 A I forget the exact number.

20 Q Was it a net worth criteria?

21 A There was a net worth criteria.

22 Q Were the indemnifications secured in some
23 fashion by insurance?

24 A That was one of the alternative methods, I
25 believe.

1 Q And what was the amount of insurance
2 required?

3 A I don't recall.

4 Q Who would be in the best position to tell us
5 that?

6 A The legal department of Monsanto.

7 Q Was there a written policy memorandum on that
8 issue?

9 A There was a policy on it, yes.

10 Q Was it written?

11 A It was written.

12 Q Do you know whether Monsanto ever performed
13 any studies on workers that were exposed to Aroclors?

14 A I can't answer that. Dr. Kelly could answer
15 that better.

16 Q Do you recall that that did occur, though?

17 A We did routine medical examinations on
18 employees; and we had a normal industrial hygiene
19 program, had one for many years. But to my knowledge,
20 there was no monitoring of bloodstreams or anything like
21 that done.

22 MR. BAUMER: That's all I have, thank
23 you.

24 MR. BURKE: You've given me copies of
25 what purport to be numbers 1 through 7 that have your

1 marks here on the lower corner. And you have agreed
2 that we can use these copies today in lieu of the
3 originals the court reporter didn't bring with her;
4 correct?

5 MR. BAUMER: Sure.

6 EXAMINATION

7 BY MR. BURKE:

8 Q Mr. Bergen, we've marked over 80 exhibits for
9 this deposition here today. Is it accurate to say that
10 that is probably only a very small fraction of the
11 correspondence that was generated by the Monsanto
12 Company over the course of your tenure with them
13 concerning polychlorinated biphenyls and all of its
14 forms?

15 A Yes.

16 Q Do you know where any of those documents came
17 from other than the Monsanto files or what they produced
18 in response to yours?

19 A No.

20 (Thereupon, the court reporter
21 marked Defendant's Exhibit 3
22 for identification.)

23 BY MR. BURKE:

24 Q Mr. Bergen, does 1966 comport with your
25 recollection of the publishing of the results by the

1 European scientists of their findings concerning
2 polychlorinated biphenyls in certain conventional
3 mediums? 1966, is that the year?

4 A Approximately then, yes.

5 Q And basically, these scientists were
6 reporting that they had found traces of polychlorinated
7 biphenyls in marine and other aquatic environment;
8 correct?

9 A Right.

10 MR. BAUMER: Object to the form of the
11 question as being an assumption without a proper
12 foundation and that the report of the people, the
13 scientists, is the best evidence of its content.

14 BY MR. BURKE:

15 Q And that those findings were made by advances
16 in gas chromatography; is that correct?

17 A Correct.

18 Q Is it not also accurate that before 1966, the
19 technology of gas chromatography was not as developed as
20 it was in 1966?

21 A Correct.

22 Q Is it also not accurate to say that the
23 detection of low levels of PCB's that were reported by
24 the European scientists in 1966 and after was only made
25 possible by these new technical advances in

1 gas chromatography?

2 A That's correct.

3 Q Mr. Bergen, what is a part per million? Can
4 you give the jury an explanation that we can all
5 understand?

6 A Well, it's just what it says; and you can use
7 any unit you want and put it in quarts, gallons, and
8 tank cars. But it is a very, very small amount, and
9 there are a lot of analogies. I can't quote them right
10 off the top of my head, but it's a very small amount.

11 Q So if a gas chromatography analysis of some
12 materials revealed a concentration of PCB's of one part
13 per million, if there were a million pounds, the
14 analysis would have revealed one pound?

15 A That's correct.

16 Q And the same thing in parts per billion?

17 A That's correct.

18 Q And a billion is a one with nine zeroes after
19 it?

20 A That's correct.

21 Q So it's accurate to say then that these
22 findings in reported environmental contamination with
23 PCB's was at very, very low levels in absolute terms; is
24 that correct?

25 A That's correct.

1 Q And that information was published in what is
2 called the scientific literature?

3 A Yes.

4 Q Which is, essentially, a worldwide network of
5 journals and papers published by scientists in the
6 interest of science?

7 A Yes.

8 Q And used by industries if it's applicable to
9 their undertakings?

10 A Yes.

11 Q And that material is available essentially
12 worldwide in terms of libraries and research facilities
13 and that sort of thing?

14 A Yes.

15 Q Is it also not accurate to say that certainly
16 in the '50s and '60s and on up through today, the major
17 corporations kept tract of this scientific literature as
18 it affected their endeavors?

19 A Yes.

20 Q And was, in fact, a way to determine what was
21 happening in the forefront of science?

22 A Right.

23 Q It was a responsible thing for corporations
24 to do to keep tract of this material, was it not?

25 A Yes.

1 Q Now, when we talk about gas chromatography and
2 these 1966 reports of these European scientists, isn't
3 it accurate that they were looking for DDT, the
4 pesticide?

5 A That was the original search.

6 Q That was the basis of their research? That
7 is what they were looking for?

8 A Right.

9 Q There was a worldwide research about the
10 persistence of DDT and its use as an agricultural
11 chemical?

12 A That's correct.

13 Q And as a byproduct of that, these
14 abberations, so to speak, were found later to be
15 identified as PCB's?

16 A Right.

17 Q If we pick 1970 as a year, the beginning of
18 1970, is it accurate to say that that's the year that
19 Monsanto undertook definitive action with respect to its
20 manufacture and sale of PCB's?

21 A Yes, that's approximately the date.

22 Q And that was predicated, at least in part, on
23 the findings and reportings of these scientists from
24 Europe beginning in '66 or so?

25 A Yes.

1 Q Was it not also accurate to say, Mr. Bergen,
2 that in 1970 the ability still to identify the
3 quantities of PCB's was not very good?

4 A That's correct.

5 Q And the ability to determine what particular
6 PCB it was was also not very good?

7 A Right.

8 Q And is it also accurate to say that the
9 understanding of the scientific community with respect
10 to the potential long-term effects on humans was not
11 known well at all, was it?

12 A That's correct.

13 Q The things that earmarked PCB's was its
14 persistence; correct?

15 A Yes.

16 Q Unlike other chemicals or some other
17 chemicals, it did not degrade as readily?

18 A Right.

19 Q Most chemicals degrade into common elements,
20 chlorine, hydrogen, and water?

21 A Carbon, hydrogen, oxygen; right.

22 Q And then are reabsorbed into what we can call
23 the ecosystem and regenerated through plant and animal
24 life?

25 A Right.

1 Q Now, in 1970 when Monsanto undertook
2 definitive action, is it accurate to say that a
3 tremendous amount of scrutiny went into and time
4 devoted to an accurate definition of what Monsanto's
5 concern was?

6 A Yes.

7 Q So as not to alarm people?

8 A Yes.

9 Q But at the same time, to accurately state and
10 understand the potential problem as Monsanto understood
11 it?

12 A Yes; primarily, to get the facts, find out
13 what the facts were.

14 Q In those early communications in 1970,
15 Monsanto described the problem as a potential
16 environmental contaminant; correct?

17 A Correct.

18 Q Which meant that it was accumulating in
19 possibly land or water buildings, right, as opposed to
20 causing physical harm to human beings?

21 A Yes.

22 Q Exhibit 1, which is the undated letter
23 concerning this special undertaking, if you'd look at
24 paragraphs two and three, is that a recap and a summary
25 of Monsanto's understanding of what is called, for want

1 of a better term, the PCB problem?

2 A Yes.

3 Q Which is primarily what accumulated in the
4 environment?

5 A Yes.

6 Q And it was for that reason that Monsanto took
7 the restrictive policies?

8 A Yes.

9 Q And the restrictive policies included the
10 discontinuance of the sale of material to what has been
11 called open-ended users?

12 A That's correct.

13 Q Where the fluid would be either used or
14 consumed in whatever process it was involved in?

15 A Yes.

16 Q In 1970 when Monsanto first announced that
17 definitive action, was Monsanto of the opinion that its
18 continued manufacture and sale for use in transformers
19 posed any unreasonable risk to users?

20 A No. In our judgment, at that time, no.

21 Q Now, this indemnity agreement, anybody who
22 was in the transformer business and wanted to stay in
23 the transformer business and provide askarel
24 transformers was required to sign that agreement?

25 A That's correct.

1 Q So Westinghouse, if they wanted to make
2 the transformers, they would have to sign, and to
3 buy fluid from you, they had to sign?

4 A That's correct.

5 Q And all of this --

6 A Excuse me; not only sign, but they also had
7 to be responsible parties to do so.

8 Q Now, in your dealings with General Electric
9 in this early period, 1970, in your personal dealings
10 with them or in reports received by you from your folks
11 that reported to you, did any of them ever report to you
12 or did you ever experience any lack of cooperation on
13 the part of anybody at G. E.?

14 A No. They were always very cooperative.

15 Q Is it accurate to say that they were as
16 interested in ascertaining the scope of the potential
17 environmental problem as Monsanto was?

18 A Yes.

19 Q Did any G. E. representative in these early
20 days, 1970, or was it ever reported to you by any of
21 your folks that G. E. refused to cooperate or refused to
22 acknowledge or follow the recommendations they were
23 making?

24 A No.

25 Q Now, when we talk about Monsanto's actions

1 here, essentially, they were voluntary, weren't they,
2 sir?

3 A Yes.

4 Q In 1970 when Monsanto stopped open-end sales
5 for open-ended uses, it was no state or federal law to
6 require you to do that, sir, was there?

7 A That's correct.

8 Q Did you feel that was a responsible action on
9 behalf of Monsanto?

10 A Very responsible.

11 Q And did you feel that General Electric's
12 reaction to that effort by Monsanto was also
13 responsible?

14 A Responsible and supportive.

15 Q In fact, sir, PCB's were used in capacitors a
16 lot more than transformers?

17 A Yes.

18 Q Did not G. E. begin immediate cooperation
19 with Monsanto in terms of attempting to develop 1016?

20 A Yes.

21 Q Basically in 1970, there was no substitute
22 for PCB fluids in the transformers, sir, was there?

23 A That's right.

24 Q Or for the capacitors, for that matter, either?

25 A That's correct.

1 Q Did Monsanto feel in 1970 that the use of a
2 transformer containing PCB's in a commercial building
3 presented any unreasonable risk to the building owner?

4 A No. As a matter of fact, we thought it was a
5 benefit from the fire standpoint, safety.

6 Q Mineral oil burns, sir, doesn't it?

7 A Yes.

8 Q And while you said earlier you would not
9 recommend that anybody breathe vapors of PCB fluids, you
10 certainly wouldn't recommend they breathe vapors of
11 mineral oil either, would you?

12 A No.

13 Q Can you give us some idea of approximately
14 how many different industrial chemicals Monsanto
15 manufactured in 1970, roughly?

16 A Probably over 500.

17 Q And all of those chemicals were manufactured
18 by employees of Monsanto in various manufacturing
19 facilities?

20 A Yes.

21 Q And is it not accurate to say that a lot of
22 toxicology studies concerning human health effects as it
23 effected industrial workers were done in the early 30s
24 and 40s as these chemicals were being developed in order
25 to be sure that industrial workers had a safe place to

1 work?

2 A There was some work done then.

3 Q And as time went on and scientific
4 technology and equipment improved, additional work was
5 done?

6 A Yes.

7 Q And the concept of TLV was developed in those
8 days, the 30s and 40s was it not?

9 A Yes.

10 Q And that's called a threshold limit value?

11 A Yes.

12 Q And the idea being that a person, an
13 industrial worker, could be exposed to a certain value
14 of a chemical eight hours a day for his entire working
15 life and not suffer any ill health effects?

16 A That's correct.

17 Q And there was a TLV for PCB's developed about
18 that time, was there not?

19 A I believe so.

20 Q And Monsanto, either through state regulation
21 or voluntarily, through industrial hygiene practices
22 attempted to comply with that?

23 A Yes.

24 Q And participated either with its own
25 scientific group or with groups like the ACGIN studying

1 and refining these TLV's?

2 A Yes.

3 Q There is also a concept of maximum allowed
4 concentration in the TLV scheme, too?

5 A Yes.

6 Q And that's the one time daily exposure a
7 person should experience?

8 A Yes.

9 Q The idea is to protect the industrial
10 workers --

11 A Yes.

12 Q -- for his own good and the continued production
13 of the product?

14 A Right.

15 Q Now, PCB transformers were not exactly
16 household products in 1970, were they?

17 A No.

18 Q In addition to industrial uses, they were
19 used a lot by utilities?

20 A Yes.

21 Q Large industrial concerns, what we call the
22 smokestack industries, to generate and distribute
23 power?

24 A Yes.

25 Q And they could also be used in office

1 buildings?

2 A Yes.

3 Q And, in fact, if they were to be used inside
4 an office building, they had to be an askarel fluid
5 because it wouldn't burn by many of the national state
6 building codes?

7 A That's right.

8 Q Exhibit 5, which we looked at the last time
9 we were here, of March 30, 1970, is the draft of the
10 Monsanto management plan for what has been described in
11 the exhibit as the polychlorinated biphenyls environmental
12 problem?

13 A Right.

14 Q And while this may not be the first draft,
15 it's one that existed on that day?

16 A Yes.

17 Q The thrust of it is to get Monsanto people
18 involved in understanding and explaining the problem as
19 well as enlisting its customers to understand and
20 explain the problem to them?

21 A Yes.

22 Q And that included informing customers of, for
23 example, these European reports concerning the health
24 levels of PCB's found in aquatic environment?

25 A Yes.

1 Q And is it accurate to say that Monsanto's
2 customers responded in the effort to understand and to
3 deal with the potential problem?

4 A Yes, it is.

5 Q And among those customers was General
6 Electric?

7 A That's correct.

8 Q If the problem is one perceived of
9 environmental pollution, one approach would be to
10 control the discharge of the fluid in various uses?

11 A Correct.

12 Q By terminating sales in the open-ended uses,
13 Monsanto essentially assisted in the termination of
14 elimination of such discharges?

15 A Majority of it, yes.

16 Q Monsanto began early plans to incinerate
17 PCB's because it provided for essentially complete
18 destruction; isn't that true?

19 A Yes, true.

20 Q And there were byproducts of carbon and
21 water and hydrochloric acid?

22 A Yes.

23 Q And the hydrochloric acid combined with air,
24 did not that form harmless constituents of something,
25 air and water again?

1 A No.

2 Q What did they do with the hydrochloric acid
3 when it was burned?

4 A It was scrubbed and absorbed. Then it
5 could be neutralized.

6 Q Now, Monsanto offered that service to its
7 customers to assist in the elimination and the reduction
8 of PCB fluids being released into the environment?

9 A Correct.

10 Q Monsanto was under no obligation to do that?

11 A No.

12 Q And no customer of Monsanto was required to
13 send their material to Monsanto?

14 A No.

15 Q General Electric, however, did send this
16 material, didn't they?

17 A Yes.

18 Q They could have disposed of it any other way
19 it was permitted, couldn't they?

20 A Yes; no law.

21 Q Do you feel that working with Monsanto and
22 participating in the combustion program was a better way
23 for a user of your PCB fluids to dispose of them?

24 A Yes.

25 Q Did Monsanto encourage that?

1 A Yes.

2 Q Did G. E. respond to that?

3 A Yes.

4 Q Looking at Exhibit No. 8, do you recognize
5 Hudson Falls as a capacitor manufacturing facility for
6 General Electric?

7 A Yes.

8 Q Transformers are not manufactured there?

9 A That's correct.

10 Q So basically, Exhibit 8 has essentially
11 nothing to do with transformer fluids, does it, sir?

12 A No.

13 Q Paragraph one, if you look at it that
14 paragraph, in various forms but essentially in substance,
15 appears throughout a lot of correspondence of
16 Monsanto to all of its customers from 1970 forward to be
17 sure that they continue to know that they're buying PCB
18 fluids?

19 A That's correct.

20 Q As far as you know, did General Electric take
21 every precaution to protect the entry of polychlorinated
22 biphenyls into the environment pursuant to your
23 recommendation?

24 A Yes.

25 Q Exhibit 9 of February 19, 1971, again,

1 concerns disposal and reclamation?

2 A Yes.

3 Q And the idea is to encourage responsible
4 disposal of PCB fluids by Monsanto and all of its
5 customers?

6 A That was the basic objective, yes.

7 Q And again, this was voluntarily on behalf of
8 Monsanto?

9 A That's correct.

10 Q With the cooperation of its customers,
11 including General Electric?

12 A Right.

13 Q Do you feel that such voluntary participation
14 in the reclamation program like this is a responsible
15 response to the concern of environmental pollution of
16 PCB's?

17 A Yes.

18 Q In fact, if industry didn't do it, nobody
19 would at that point in time?

20 A There was no requirement, no law, that said
21 you had to.

22 Q And there was no agency or no other entity
23 who was capable of doing it, was there?

24 A No.

25 MR. BAUMER: For the record, I want to

1 make an objection which I consider to be continuing in
2 nature as to what the witness feels. I object to the
3 form of that question in all respects, and I won't make
4 that objection each time. But what he feels is
5 irrelevant and immaterial, and to the extent, that's to
6 the form of the question.

7 BY MR. BURKE:

8 Q Based upon how you felt about something, sir,
9 did it govern the conduct of your actions if you felt
10 something should be done?

11 A We acted in what we felt was the correct
12 thing to do.

13 Q You understand my choice of words?

14 A Yes.

15 Q Now, going to Exhibit 10 of May 1969,
16 Mr. Raab of General Electric had an acquaintance at the
17 Denver Research Institute submit to Monsanto a possible
18 proposal or at least discuss their capabilities to do
19 PCB research?

20 A Correct.

21 Q And Monsanto was getting ready to engage in a
22 research program?

23 A Correct.

24 Q Is it accurate to say that Mr. Raab was
25 attempting to assist Monsanto in this effort?

1 A Yes. I'd say he was submitting another
2 source, another idea, of where work could be done.

3 Q And whether Monsanto selected University of
4 Denver or not, this was helpful information to you?

5 A Yes; it was constructive information.

6 Q Does that letter or does that memo,
7 Exhibit 10, indicate any action on behalf of Mr. Raab or
8 General Electric to ignore the potential environmental
9 pollution of PCB's?

10 A No.

11 Q Monsanto did start a research program
12 concerning animal testing?

13 A Yes.

14 Q And was G. E. called upon to assist in any
15 fashion, provide information or personnel or funding?

16 A I don't recall. There may have been some
17 discussions, but I don't specifically recall.

18 Q Were General Electric people at this time,
19 1969, 1970, did they express interest in the work and
20 the results?

21 A Yes.

22 Q And periodically, would you receive
23 communications from them asking about what the results
24 were or what the status was?

25 A It was a mutual communication.

1 Q Was that something you would have expected
2 from a user of your PCB fluids?

3 A Responsible user.

4 Q And you would have encouraged it?

5 A Yes.

6 Q Now, Exhibit 11, the June 9th, 1970, letter
7 to Mr. Raab apparently responds paragraph by paragraph to
8 Mr. Raab's June 2nd letter; is that right?

9 A Yes.

10 Q We don't have the June 2nd letter here today,
11 sir, do we?

12 A No.

13 Q So in terms of figuring out what the
14 responses are, it's a little difficult.

15 A To some degree, yes.

16 Q Exhibit 12 is from the Hermetic Motor
17 Department of General Electric apparently located in
18 Tiffin, Ohio?

19 A That's correct.

20 Q Now, were askarel fluids used in hermetically
21 sealed motors?

22 A Not generally, to my knowledge.

23 Q But if it wasn't a transformer or a
24 capacitor, about February 7th, 1972, when Exhibit 12 was
25 generated, it would have been about the time that

1 Monsanto ceased the sale of Aroclors to all but the
2 capacitor and transformer manufacturers; correct?

3 A Right.

4 Q So, in fact, McFarland was attempting to
5 comply with Monsanto's withdrawal from the open-ended
6 market?

7 A Yes.

8 Q Which is what you expected from your
9 industrial customers who were not in the transformer and
10 capacitor business?

11 A Correct.

12 Q And for that reason, you accepted it back at
13 full credit?

14 A Correct.

15 Q Again, a responsible action on Monsanto's
16 part?

17 A Yes.

18 Q To encourage open-end users to return the
19 material and avoid its entry into the environment?

20 A Correct.

21 Q Exhibit 13, which appears to be an agenda for
22 a May 2nd, 1972, meeting really has nothing to do with
23 transformer dielectric fluids?

24 A No.

25 Q It all has to do with 1016 Aroclor and 1016

1 for capacitors?

2 A That's correct.

3 Q Isn't it true that Aroclor 1016, because of
4 its chemical and physical properties, was not suitable
5 for transformers?

6 A That's correct.

7 Q Because of its higher biodegradability, it
8 would have been preferable for use, but it simply wasn't
9 compatible with transformers?

10 A Didn't have the flash at fire point.

11 Q As of May 2nd, 1972, when folks were getting
12 together to discuss capacitors as reflected on
13 Exhibit 13, did Monsanto feel that it was reasonable to
14 continue the sale of Aroclors for capacitor and
15 transformer use?

16 A Yes.

17 Q May '72 is about the time that the
18 interdepartmental task force report came out, wasn't it?

19 A Yes.

20 Q Do you recall the specific finding in which I
21 think was conclusion number six, that capacitor and
22 transformer use of Aroclors should not be banned and it
23 should be continued?

24 A Yes. My general recollection was that the
25 task force felt that we were taking all the proper

1 precautions and doing the proper actions.

2 Q And do you remember the specific portion of
3 that conclusion that indicated that use in capacitors
4 and transformers represented a minimal risk of
5 environmental contamination? Does that sound familiar
6 to you?

7 A Yes.

8 Q Exhibit 14 has to do with Mr. Benignus'
9 concern about some announcements of General Electric
10 that they were going to withdraw from Pyranol transformer
11 activity. That, in fact, didn't occur, did it, sir?

12 A No.

13 Q G. E. stayed in the business until the fluid
14 was no longer available in '77?

15 A I believe that's correct.

16 Q Whatever Exhibit 14 is, it didn't come to
17 pass?

18 A Apparently.

19 Q Is the letter and the events it describes
20 typical of the things that happen in industry, whether
21 it's PCB's or any other fluid?

22 A Certainly.

23 Q Exhibit 15 appears to be a report of an
24 analysis of some water samples done by Monsanto for
25 General Electric or at General Electric's request?

1 A Yes.

2 Q And it appears that the detection limit as of
3 1975 was at the level of one-tenth of a part per
4 billion?

5 A Correct.

6 Q So the technology at that time was advanced
7 to the point that the gas chromatographs could detect a
8 PCB level of one-tenth of a part per billion?

9 A Correct.

10 Q Is it accurate to say that that is very, very
11 small?

12 A Yes.

13 Q Now, the analytical chemistry that goes into
14 this type of work, is it accurate to say that it's
15 complex?

16 A Yes.

17 Q Analytical chemists are highly trained and
18 specialized people?

19 A Yes.

20 Q And that a lot of analytical chemistry was
21 done between 1970 and '75 in an attempt to develop
22 methods and procedures to be able to measure this low?

23 A That's correct.

24 Q The greater the sensitivity of the measuring
25 device, the greater the ability to determine the factual

1 situation as it exists in the environment?

2 A True.

3 Q And in 1970, that was not as acute as it
4 was in 1975?

5 A Correct.

6 Q I gather from your testimony, Mr. Bergen,
7 that you did not have a lot of direct involvement with
8 ANSI or its groups or study committees?

9 A That's correct.

10 Q American National Standard Institute is a
11 voluntary association of manufacturers engaged in all
12 types of activities, manufacturing activities, who
13 attempt to set standards for participating companies to
14 assist in the manufacture of quality products; correct?

15 A Yes.

16 Q And when Monsanto began to inform essentially
17 the world of the potential environmental pollution of
18 PCB's in 1970, the ANSI, American National Standards
19 Institute, became involved in terms of proposing a
20 standard to handle and dispose of PCB fluids?

21 A Correct.

22 Q Is it accurate to say that such an
23 involvement is a responsible action by a manufacturing
24 association?

25 A Yes.

1 Q Did Monsanto welcome and participate in their
2 work?

3 A Yes.

4 Q Sent folks to the various committees?

5 A Yes.

6 Q Who were on the committees?

7 A Yes.

8 Q To develop a standard like that, whether it
9 be PCB's or anything, it is best done in the context of
10 a valid scientific background?

11 A That's correct.

12 Q And in 1972 when this committee was meeting,
13 is it accurate to say that that scientific background
14 and data base was still being developed?

15 A Yes.

16 Q Do you have any experience in terms of
17 comparing the relative toxicity of PCB's to other
18 commonly used, industry used, chemicals?

19 A Monsanto had and does have a relativity
20 there. I personally have not done the work, but --

21 Q Do you recall what that relative toxicity
22 was?

23 A It was a product that we classified as an
24 industrial chemical-type that you had to exercise
25 caution about, but it was not an extremely poisonous

1 type, nor was it completely innocuous. It was kind
2 of in a middle ground of most industrial chemicals
3 where you have to exercise some care.

4 Q Is it accurate to say that the use of any
5 industrial chemical and its marketing as a product is
6 the result of a risk benefit analysis done by the
7 company?

8 A Absolutely.

9 Q And as soon as the benefits outweigh the
10 risks and there is a market and a use for the product, a
11 manufacturer will ordinarily produce it?

12 A That's correct.

13 Q With PCB's in the area, and let's take it up
14 to 1973, through 1973, is it accurate to say that the
15 benefits of the production and sale of Aroclors for
16 transformer dielectric fluids outweighed the risks that
17 were involved?

18 A That was our opinion.

19 Q But with respect to the open-ended uses,
20 Monsanto took the position that the risks outweighed the
21 benefits?

22 A Right; so we terminated it, right.

23 Q Exhibit 16 of April 12th, 1972, is
24 essentially for use in industrial facilities in order to
25 limit and prevent environmental discharge?

1 A Right.

2 Q And to continue to provide a safe place to
3 work for industrial workers?

4 A Right.

5 Q Again, responsible actions in view of the
6 perceived potential problem?

7 A Right.

8 Q In the overall scheme of things, is it
9 accurate to say that the response time of industry with
10 respect to reacting to a reported potential problem with
11 respect to PCB's was relatively quick?

12 A Yes.

13 Q Exhibit 17, which is the April 4th, 1941,
14 document, I gather you were still years away from
15 starting work with Monsanto?

16 A That's correct.

17 Q But the Journal of Industrial Hygiene and
18 Toxicology at that time had been around for about 21
19 years if it's volume 21. Does that seem to make sense?

20 A Right; May '39.

21 Q And the article that Mr. Clark is discussing
22 in there, is it accurate to say that it is typical of
23 the articles published about acute toxicity of the
24 industrial chemicals of all types that was in the
25 scientific literature in that period of time?

1 A Right.

2 Q And it's the type of material that a
3 manufacturer kept track of in order to provide a safe
4 place to work for its industrial employees?

5 A That's correct.

6 Q Now, when we talk about open-ended uses and
7 closed-end uses, isn't it true that one of the largest
8 open-ended uses of polychlorinated biphenyls was in
9 carbonless carbon paper?

10 A That's correct.

11 Q And is it not also accurate that carbonless
12 carbon paper was ubiquitous and uniformly distributed
13 throughout the universe by 1970?

14 A That's correct.

15 Q It was an aid in various business
16 enterprises?

17 A Yes.

18 Q Would you be surprised to learn that
19 insurance companies probably used it?

20 A I know they did.

21 Q And there were other numerous open-ended uses
22 for polychlorinated biphenyls in paint and ink and that
23 sort of thing?

24 A That's correct.

25 Q In terms of Monsanto's experience with this

1 material, and let's talk about up until 1973, did
2 Monsanto find that the bulk of the environmental
3 discharge or the discharge into the environment of PCB's
4 was caused by the open-ended uses?

5 A Yes.

6 Q The hydraulic fluids and the plasticizers and
7 the ink?

8 A Yes.

9 Q The insurance --

10 A And the carbonless carbon paper.

11 Q The insurance company that throws away its
12 carbonless carbon paper is essentially --

13 A That's one way it can happen.

14 Q -- is essentially throwing it into the
15 landfill and distributing it into the environment?

16 A Right.

17 Q That's one way it can happen?

18 A Right.

19 Q Exhibit 18, which is the letter to Mr. Barker
20 in 1968, that letter focuses to a certain extent on the
21 possibility of being able to recycle scrap PCB,
22 scrap Pyranol, in order to recover the PCB fluid?

23 A Correct.

24 Q PCB fluid in terms of relative economic
25 expense cost more than mineral oil, didn't it?

1 A Correct.

2 Q And it was only the nonflammable use that
3 justified the expense?

4 A Correct.

5 Q And if it could be recycled, it would be a
6 benefit to the customer and to Monsanto?

7 A Correct.

8 Q And Monsanto was attempting to assist General
9 Electric in this case in terms of possibly recycling
10 what has been identified as scrap Pyranol?

11 A Correct.

12 Q Is it accurate to say that this Exhibit
13 No. 18, this letter of November 8th, 1968, is not
14 directly involved with the matters which gave rise to
15 Monsanto's actions in 1970? This is a typical
16 industrial problem?

17 A I don't really recall that.

18 Q Were there such things as toxic dumps in
19 1968?

20 A Yes.

21 Q So even back then, people were attempting to
22 segregate what was considered to be toxic waste from
23 the normal run-of-the-mill garbage and waste that
24 accumulated?

25 A Beginning to, yes.

1 Q Exhibit 19, which is the letter to
2 Mr. McBournie of October 1969 concerns General
3 Electric's polymer products; correct?

4 A Yes.

5 Q Doesn't really have anything to do with
6 askarel fluids for transformers?

7 A It would seem not to. The Noryl Avenue
8 description of the polymer products would indicate
9 an entirely different application.

10 Q And the polymer product is an open-ended use
11 that Monsanto stopped selling fluids for?

12 A Yes.

13 Q Exhibit 20 is the letter to Dr. Scoville at
14 Hudson Falls. That is a capacitor plant; correct?

15 A Yes.

16 Q With respect to a direct relationship
17 concerning transformer dielectric fluids, Exhibit 20
18 really doesn't have much to do with that, sir, does it?

19 A No. I think the intent here, though, was that
20 it was regarding the general content of the San
21 Francisco Chronicle articles about the possible effects
22 on the environment.

23 Q And apparently, the letter indicates that
24 some Monsanto folks were going over to Europe to talk to
25 the folks. Is that the same folks that had published

1 this report and the studies?

2 A Yes, Dr. Jensen and some of those
3 people.

4 Q Did Monsanto invite anybody from G. E. to go
5 along?

6 A I don't recall.

7 Q Do you know if anybody from G. E. went along?

8 A I don't recall.

9 Q Were they interested in the results when those
10 folks came back, if you know?

11 A I don't know. I don't recall. I assume they
12 would have been.

13 Q Exhibit 21, the letter to Mr. Nelson from --
14 is it Dr. or Mr. Wheeler?

15 A I think Mr.

16 Q Of July 1969, again, he's enclosing
17 information of the type that General Electric and
18 Monsanto were exchanging concerning PCB's?

19 A Yes.

20 Q And apparently, Mr. Wheeler is of the opinion
21 in Exhibit 21 that Dr. Risebrough is more concerned
22 about DDT than PCB's?

23 A That's what he says.

24 Q One of the attachments to Exhibit 21 is the
25 February 2nd, 1970, memo entitled Possible Customer

1 Questions on PCB's. Is this a device or a vehicle that
2 Monsanto was preparing in order to answer customers'
3 questions about PCB's?

4 A Yes. Ed John was in our public relations
5 department, and it appears as though it was getting
6 background information on how we'd answer certain
7 questions if they were raised by the media or by the
8 people.

9 Q And again, that is a responsible action in
10 order to inform and advise interested persons on the
11 scientific information available?

12 A That's right.

13 Q As it was developing?

14 A Right.

15 Q In February 1970, isn't it accurate to say
16 that very little of what we know today about PCB's was
17 known then?

18 A That's correct.

19 Q Exhibit 22, which is a January 7th, 1970,
20 letter to Dr. Pozefsky, again, is that typical of the
21 exchange of technical information between Monsanto and
22 General Electric at this point in time?

23 A Yes.

24 Q We've already talked about January 7th, 1970,
25 or at least the 1970 day. As far as you know, was that

1 information received and used by General Electric in its
2 work and concerns about the use of PCB's?

3 A I would assume so.

4 Q Exhibit 23 is a letter to Mr. Benignus from
5 Mr. Raab of General Electric of January 8th, 1970. Now,
6 to your recollection, it seems to me that based on the
7 document we've reviewed, that that letter of January 8th,
8 1970, would actually predate Monsanto's communication,
9 the written communication, about its withdrawal from the
10 open-ended sale or the sale for open-ended uses of PCB
11 fluids. Does that sound about right?

12 A You'd have to check the dates on that. I
13 don't recall.

14 Q Essentially, General Electric is there very
15 early in 1970, wanted to come out very early to discuss
16 this matter with you?

17 A Yes.

18 Q Does this desire to come out and discuss this
19 matter indicate to you any desire on behalf of General
20 Electric to ignore this potential problem?

21 A No.

22 Q In fact, sir, it's just the opposite?

23 A No; quite concerned about it.

24 Q Did the other manufacturers ask for such
25 conferences and meetings, too, that you're aware of?

1 A I would have to say that in general, General
2 Electric took the lead of all the transformer and
3 capacitor people in being most cooperative and most
4 concerned and most interested in the problem.

5 Q Exhibit 24 is Mr. Dobbins' letter to
6 Mr. Benignus indicating a letter General Electric
7 proposed to send to its customers; correct?

8 A Correct.

9 Q If we assume for purposes of discussion that
10 it was the February 18th and April 1st, 1970, letters
11 from Monsanto that first alerted its customers to the
12 potential environmental pollution of PCB's, Exhibit 23,
13 the January 8th, 1970, letter from General Electric's
14 Mr. Raab setting up the meeting, would have predated
15 that, wouldn't it?

16 A Correct.

17 Q General Electric was there early, weren't
18 they, sir?

19 A Correct.

20 Q Do you have any reason, any factual basis, to
21 know whether General Electric did not inform its
22 customers that this letter or some variation of it was
23 not sent to its customers?

24 A No.

25 Q In fact, based upon your dealings with them,

1 would you not have expected they would have sent some
2 letter?

3 A Yes.

4 Q Exhibit 25, which is Mr. Tucker's letter to
5 Mr. Fagel of General Electric of June 11th, 1970,
6 concerns analytical methods for measurement of PCB's; is
7 that correct, sir?

8 A Yes.

9 Q And is it accurate to say that this letter
10 reflects the ongoing technical work being done to
11 improve the ability to measure PCB level and the PCB
12 types present in the environment?

13 A Correct.

14 Q And again, a voluntary response to this
15 potential environmental problem?

16 A Yes.

17 Q Exhibit No. 26 is the letter to Mr. Crowe,
18 apparently, the purchasing department in Rome, Georgia,
19 for General Electric in December 1970. Is that
20 accurate?

21 A Yes.

22 Q And apparently, the letter is responding to
23 Mr. Crowe's concern about returning used and scrap
24 Pyranol to Monsanto for proper and appropriate
25 destruction?

1 A Correct.

2 Q Again, in December of 1970, is the action by
3 General Electric to work with Monsanto for proper
4 disposal of the material the type of conduct that
5 Monsanto encouraged?

6 A Yes.

7 Q And to which General Electric responded on a
8 recurring basis?

9 A That's correct.

10 Q General Electric was not obligated to dispose
11 of the material in this fashion, sir, were they?

12 A No.

13 Q In terms of any other disposal methods that
14 may have been available in December 1970, is the type of
15 disposal described in Exhibit 26 the type that Monsanto
16 encouraged?

17 A Yes.

18 Q Exhibit 27, which is Dr. Pozefsky's letter
19 to, I guess, Mr. Richard -- isn't he Dr. Richard now?

20 A He was then.

21 Q That letter addresses research work
22 concerning the Aroclor 1016; correct?

23 A Yes.

24 Q It really doesn't have anything to do with
25 transformer dielectrics specifically?

1 A No.

2 Q Again, is it accurate to say that General
3 Electric, as of January 4th, 1971, the date on
4 Exhibit 27, remained interested in the results of
5 research Monsanto was doing and wanted to be kept
6 abreast?

7 A Yes.

8 Q In Exhibit 28, Mr. Bryant is reporting to
9 Mr. Argensinger in May of 1972 about the withdrawal of
10 what is called the Mass Bill which apparently was
11 pending in the Congress?

12 A Yes.

13 Q And in that letter, Mr. Bryant states that
14 Monsanto or General Electric should not relax their
15 efforts to clean up?

16 A That's correct.

17 Q As of the day of that letter, May 27, 1972,
18 did Monsanto have an ongoing program within its
19 corporation to clean up sources of potential
20 environmental discharge of PCB's, if there were any?

21 A You mean within our own sites or customer
22 sites or what?

23 Q Within your own sites.

24 A We had programs to monitor and clean up the
25 Anniston plant and the Sauget, Illinois plant.

1 Q Are those two sites where PCB's are
2 manufactured?

3 A Yes. These were two open sites.

4 Q And was Monsanto encouraging its customers to
5 do the same thing at their own manufacturing facility?

6 A Yes.

7 Q Do you know if G. E. was responsive to that
8 recommendation?

9 A I believe they were.

10 Q And did they cooperate with Monsanto in terms
11 of information and knowledge and procedures on how to do
12 that?

13 A Yes.

14 Q And whether it be PCB's or anything else,
15 sir, the use of industrial chemicals normally requires
16 good industrial hygiene practices?

17 A That's correct.

18 Q In your dealings with General Electric in
19 this period of time, up through 1973, did you have any
20 basis to conclude that General Electric was not
21 following acceptable industrial practices in its
22 industrial facilities?

23 A No.

24 Q Exhibit 29, which is a letter to
25 Mr. Worthington of October 5, 1971, of General

1 Electric's nuclear energy division, concerns, apparently,
2 vacuum fluids Santovac 1 and 2?

3 A Correct.

4 Q Those are not transformer dielectric fluids,
5 are they?

6 A No.

7 Q And Exhibit 29 doesn't have anything directly
8 to do with transformer dielectric fluids?

9 A No.

10 Q And if we look at Exhibit 29, paragraph
11 three, I think we can safely say this has become a
12 boiler plate paragraph by Monsanto to insure that its
13 customers remain aware of the care that should be taken
14 in the handling of PCB's because of potential
15 environmental pollution?

16 A Right.

17 Q Exhibit 30 addresses the toxicity of
18 Therminol fire resistant heat transformer fluid;
19 correct?

20 A Yes.

21 Q Of October 8th, 1971?

22 A Yes.

23 Q That's one of the open-ended uses?

24 A That's correct.

25 Q And has nothing to do with transformer

1 dielectrics, does it?

2 A No.

3 Q The note on there to the blind carbon copy
4 recipients, that is not an unexpected result from an
5 event which involved vapors and fumes from the accidental
6 release of hot Therminol, is it, sir?

7 A No.

8 Q Would you have expected the same kind of
9 result from the release of vapors and fumes from mineral
10 oil?

11 A Yes.

12 Q There are other industrial chemicals that
13 could conceivably cause a lot more discomfort if they
14 were released accidentally?

15 A Absolutely.

16 Q Exhibit 32, which is the letter to Mr. Eschen
17 of November 15th, 1971, has to do with Therminol heat
18 transfer fluid; correct?

19 A Yes.

20 Q And apparently, it's for a nuclear fuel
21 processing plant?

22 A Yes.

23 Q Apparently, the system, the heat transfer
24 system, was purchased some three years before the date
25 of the letter in 1971; but basically, Mr. Roush felt

1 that this was an appropriate use of PCB fluid at that
2 time?

3 A Yes.

4 Q And may we conclude that Mr. Roush, again,
5 weighed the risks and the benefits with respect to a
6 nuclear fuel processing plant before he recommended the
7 continued use of the PCB fluid in that location?

8 A Yes; that was his opinion.

9 Q And is Dr. Roush the one who would, as a
10 products specialist in heat transfer fluid, the one
11 who should make that decision?

12 A Yes.

13 Q Exhibit 32, by its terms, doesn't really
14 address transformer dielectrics, does it?

15 A No.

16 Q Exhibit 33 of December 3rd, 1971, on General
17 Electric letterhead appears to address the continued
18 work of the ANSI group on capacitors?

19 A Correct.

20 Q And apparently, they're going to get together
21 and have a meeting?

22 A Yes.

23 Q And various manufacturers of capacitors
24 appear to be represented; General Electric, Universal,
25 McGraw-Edison, Westinghouse, Sangamo Electric?

1 A Correct.

2 Q Does that describe the major manufacturers of
3 capacitors at that time?

4 A Yes.

5 Q In December of 1971, when Mr. Benignus was
6 getting ready to attend that meeting, did Monsanto have
7 any basis at that time to advocate the abandonment of
8 PCB fluids for capacitors?

9 A No.

10 Q In December of 1971, did Monsanto have any
11 scientific or technical basis to advocate or recommend
12 the discontinuance of PCB fluids in transformers?

13 A No.

14 Q If we moved to the end of 1973, do you know
15 of any factual basis that Monsanto had to recommend that
16 PCB fluids not be used in transformers as of that date?

17 A No.

18 Q As far as Monsanto was concerned, at the end
19 of 1973, did the use of PCB fluids in transformers
20 present any unreasonable risk to the user?

21 A No.

22 Q Exhibit 34, again, on General Electric
23 stationery, appears to address the topic of another ANSI
24 group on transformers?

25 A That's correct.

1 Q And there, again, it contains the
2 representatives of the major -- if you would review
3 that -- the major manufacturers and users of PCB
4 transformers; is that correct?

5 A Yes.

6 Q If you would review this document, sir, can
7 you confirm for me that it appears to be an effort by
8 the group to collect and disseminate information about
9 PCB transformers and their uses at that point in time?

10 A Yes. It appears to attempt to gain all the
11 information on handling and control of various effluents
12 and guidelines for proper uses.

13 Q And, again, that's a responsible action in
14 response to the perceived environmental pollution
15 problem?

16 A Yes.

17 Q And it was signed by Mr. Raab, who apparently
18 was the chairman of the ANSI group?

19 A Yes.

20 Q And, again, that would be consistent with
21 General Electric taking the leading roll in the
22 responsible end use of the PCB fluids?

23 A Correct.

24 Q In your experience, sir, the type of activity
25 reflected in Exhibit 34 is not the type of activity of a

1 corporation that's attempting to ignore or hide a
2 problem, sir, is it?

3 A I would say not.

4 Q Exhibit 35 is the letter to Mr. Mason of
5 September 1971 concerning the Pittsfield, Massachusetts
6 newspaper article?

7 A Yes.

8 Q And apparently, General Electric issued a
9 press release at the same time or about the same time in
10 order to disseminate additional information?

11 A Correct.

12 Q Does the press release, the attachment to
13 Exhibit 35 of September 24th, 1971, if you would look at
14 it in detail, is that an accurate statement of the use
15 of PCB fluids in transformers as of that day?

16 A Yes.

17 Q With respect to the last paragraph concerning
18 alternatives, is that accurate?

19 A Yes.

20 Q So as of September 24th, 1971, General
21 Electric and perhaps others, including Monsanto, I
22 believe, had invested a lot of research and development
23 funds into attempting to develop alternatives to PCB's?

24 A Correct.

25 Q But as of September 24th, 1971, none had been

1 found?

2 A That's correct.

3 Q Now, this research and development was
4 undertaken because of the relative cost of PCB fluid to
5 oil; isn't that true? If you can find something --

6 A Study by whom?

7 Q By anybody looking for an all alternative
8 fluid.

9 A Yes.

10 Q If an alternative fluid could be developed
11 that had the same performance characteristics that was
12 cheaper, it would be more competitive to the end-users,
13 the utilities, and industries, and the commercial
14 buildings that wanted those for fire safety reasons?

15 A Right.

16 Q And that is an ongoing aspect of corporate
17 research and development; correct?

18 A Yes.

19 Q To find better, cheaper products?

20 A Right, cheaper.

21 Q If we take the end of 1973 as a target date,
22 would you still agree with the last paragraph of
23 Exhibit 32 in which there are no alternatives to PCB
24 fluids for transformers; is that still accurate?

25 A Yes.

1 Q Exhibit 36 is the February 2nd, 1972, letter
2 to Dr. Pozefsky from Mr. Papageorge. And isn't he
3 attaching the question and answer list we looked at
4 before?

5 A Yes.

6 Q And again, this was a type of document
7 prepared to answer questions from anyone who may be
8 interested or may want answers about the uses of PCB's?

9 A Correct.

10 Q And that attachment to Exhibit 36, I know
11 you've looked at it before today, did that accurately
12 describe the state of knowledge of Monsanto and General
13 Electric concerning PCB's as of that time period?

14 A Yes, that's correct.

15 Q Not necessarily all of the questions, but
16 those which were current in a lot of folks' mind?

17 A Yes; if we perceived what the questions might
18 be.

19 Q Yes.

20 Exhibit 37 of March 30th, 1972, essentially
21 concerns offshore Monsanto operations, does it not?

22 A Correct.

23 Q And at this point in time, in 1972, is it
24 accurate to say that a good deal of the world did not
25 share the concern that Monsanto had expressed in the

1 United States since 1970?

2 A That's correct?

3 Q And the conditions and the undertakings that
4 may be necessary outside of the United States were
5 different than what Monsanto was requiring inside the
6 United States?

7 A Correct.

8 Q Can you tell us, sir, whether these were, the
9 conditions that were set forth in Exhibit 37, were those
10 the ones applied in the United States or was it strictly
11 offshore?

12 A These were offshore. The ones applied in the
13 United States were even more stringent.

14 Q So Exhibit 37 really has nothing to do with
15 what Monsanto required of General Electric in the United
16 States?

17 A Yes.

18 Q And the indemnity agreement or the special
19 undertaking we've been talking about describes those
20 conditions best, doesn't it?

21 A Yes.

22 Q Thank you, sir.

23 Exhibit 40 of May 2nd, 1973, addresses
24 apparently a transportation accident. Is that accurate?

25 A Yes.

1 Q And by this time, Mr. Papageorge, maybe he
2 was always, but he signs himself off here as the
3 chairman of the ANSI committee, C-107?

4 A Yes.

5 Q Mr. Benignus of Monsanto was the steering
6 committee chairman; correct.

7 A Yes.

8 Q And Mr. Salazar of the transformer section --

9 A Yes, secretary.

10 Q Secretary, yes, sir. Now, is it accurate to
11 say that that May 2nd, 1973, letter raised a red flag
12 with respect to the requirement to deal with potential
13 transportation accidents?

14 A Yes.

15 Q That in terms of release of materials into
16 the environment, that the primary focus before May 2nd,
17 1973, had been on actual plant discharges and misuse?

18 A Primarily.

19 Q But then in 1973, you have to get the
20 transformer or the capacitors to the end user?

21 A Right.

22 Q Do you know how recent the incident was? I
23 think you said --

24 A No, I don't recall.

25 Q The call by Mr. Papageorge for consideration

1 of procedures to deal with potential transportation
2 accidents, is that typical of the activity engaged in by
3 Monsanto, responding affirmatively as soon as the
4 problem became aware?

5 A Yes, basically.

6 Q And was General Electric also participating
7 or cooperating in terms of recognizing a new difficulty
8 and attempting to address it?

9 A Yes.

10 Q Through the ANSI committee, for example?

11 A Yes.

12 Q Now, NEMA, are you familiar with the acronym
13 National Electric Manufacturers' Association, NEMA?

14 A Right.

15 Q That trade group was also active early on in
16 terms of recognizing and dealing with the problem of
17 potential environmental pollution of PCB's?

18 A Correct.

19 Q It's safe to assume that some time before
20 1970, there probably was a transportation accident
21 involving PCB, wasn't there?

22 A Yes.

23 Q But because of the inability to measure
24 levels that low before that day, it's also accurate to
25 say that it probably didn't get the attention that the

1 1973 incident got?

2 A That's correct.

3 Q Exhibit 41, from Mr. Frahm to Mr. Bryant,
4 enclosed the Electrical World article dealing with
5 transportation accidents G. E. had?

6 A Uh-huh.

7 Q I don't suppose your vision is any better
8 than mine. Is that a '73? I can't read it.

9 A No; it's June something or other.

10 Q Did you ever hear the anecdote about
11 this incident in which it was the patrol officer of the
12 Tennessee Highway Department that required the driver to
13 dump the fluid out of the transformers, and that's how
14 it ended up being dumped into the farmland?

15 A Now that you mention it, I do recall
16 something like that, yes.

17 Q Apparently, at that time, the trooper thought
18 that dumping the fluid was better than allowing the
19 driver to dribble it up the road to the repair shop or
20 back to the factory?

21 A Yes.

22 Q And apparently, the driver complied with
23 that, as far as you can tell?

24 A Yes.

25 Q Were you aware, sir, that there were no state

1 or federal regulations that required General Electric to
2 clean that spill up? That was a voluntary act on behalf
3 of General Electric?

4 A I believe that's right.

5 Q In the traditional sense, the risk of loss
6 had passed to the shipper?

7 A Correct.

8 Q Exhibit No. 42 of September 25th, 1973,
9 addresses Dr. Bickers' articles concerning
10 polychlorinated biphenyls; correct?

11 A Correct.

12 Q Dr. Bickers appears to be the wide-eyed
13 gentleman who was reproduced on the second page of the
14 exhibit?

15 A Yes.

16 Q Were you aware at that time of Dr. Bickers'
17 qualifications, if any, in the area of the toxicity of
18 PCB's?

19 A No.

20 Q Were you aware of any scientific study of any
21 kind as of September 25th, 1973, that had identified
22 PCB's as either a possible or probable human carcinogen?

23 A I don't recall specific days. There were
24 various articles that were coming out approximately
25 around that time inferring that.

1 Q But Dr. Bickers sites, without reference or
2 attribution, his conclusion; correct?

3 A Yes.

4 Q Is it accurate to say that in September of
5 1973, there was an open ongoing debate in the scientific
6 community about the carcinogenic conditions of PCB's?

7 A Yes.

8 Q That debate is still going on today?

9 A As far as I know. I don't think it's ever
10 been proven to date that it's a carcinogen.

11 Q The fact that it may have caused cancer in
12 laboratory animals in one test or another does not make
13 it --

14 A Make it necessarily apply to man. We have
15 the same case in formaldehyde today.

16 Could I make an observation about that
17 article in general?

18 MR. BAUMER: No, you may not. You may,
19 but I object to any observations by the the witness
20 which is not in response to any question, and there is
21 no pending question.

22 Now, if you want to talk on the record,
23 you're welcomed to talk. The judge will rule whether or
24 not anybody else will ever hear this.

25 MR. BURKE: Please, Mr. Bergen.

1 THE WITNESS: We at Monsanto observed
2 that as the media picked up its intensity on talking
3 about PCB's, all sorts of "experts" appeared writing
4 about PCB's on many, many aspects. And we kind of had a
5 joke around the place that if a scientist wanted to gain
6 fame and fortune, he would latch onto the current
7 episode of what is the latest environment product to
8 pick up on and start publishing articles on it to gain
9 fame and notoriety on it for himself.

10 And I think that still goes on today. So
11 it's a way of gaining prominence in the literature and
12 the press regardless of what the scientific value is.

13 BY MR. BURKE:

14 Q There began to appear more and more articles
15 from 1970 forward; correct?

16 A Yes.

17 Q And the ability to evaluate and analyze those
18 articles became more and more difficult as the volume
19 increased?

20 A Absolutely.

21 Q And is it also not accurate to say that that
22 dispassionate scientific discourse of a chemical like
23 polychlorinated biphenyl does not sell newspapers
24 whereas somebody like Representative Ryan can get
25 on tv with it?

1 A Absolutely.

2 Q Are you aware of any scientific credentials
3 that Representative Ryan had?

4 A No. I believe he got defeated in the
5 election, didn't he?

6 Q Probably did. He deserved to be.

7 Exhibit 43 has to do with the transportation
8 accident that occurred in 1973; correct?

9 A Correct.

10 Q That is not a lawsuit involving the end use
11 of an indoor PCB transformer by a building owner or
12 factory owner?

13 A Correct.

14 Q And we can say the same thing about
15 Exhibit 44?

16 A Correct.

17 Q Basically, these folks felt their land got
18 polluted and wanted somebody to pay for it?

19 A Correct.

20 Q Exhibit 45, which is a letter to Dr. Stenger
21 of General Electric at Hudson Falls capacitor facility
22 of October 10th, 1974, concerns samples of fluids sent
23 by Monsanto to General Electric?

24 A Correct.

25 Q Is that letter representative of the type of

1 ongoing research that was being conducted by both
2 Monsanto and General Electric to develop more
3 biodegradable Aroclors for capacitor use?

4 A Yes.

5 Q And, again, Exhibit 45 addresses its use in
6 capacitors, does it not?

7 A Correct.

8 Q Are you aware if as of October 10, 1974, any
9 replacement fluid for askarels in transformers had been
10 developed such as they were available in that period of
11 time, October '74?

12 A There is mention in here of a dielectric
13 close to that of DOP. About that time, General Electric
14 and others were also looking at diethyline as a
15 capacitor fluid, and the question was being raised
16 as to which was the best fluid to use.

17 Q My question address the replaced transformer
18 dielectric fluid as of October '74. Were you aware of
19 any that was available?

20 A No.

21 Q Were some being developed, as far as you
22 know?

23 A We had reason to believe that people were
24 looking at other things, yes, including General
25 Electric.

1 Q As far as you know, if in October 1974 the
2 builder of a high-rise building wanted to use indoor
3 transformers, isn't it true that his only choices were
4 either askarel fluids or mineral oil in vaults?

5 A To my knowledge, that's correct.

6 Q Exhibit 46, which is the letter to Mr. Barker
7 at Hudson Falls in November 1974, appears to be the
8 implementation of a procedure to deal with the
9 transportation incident?

10 A Correct.

11 Q And again, do you feel that that is a
12 reasonable response to the problem perceived in 1973 of
13 a transportation incident?

14 A Yes.

15 Q Was General Electric cooperative in that
16 effort to develop a procedure to handle the
17 transportation incident?

18 A Yes.

19 Q Is it the type of conduct that you would have
20 expected from General Electric?

21 A Yes.

22 Q Exhibit 47, which is a letter of apparently
23 August 11, 1975, there are several of those scattered
24 throughout these exhibits. Is it accurate to say that
25 Monsanto prepared that to deal with the problem of the

1 failure to follow Monsanto's procedures for the return
2 of PCB fluids?

3 A Yes.

4 Q And can you tell us definitively whether
5 Exhibit 47 was sent in response to a specific area of
6 noncompliance or as a reminder to customers that their
7 continued cooperation was required to properly dispose
8 of PCB's?

9 A I can't say for certain, but I think this was
10 a general letter that was sent out to remind people of
11 the need for compliance.

12 Q Exhibit 48 appears to be a General Electric
13 form for shipment?

14 A Yes.

15 Q And this is the rejected 8,000 gallon tank
16 car of 1016?

17 A Right.

18 Q Now, apparently, is it not accurate to say
19 that General Electric had either adopted in whole or
20 modified for its own uses the type of warning that
21 Monsanto was putting on its invoices in order to be sure
22 that shipping personnel were aware of the presence of
23 polychlorinated biphenyls in the material being shipped?

24 A Yes.

25 Q Again, in Monsanto's view, was that a

1 responsible action to take in 1975?

2 A Yes.

3 Q Do you know how long before that General
4 Electric was following that procedure?

5 A No, I don't recall.

6 Q In terms of large shipping documents or
7 shipments themselves, did you ever detect or was it ever
8 reported to you that General Electric was uncooperative
9 in following reasonable guidelines in marking shipments?

10 A No.

11 Q Shipment by tank car to various users was a
12 common method of shipment during the time that Monsanto
13 manufactured PCB's?

14 A Yes.

15 Q And is it accurate to say that as of
16 June 1975, that Monsanto had weighed the risks and the
17 benefits of the continued shipment of PCB fluids to
18 customers in tank cars and found that it was reasonable?

19 A Yes.

20 Q Provided the proper precautions were taken?

21 A Right.

22 Q Now, the railroads have their own rules and
23 procedures and regulations for the shipment of various
24 chemicals substances?

25 A Right.

1 Q And they have been in existence for many
2 years?

3 A Yes.

4 Q As was well known to the industry?

5 A Yes.

6 Q Well followed?

7 A Right. They shipped products many times more
8 hazardous than PCB's.

9 Q That is still done today?

10 A Still done today.

11 Q Exhibit 49, which is only dated on the second
12 page, August 1975, basically concerns Monsanto's
13 continued involvement in the proper disposal of PCB
14 waste fluids; correct?

15 A Correct.

16 Q And also announces an increase in price?

17 A Correct.

18 Q As of 1975, did General Electric continue to
19 participate in the offering by Monsanto to incinerate
20 PCB's in accordance with the rules and regulations set
21 forth in Exhibit 49?

22 A I believe so.

23 Q Did you feel or did Monsanto have the view
24 that such continued disposal by incineration in
25 Monsanto's facility was a reasonable and appropriate

1 manner of disposal?

2 A At that time, we felt so.

3 Q And in August of 1975, had Monsanto reached
4 the conclusion that the continued sale or manufacture
5 and sale of PCB fluids for transformers was unjustified
6 because of the risks?

7 A No.

8 Q Is it accurate to say that as of August 13th,
9 1975, that Monsanto remained of the opinion that the
10 benefits to be gained by the use of PCB transformers
11 and capacitors outweighed those risks?

12 A Yes.

13 Q And is it also accurate to say that General
14 Electric concurred in that conclusion?

15 A Yes.

16 Q Exhibit 50 is the letter from Mr. Dobbins to
17 Mr. Papageorge in August of 1975 addressing what appears
18 to be, at least in Mr. Dobbins' opinion, another
19 inaccurate report concerning General Electric's use of
20 PCB's which, when Mr. Dobbins ran it down, turned out
21 not to be accurate; correct?

22 A Correct.

23 Q Now, attached to Exhibit 50 is apparently a
24 G. E. document that was dated April 1972 and distributed
25 internally within General Electric to sales people.

1 Paragraph two talks about General Electric's action in
2 1970 after Monsanto's advice about the possible
3 environmental pollution of PCB's?

4 A Yes.

5 Q And paragraph two talks about General
6 Electric informing its customers. Did you ever see any
7 of that information that General Electric distributed to
8 its customers?

9 A I don't recall seeing it, no.

10 Q Again, do you have any reason to doubt that
11 they did it?

12 A I have no reason to doubt that they didn't do
13 it.

14 Q Now, just to nail down some dates here,
15 looking at Exhibit 50, the attachment to Exhibit 50,
16 which is the G. E. memo of April 18th, 1972, talks about
17 the Monsanto action to discontinue sales as of
18 January 15th except to those who would sign the
19 indemnity agreement?

20 A Correct.

21 Q So if we can summarize, it was 1970 that the
22 open-ended users were discontinued as customers of
23 Monsanto with PCB fluids?

24 A Yes.

25 Q And then in 1972, the closed-end users were

1 required to execute the indemnity agreement in order to
2 continue the purchase of askarel fluids from Monsanto?

3 A Yes.

4 Q So from 1970 to 1972, closed-end users of
5 askarel fluids could purchase them from Monsanto without
6 any special agreements?

7 A Yes.

8 Q Was there any event or any individual thing
9 that happened other than what Monsanto considered to be
10 good business practice that resulted in the indemnity
11 agreement of '72?

12 A I think it was just the culmination of all
13 the events and the trends that they were taking.

14 Q For instance, there was no new startling
15 discovery that changed any of Monsanto's opinions about
16 the toxicity of PCB's as of that date, for example?

17 A Not to my knowledge.

18 Q The research was ongoing in the rigorous
19 normal way?

20 A Correct.

21 Q To continue to find out the problems?

22 A Correct.

23 Q If any?

24 Westinghouse and General Electric were
25 basically competitors, weren't they?

1 A Yes.

2 Q Inerteen was the registered trademark that
3 Westinghouse had for its askarel fluids?

4 A Correct.

5 Q And they were fierce competitors bidding in
6 the electric utility field to provide transformers?

7 A Correct.

8 (Thereupon, there was a brief recess.)

9 BY MR. BURKE:

10 Q Exhibit 51 appears to be some communication
11 between Mr. Miller apparently of Monsanto and
12 Mr. Osthoff of General Electric concerning some
13 collaboration between the two of them headed,
14 apparently, toward an NBS project team. Was that a
15 national standards group that was looking at the use of
16 PCB's? Do you know that?

17 A I don't recall. I can't say for sure.

18 Q Apparently, they had met in August of 1975 to
19 review the use of PCB's as dielectric fluids and
20 transformers and capacitors; is that accurate?

21 A If you recall my testimony, I couldn't even
22 be certain from this document whether that is the same
23 Dr. Dave Miller that was in our research group. So it's
24 kind of a nothing document, as far as I'm concerned.

25 Q So you had not seen it before today?

1 A No; I don't recall it.

2 Q Putting aside Exhibit 51, was there anything
3 as of August 1975, which we'll pick as a convenient date
4 because it's on Exhibit 51, that had changed Monsanto's
5 position about the continued sale of PCB fluids for
6 transformer dielectrics?

7 A No.

8 Q Did the benefits still outweigh the risks as
9 far as Monsanto was concerned?

10 A In our opinion.

11 Q And again, as of August 1975, there was no
12 federal agency that could prevent Monsanto's
13 manufacture of PCB fluids, was there, sir?

14 A No.

15 Q The FDA regulations we've been talking about,
16 FDA is the Food and Drug Administration?

17 A Yes.

18 Q And they have regulatory power in the area of
19 food and drugs?

20 A Correct.

21 Q But as far as regulating the manufacture of a
22 PCB containing transformer for use in an industrial or
23 commercial setting where food or drugs were not
24 involved, they couldn't regulate that in '75, could
25 they, sir?

1 A No.

2 Q Exhibit 52 a letter from Mr. Papageorge to
3 Mr. Simons of September 12, 1975, enclosing some test
4 reports. Is it accurate to say that that is
5 representative of the continued cooperation and
6 scientific exchange of information between General
7 Electric and Monsanto at this period of time?

8 A Yes.

9 Q To fulfill Monsanto's policy of disseminating
10 information about PCB's?

11 A Correct.

12 Q Exhibit 53, which is a letter to Mr. Simons
13 from Mr. Papageorge of September 23rd, 1975, in essence
14 is a request by Mr. Papageorge for General Electric's
15 assistance in further disseminating information about
16 PCB's?

17 A Yes.

18 Q Do you know if General Electric responded to
19 that in any fashion?

20 A No, I don't recall any specific action at
21 that time.

22 Q Exhibit 54 of October 3rd, 1975, appears to
23 be communication between Monsanto U.S. and General
24 Electric Malaysia; is that correct?

25 A Correct.

1 Q And is it accurate to say that this document
2 is describing market conditions and conditions of the
3 use of askarel fluids in Malaysia?

4 A Yes.

5 Q And is it also accurate to assume that
6 Mr. Joyce who signed this letter for General Electric
7 Company of Malaysia as of August 1975 was probably not
8 up to speed on what was going on in the United States?

9 A I just happen to think that this General
10 Electric Company is probably not related to the U.S.
11 General Electric Company. This is U.K. General
12 Electric Company which has no relation, I don't think,
13 because they talk about uniting the activities of
14 G.E.C.A.I. and English electric companies. So I
15 think they're referring to the English electric
16 companies and not General Electric U.S. That's often
17 confusing to people.

18 Q So as we sit here today, the attachment to
19 Exhibit 54, we don't know whether that's the American
20 General Electric or not, do we, sir?

21 A Correct.

22 Q I'm going ask you to look at Exhibit 55 and
23 56 together because they appear to refer to the same
24 test samples, and they are communications between
25 Monsanto's Dr. Mieure and Dr. Stenger of General

1 Electric?

2 A Yes.

3 Q Basically, those two, Exhibit 55 and Exhibit 56,
4 of October 1975 are describing continued analytical
5 analysis of PCB samples?

6 A Correct.

7 Q Is it accurate, Mr. Bergen, that the
8 technology of the analytical chemistry involved in the
9 analysis of minute parts per million and part per
10 billion quantities of PCB's was still developing in
11 October of 1975?

12 A Yes.

13 Q And that the procedures were, the practices
14 were, continuing to be refined?

15 A Yes. That's explained in that October 24th
16 letter, I believe, some of the difficulties.

17 Q Is it not accurate that improper collection
18 procedures could alter the results?

19 A Yes.

20 Q And that one of the purposes of ASTM, for
21 example, is to standardize collection and measurement
22 procedures so that scientists in state A can get the
23 same result as scientists in state B if they use the
24 same procedure?

25 A Correct.

1 Q And that facilitates the exchange of
2 scientific data, one of the fundamental cornerstones of
3 data?

4 A Yes.

5 Q And in 1975 there was an ongoing system of
6 development with respect to PCB development?

7 A Yes.

8 Q And there was still work to be done in the
9 analytical measurement of PCB's in 1975?

10 A Still continuing today.

11 Q Exhibit 57 is Monsanto's Mr. Wood writing to
12 General Electric's Dr. Modan in November of 1975. And
13 is that document, Exhibit 57, representative of the
14 continuing ongoing exchange of scientific and technical
15 information between General Electric and Monsanto?

16 A Yes.

17 Q Exhibit 58 from initials AMB to Mr. Throdahl
18 of November 1975, Mr. Bueche, of November 10th, 1975,
19 reflects the ongoing cooperation between Monsanto and
20 General Electric concerning scientific research into
21 potential PCB pollution?

22 A Yes.

23 Q There is nothing in that letter that
24 indicates any attempt by General Electric or Monsanto to
25 not deal with this problem, sir, is there?

1 A No.

2 Q Exhibit 59 of February 24th, 1972, is a
3 Monsanto procedure to provide what is called top-up
4 fluid to end users of PCB transformers; correct?

5 A Correct.

6 Q There was, in fact, a need for that type of
7 fluid in order to keep the transformer operating
8 correctly?

9 A Correct.

10 Q The inability of an end user, for example, to
11 be able to repair and refill this transformer could be
12 serious, couldn't it?

13 A Yes.

14 Q You were telling us earlier this morning
15 about hospitals calling Monsanto and expressing concern
16 about their inability to obtain either PCB fluid or PCB
17 transformers. Could you describe that for us in any
18 more detail?

19 A I just remember one incident. It was a ship
20 at sea, and something happened to the transformer; it
21 went out. And they were performing an operation, and
22 they had to get an emergency shipment of the transformer
23 fluid to take place. So it was kind of a very dramatic
24 incident.

25 Q Were there any end user industrial concerns

1 or utilities who had any ongoing dealings with Monsanto
2 expressing their concern about the potential
3 unavailability of askarel fluids that you're aware of?

4 A I don't recall that we had too many direct
5 contact with utilities. There may have been some, and
6 Paul Benignus would be much more aware of that group.

7 Q Exhibit 60, which is another Monsanto sales
8 bulletin of June 1972, contains a list of domestic U.S.
9 customers that fills up an entire sheet, doesn't it,
10 sir?

11 A Yes.

12 Q And it pretty much covers who's who in
13 askarel transformers?

14 A That's correct.

15 Q Actually, it goes on for two pages. The
16 Westinghouse folks are on the second page?

17 A Yes.

18 Q The third attachment to Exhibit 60,
19 apparently, is the Westinghouse document of April 1972.
20 Do you recall dealing with Westinghouse people about
21 this time over their use of PCB fluids?

22 A Nothing specific.

23 Q Would you take a look at the third page of
24 the exhibit and tell me if it accurately reflects the
25 state of scientific and technical knowledge concerning

1 possible environmental contamination with PCB's and the
2 need for the continued use of transformers and
3 capacitors that use PCB fluids?

4 A Yes. That was pretty much the state of the
5 art and status at that time.

6 Q Essentially, Westinghouse is reaffirming its
7 commitment to the continued use of PCB fluids and their
8 reasonable handling to protect the environment and at
9 the same time provide a needed electrical industry
10 requirement?

11 A And a servicing of it, yes.

12 Q Now, that's as important as the sale, isn't
13 it, sir?

14 A Yes. It's all important.

15 Q And it's something with which Westinghouse
16 and General Electric dealt on a continuing basis?

17 A Right.

18 Q Looking at Exhibit 61, the substance of that
19 exhibit, which is another Monsanto sales bulletin of
20 February 1973, is that the new drums which Monsanto
21 considered to be an improvement would not be available
22 until early '73?

23 A Correct.

24 Q And this was, again, an attempt by Monsanto
25 to limit the discharge of PCB's into the environment?

1 A Yes.

2 Q Is it accurate to say that the industrial
3 world was full of forklift truck drivers who sometimes
4 didn't pay attention?

5 A That's correct.

6 Q And that was an attempt to be sure that they
7 did?

8 A Right.

9 Q Exhibit 62, which is undated, has on it the
10 warning which Monsanto attached to the bright new yellow
11 drums as of early 1973; correct?

12 A Correct.

13 Q If you take a look at that, sir, does that
14 accurately describe the precautions that Monsanto felt
15 were reasonable for people to take who were handling
16 this product?

17 A Yes.

18 Q Now, those precautions are, in fact, no
19 different or more severe or more restrictive than any
20 one of a number of other industrial chemicals that are
21 used on a regular basis today?

22 A Correct.

23 Q And, in fact, there are numerous other
24 industrial chemicals in current use today that require
25 use restrictions substantially more significant than

1 what is reflected on the third page of Exhibit 62?

2 A Yes.

3 Q In keeping with the concept of TLV, did
4 Monsanto anticipate that workers handling PCB fluids
5 following the precautions listed on Exhibit 62 would not
6 exceed the threshold limit value for industrial
7 exposures?

8 A That's correct. We didn't have any
9 particular problem with worker exposure.

10 Q Exhibit 63 is Dr. Richard's letter or note of
11 May 20th, 1968, asking the rhetorical question about
12 preparations to prevent pollution; correct?

13 A Correct.

14 Q A reasonable step to take?

15 A Correct.

16 Q The FDA -- we can assume it's probably the
17 Food and Drug Administration?

18 A Yes.

19 Q -- in pursuit of their legislative
20 requirement to protect food and drug sources, et cetera,
21 looked for samples of Aroclors for testing?

22 A Correct.

23 Q Now, we can assume probably at this point
24 that in 1968 there were probably industrial uses of
25 PCB's, transformers or capacitors or other fluids, which

1 probably were close to feed or food production
2 facilities?

3 A That's correct.

4 Q And again, before 1968, that was a function
5 of the inability to detect the very low levels; correct?

6 A Correct.

7 Q As well as the essentially positive
8 experience that mankind had experienced in terms of
9 acute illness or whatever with PCB's?

10 A Correct.

11 Q Before 1968 or 1966, we can say there was no
12 scientific base to be concerned?

13 A That's correct.

14 Q And as that scientific base began to develop,
15 Monsanto and General Electric appropriately responded to
16 it, didn't they?

17 A Correct.

18 Q Exhibit 64 is the April 28th, 1970, memo
19 specifically outlining affirmative actions by Monsanto
20 to investigate the potential PCB environmental
21 pollution; correct?

22 A Correct.

23 Q And again, this was consistent with the
24 policy Monsanto undertook in 1970?

25 A Yes.

1 Q Now, many of these deadlines in here with
2 respect to developing alternative products, reliable
3 analytical procedures, effective disposal methods, many
4 of those deadlines were not met, sir?

5 A That's correct.

6 Q If the biodegradability of some types of
7 PCB's are refractory, is it not also accurate that in
8 1970 some of the solutions were equally refractory?

9 A That's correct.

10 Q But nevertheless, Monsanto forged ahead on a
11 voluntary basis?

12 A Correct.

13 Q And G. E. participated and cooperated in that
14 process, didn't they?

15 A Yes.

16 Q Exhibit 65 is a form letter; correct?

17 A Correct.

18 Q Apparently, it was attached to acknowledge
19 any order for PCB?

20 A I believe that was the purpose.

21 Q Standard industry practice would be for a
22 customer to place an order and for the recipient to
23 acknowledge receipt of the order?

24 A Yes.

25 Q And when Monsanto did that for PCB's, they

1 sent one of these letters?

2 A We would always send our own order form back,
3 our receipt form. We wouldn't use the customer's; we'd
4 use our own, an acknowledgment form, and we'd attach that
5 to it.

6 Q And that has to do with the various purchase
7 orders that people --

8 A Right.

9 Q The customer would want certain things, and
10 Monsanto would dictate the terms and its acknowledgment
11 as to how it would sell?

12 A Right.

13 Q All of this other stuff attached to
14 Exhibit 65 was apparently prepared for this lawsuit?
15 You've never seen that before?

16 A That's foreign to me.

17 Q Exhibit 66 is apparently another form letter
18 of March 3rd, 1969. Would you agree with that analysis,
19 sir, that it's a form letter?

20 A Yes. I think that was my comment at that
21 time, and I don't know whether it was ever truly sent
22 out or not. I assume it was, but I don't know for a
23 fact that it was.

24 Q In 1969, did Monsanto agree with the
25 characterization of PCB's as a "menancing new

1 pollutant?"

2 A No, we didn't agree with that.

3 Q Would you agree that statements like that are
4 more intended to sell newspapers than they are to have
5 the scientific discourse?

6 A Absolutely.

7 Q In general, sir, in terms of a corporation's
8 attempt to provide and disseminate information about a
9 product which may have some environmental impact of one
10 kind or another, have you found in your experience that
11 it is difficult to communicate difficult scientific
12 concepts through the ordinary media approaches?

13 A Extremely difficult to get all the facts
14 to the public.

15 Q And as a result of that difficulty, there are
16 associations or groups like ANSI and NEMA which are
17 attempting to disseminate the information in order to be
18 sure that there is a full discussion?

19 A That's correct.

20 Q In 1969, when this form letter may or may not
21 have been sent, but apparently, it was prepared, was
22 there not a significant amount of difficulty experienced
23 by Monsanto and other researchers in essentially
24 identifying what was showing up on these gas
25 chromatographs?

1 A Absolutely, a lot of interference.

2 They weren't sure what they were looking at.

3 Q And it's hard to figure out what you've got
4 until you know what you've got and what its impact could
5 be?

6 A Right.

7 Q Exhibit 67 appears to be, again, a form
8 letter of February 9th, 1970, that may or may not have
9 been sent; correct?

10 A Correct.

11 MR. BAUMER: Which one is that?

12 MR. BURKE: Exhibit 67.

13 BY MR. BURKE:

14 Q And whether this was sent or not, attached to
15 it was the October 29th, 1969, Chemical Week article
16 concerning water quality standards?

17 A Yes.

18 Q Indeed, Chemical Week, the publisher of the
19 article, says, "For the first time, a summary of water
20 quality standards set by all 50 states." So at least
21 Chemical Week is of the opinion that they were the first
22 to collect all 50 states' requirements?

23 A It would sound that way.

24 Q So as late as 1969, no one had done that, at
25 least according to Chemical Week?

1 A I don't know.

2 Q If we assume that Chemical Week was the first
3 one to do that, would it be reflective of the basic
4 threshold upon which science and industry were with
5 respect to not only PCB's but all types of water
6 contaminants at that time? They were just
7 beginning to be able to investigate that sort of thing?

8 A It would appear that way.

9 Q Again, the advances in gas chromatography
10 would apply not only to PCB's, but to other substances
11 as well?

12 A Right.

13 Q To measure them in parts per million and
14 parts per billion?

15 A Correct. We're still talking about water
16 quality standards today.

17 Q And apparently, there was a concern in the
18 various states concerning the amount of radioactivity in
19 water, wasn't there, sir?

20 A Reading that, it appears that is the main
21 thrust.

22 Q Radioactivity, turbidity, color, taste, odor;
23 and there were certain standards for dissolved oxygen
24 allowable, pH; correct?

25 A Seems that way.

1 Q The Environmental Protection Agency itself
2 was not even formed until 1970 and didn't begin
3 operation until '72; right?

4 A Somewhere around there.

5 Q On Exhibit 67, whether any of these folks
6 ever got this letter or not, you don't know?

7 A No, I don't.

8 Q Exhibit 68 --

9 A I'd have to say I think they got it. I
10 assume they got it. I have no reason to believe they
11 didn't.

12 Q Exhibit 68 is an August 14th, 1970 letter.
13 Again, this appears to be a form letter?

14 A Yes.

15 Q Again, whether it was sent or not is an open
16 question?

17 A Yes. Again, I have reason to believe it was
18 sent.

19 Q The Ballast, the Chelsea, Massachusetts, and
20 Laminated Products Department are probably not
21 transformer facilities, sir, are they?

22 A No, that's correct.

23 Q And this letter appears to set forth the
24 procedure by which open-ended users could return PCB's
25 to Monsanto?

1 A Right.

2 Q Page two of that letter sets forth those
3 criteria?

4 A That's correct.

5 Q And the fourth paragraph on page two
6 essentially provides an economic incentive for the end
7 user to return the material as soon as possible to
8 Monsanto?

9 A That's correct.

10 Q Again, consistent with Monsanto's policy of
11 assisting customers in returning the material for proper
12 disposal?

13 A That's correct.

14 Q And certainly there is no reason this
15 material could not be resold to appropriate users if the
16 use was right for closed-end users, for example?

17 A Right.

18 Q As far as you know, did General Electric
19 cooperate in that program and send the material back?

20 A To my knowledge, they did. They were not
21 major users for these types of applications.

22 Q For the open-ended --

23 A Right; so they were rather minor customers,
24 really.

25 Q Is it accurate to say that in the period 1970

1 to '73, General Electric was a large customer for
2 closed-end uses?

3 A Yes, that's correct.

4 Q So they were not responsible for polluting
5 the environment with carbonless carbon paper or paints?

6 A No.

7 Q They weren't in the paint business?

8 A No.

9 Q Exhibit 69 is a letter to Mr. Argersinger of
10 November 30, 1970, essentially announcing a price
11 increase?

12 A Yes.

13 Q If Monsanto is not going to sell the
14 open-ended users, there is going to be a substantial
15 reduction in the amount manufactured?

16 A That's correct.

17 Q That will increase Monsanto's unit price?

18 A Right, unit cost.

19 Q Which would justify price increase?

20 A Right.

21 Q There is nothing more significant to this
22 letter other than the price increase, is there, sir?

23 A That's correct. It just more or less states
24 the philosophy of what some of our policies were.

25 Q And it emphasizes Monsanto's intention to

1 continue to make the closed-end use available?

2 A Right.

3 Q On the basis that the benefits of the use
4 outweigh the risk in 1970?

5 A We didn't say that, but that was implied.

6 Q And, again, that's a traditional business
7 analysis?

8 A Yes.

9 Q Acceptable then and acceptable today?

10 A Right; there is no law against it.

11 Just for purposes of identification, one of
12 the General Electric names I saw in one of the
13 documents, we didn't have time to talk about it, but it
14 was Luke Hart. I kept referring earlier in my
15 conversations to Luke somebody. It was Luke Hart, and
16 he was the general manager at Hudson Falls when a lot of
17 this was going on. And he and I had several meetings
18 together. I can't recall any specific meeting, but he
19 was the fellow who was in the fire.

20 BY MR. BURKE:

21 Q Exhibit 70 is a response by Mr. Papageorge to
22 Mr. McCann's interest in receiving materials concerning
23 possible environmental pollution by PCB's?

24 A Yes.

25 Q Is it accurate to say that Exhibit 70 of

1 December 22nd, 1970, is representative of the ongoing
2 interest by General Electric in dealing with this
3 problem?

4 A Yes.

5 Q Is this the type of contact that you would
6 have expected from General Electric or any other user of
7 PCB fluids?

8 A Yes.

9 Q Exhibit 71, again, appears to be a form
10 letter of April 15th, 1971; correct?

11 A Yes.

12 Q And that has to do with PCB containing
13 hydraulic fluids?

14 A Correct.

15 Q And, essentially, Monsanto's ability to
16 formulate substitutes?

17 A Correct.

18 Q And that was consistent with Monsanto's
19 policy of reducing and eliminating open-ended uses of
20 PCB fluids?

21 A Correct.

22 Q And in April of 1971, when Mr. Bradford was
23 fortunate enough to be able to announce this
24 accomplishment by Monsanto, there were no replacement
25 dielectric fluids for transformers or capacitors?

1 A That's correct.

2 Q A commercial building that wanted indoor
3 transformers, because of their economies with respect to
4 power distribution, would either have askarel or they
5 could have mineral oil in vaults?

6 A Correct.

7 Q Exhibit 72 is Mr. Hatton's letter to
8 Mr. Johnson essentially about Santovac, which is the
9 vacuum fluid?

10 A Correct.

11 Q It really has no direct application to
12 transformer dielectric fluids, does it, sir?

13 A No.

14 Q Exhibit 73 we've already seen in another
15 context. This is the Therminol fluid?

16 A Yes.

17 Q Exhibit 74, again, from Mr. Graham appears to
18 be a form letter signed by you concerning the cessation
19 of sales of Santovac vacuum pump fluids?

20 A Right.

21 Q And December 30th, 1971, would make that date
22 or that action consistent with Monsanto's cessation of
23 the sale of open-ended fluids and consistent with that
24 policy?

25 A Right.

1 Q It has nothing to do with transformer dielectric
2 fluids?

3 A No.

4 Q But you did pass on to the customers of the
5 vacuum pump fluids Mr. Gustafson's article?

6 A Correct.

7 Q Who was with the Federal Water Quality folks?

8 A Right.

9 Q And that is from Environmental Science and
10 Technology of October 1970?

11 A Yes.

12 Q Now, Mr. Gustafson is of the opinion that if
13 Monsanto's former customers use PCB substitutes, that
14 the goal of decreasing environmental pollution with
15 PCB's would be met; but if they imported them, they
16 wouldn't be, would they?

17 A No.

18 Q And, in fact, a lot of other folks around the
19 world were manufacturing PCB's, and some were probably
20 shipping them into this country?

21 A They actually occurred, yes.

22 Q As far as G. E. goes, isn't it true that they
23 looked and used substitutes rather than purchase
24 offshore?

25 A To my knowledge, that's correct.

1 Q And that's the type of action and conduct
2 that you were encouraging your customers to do, that
3 is, use substitute fluids rather than buy the offshore
4 PCB's?

5 A Correct.

6 Q In Monsanto's view, you were responsible
7 manufacturers and would use the substitutes and not use
8 the foreign manufactured PCB's?

9 A Correct.

10 Q Mr. Gustafson is calling for a lot of
11 research, isn't he, in terms of what is not known and
12 what should be done?

13 A I haven't read the whole article here now,
14 but he does have several paragraphs here on research
15 needs that I can see, yes.

16 Q And in October 1970, that was a reasonable
17 request?

18 A Yes.

19 Q Or a reasonable question to pose?

20 A Yes.

21 Q In October 1970, isn't it true that the only
22 agencies or the only entities, if I may, the only
23 entities who were capable of carrying on sustained
24 fundamental research were industries because they had the
25 money and they had the interest and they could afford to

1 hire the research labs to do the testing? There were no
2 government agencies per se, were there?

3 A No, that's correct.

4 Q And, in fact, if Monsanto had not undertaken
5 the studies that it did in 1970 and whatever studies
6 G. E. may have done about that time, nobody would have
7 been doing that toxicity research, sir, would they?

8 A Probably not.

9 Q EPA had just been enacted? They had no
10 staff, they didn't exist?

11 A Right.

12 Q And, in fact, as the agencies began to form
13 and develop, isn't it not true that they looked to the
14 industrial user who had experience with industrial
15 chemicals for assistance and information and guidance?

16 A Yes.

17 Q And in most, if not all, situations,
18 specifically with respect to PCB's, Monsanto provided
19 that information to the governmental agencies for its
20 use?

21 A That's correct.

22 Q And do you know if G. E. participated in
23 that, also?

24 A I believe they did.

25 Q And, in fact, isn't it true that the various

1 governmental agencies, as they began to develop,
2 including those that were there like the FDA, asked
3 G. E. and Monsanto for help and assistance in providing
4 data, technical research, and support?

5 A Yes.

6 Q A reasonable governmental industry
7 cooperation, wouldn't you say?

8 A Yes.

9 Q Going now to Exhibit 75, the March 30th,
10 1972, letter from Monsanto to General Electric Company
11 of Australia, first of all, do you know, sir, whether
12 that General Electric Company is the same as the
13 American one?

14 A I don't know. You'll have to find that out.

15 Q And, again, dealing with offshore conditions,
16 the terms of sale set forth in Exhibit 75 were not
17 necessarily the ones that applied to American users;
18 correct?

19 A No.

20 Q Exhibit 76 is another form letter of April
21 1972, the most important question of which is where was
22 the real office of the president located?

23 A I notice there were two addressses, the one
24 on Lexington Avenue in New York, and one in San Jose,
25 California; and I'm inclined to think it's the Lexington

1 Avenue in New York.

2 Q Mr. Papageorge signed this letter of April
3 '72. Do you have any idea what governmental pollution
4 control agency he's talking about?

5 A I don't know for a fact. We assumed it might
6 have been the FDA or if the EPA existed, it might have
7 been them.

8 Q In fact, some of the states were developing
9 their own state agencies for environmental control?

10 A Yes, some were.

11 Q And that type of activity by state agencies
12 and, in fact, by the EPA in April '72 was essentially in
13 its infancy, wasn't it?

14 A Yes.

15 Q In terms of its understanding of the uses of
16 industrial chemicals, particularly, PCB's and with
17 respect to the toxicity of PCB's, is it accurate to say
18 that in 1972, the industry had a better understanding
19 than the infant EPA did?

20 A I couldn't conclude that. I don't think
21 anybody had too much great wisdom at that time about the
22 environment.

23 Q But in terms of its use as a fluid in
24 transformers, for example?

25 A Certainly, their industry had more knowledge

1 than the government did. I'd like to comment further
2 that it was because of the instrumentation development
3 that you mentioned earlier plus finding some of these
4 chemicals in the environment like DDT and PCB's that did
5 then lead to all the government agencies and all the
6 controls and all the regulations that we're still facing
7 today.

8 So in my book, PCB's were just the second
9 wave. DDT was the first wave, and PCB's were the second
10 wave. We're now on the thousandth wave, going on the
11 two thousandth wave.

12 Q Exhibit 77, again, appears to be a form
13 letter of January 15th, 1974; correct?

14 A Yes.

15 Q And whether or not any of those folks listed
16 on the first two pages got a copy, you don't know?

17 A I can't say for a fact.

18 Q And that letter enclosed the regulations,
19 apparently, the proposed regulations, concerning various
20 effluent standards?

21 A Correct.

22 Q We have a three-page letter which talks about
23 who to get in touch with to comment?

24 A Correct.

25 Q Now, when we talk about this comment

1 business, isn't it accurate that the federal government,
2 through its administrative rule-making power, had a very
3 well-defined, elaborate procedure to permit any
4 interested person to comment on an issue before it?

5 A That's correct.

6 Q Such as the regulation of water quality, for
7 example?

8 A Yes.

9 Q And, in fact, the agencies encouraged comments
10 by interested persons?

11 A They'll have hearings and testimony, right.

12 Q In order to get the broadest range of input
13 to make an appropriate decision?

14 A Right.

15 Q Essentially, part of the democratic process?

16 A Right.

17 Q In which Monsanto participated?

18 A Correct.

19 Q In which G. E. participated?

20 A Yes.

21 Q All with the encouragement of the agencies
22 involved?

23 A Yes.

24 Q Essentially, the November 6th, 1973,
25 enclosure just talks about notice of hearings?

1 A Yes.

2 Q And the July 6th, 1973, document, which is
3 two pages long, is essentially proposed rules?

4 A That's correct.

5 Q And you don't know whether those rules were
6 ever adopted in the form they were set forth in this
7 register, do you?

8 A No, I don't.

9 Q The same thing goes for the July 17th, 1973,
10 rules again as a proposed rule?

11 A True.

12 Q Apparently, page 19071 of July 17th, 1973,
13 Federal Register Volume 308, No. 136, has to do with
14 everything but PCB's, doesn't it?

15 A I don't see it mentioned.

16 Q I don't either.

17 The September 7th, 1973, Federal Register
18 appears to, again, have the proposed toxic pollutant
19 effluent standards, including PCB's? Again, that's
20 proposed, apparently.

21 A Uh-huh.

22 Q Inviting written comment or actually setting
23 forth the history. We have two pages here, three pages,
24 so there are three pages explaining the agency action;
25 correct?

1 A Yes.

2 Q We have a June 18th, 1973, page, again,
3 addressed to effluent standards, Agenda and Notice of
4 Public Hearings. And we're going to discuss, again,
5 polychlorinated biphenyls?

6 A Right.

7 Q And the other part of Exhibit 77 that we're
8 muddling through here, again, the proposed rules of
9 December 1973?

10 A Correct.

11 Q Labeled as such, proposed?

12 A Right.

13 Q Do you know whether those rules were ever
14 adopted?

15 A No.

16 Q And, again, if in December 1973 they're still
17 proposing, we can safely assume they haven't been
18 adopted?

19 A Right.

20 Q The comment administrative process can be
21 relatively long.

22 A May take years.

23 Q Monsanto and General Electric both
24 participated in the comment process?

25 A Right.

1 Q That's not illegal, sir, is it?

2 A Oh, no. They request that. They want all
3 the comment they can get. I went to one hearing where a
4 little old lady with tennis shoes actually came in and
5 talked.

6 Q That's what that process is for, in part, to
7 allow any interested person. Then the agency makes a
8 decision at some point in time; right? And whatever
9 decision they made after December 1973, the continued
10 manufacture and sale of askarel fluids for transformers
11 was permitted, wasn't it?

12 A Correct, if they made a decision on it.

13 Q Yes, sir. In fact, as of December 1973, when
14 they were proposing these rules, there were no
15 regulations or statutes of any kind that prohibited the
16 sale of askarel fluids for transformers or prohibited
17 the sale of PCB transformers?

18 A That's correct.

19 Q And again, December 1973, we're talking about
20 18 months after the interdepartmental task force
21 recommended that transformer and capacitor use not be
22 eliminated?

23 A Correct.

24 Q I believe we've seen Exhibit 78 before. This
25 is a standard letter advising proper procedures to ship?

1 A Yes.

2 Q Exhibit 79 we've seen before, also?

3 A Correct.

4 Q Again, describing the procedure, proper
5 procedure, for shipment?

6 A Correct.

7 Q And we can assume that these letters are
8 being sent to General Electric, that they are in August
9 of 1975 continuing to ship askarels to Monsanto for
10 disposal in their incinerators?

11 A I would assume that.

12 Q Had you left Monsanto by the time General
13 Electric began to develop its own incinerator?

14 A I believe I had. There was a period in my
15 service there where I was assigned a different job,
16 about six months prior to my departure; so I was really
17 only on the PCB's until about November, December of '75.
18 And then from that period until '76, I was in a
19 development-type project, development area; so I was off
20 of PCB's about that time.

21 Q At some point in time, did not the EPA end up
22 restricting Monsanto's use of the incinerator?

23 A Something happened, but I had left by that
24 time, and I don't know what it was.

25 Q Because General Electric claims that they had

1 developed the first incinerator.

2 MR. BAUMER: Is this a question or just a
3 discussion between the two of you as to what General
4 Electric is doing, because that wasn't a question you
5 imposed, and I'm objecting to the form of this dialogue.

6 BY MR. BURKE:

7 Q Did you ever become aware of General
8 Electric's claim that it developed the first incinerator
9 approved for PCB disposal?

10 A No, I'm not specifically aware of that.
11 Could I comment about incineration?

12 Q Absolutely.

13 MR. BAUMER: Let me make the same
14 objection as to voluntary comment by the the witness.
15 I'd like to make it as a matter of record anyway.

16 THE WITNESS: The whole matter of
17 incineration of PCB's has still been a current issue in
18 the press and by the government, and they're still
19 seeking permission to burn PCB's on ships. And that,
20 again, has been recently prohibited to do. And I think
21 those experiments are going on today. So the government
22 has vacillated several times on its whole approval
23 process for incineration of PCB's.

24 BY MR. BURKE:

25 Q As of 1975, isn't it true Monsanto's

1 incineration facilities were technically the best method
2 for disposal at that time?

3 A That's correct.

4 Q Exhibit 80 appears to be another copy of this
5 September 23, 1975, letter from Mr. Papageorge to
6 Mr. Simons, again, enlisting or requesting General
7 Electric's assistance?

8 A Yes.

9 Q This one appears to have the attachment to
10 it, though?

11 A Yes.

12 Q And if we could go through those attachments.
13 Apparently, in May of 1970, there is an additional
14 mailing by Mr. Quinn to people identified as agents and
15 distributors of prior correspondence concerning PCB's;
16 correct?

17 A Correct.

18 Q And there is a letter to industrial customers
19 in there, and that includes Monsanto's February 18th,
20 1970, letter?

21 A Yes.

22 Q Does the February 18th, 1970, date ring a
23 bell with you as the initial correspondence from
24 Monsanto to its customers about the potential
25 environmental problems with PCB's?

1 A I can't state that it's a first letter, but
2 it was certainly one of the earlier letters.

3 Q All right, sir. Then apparently, there is
4 another open letter to electric utility customers which
5 does not have the Monsanto attachment to it; but
6 apparently, it appears to be, the last attachment
7 appears to be, General Electric's mailing list, doesn't
8 it?

9 A It would appear that way, yes.

10 Q Somebody's mailing list?

11 A Yes.

12 Q And it covers public utilities, mines,
13 quarries, oil and gas wells, primarily the smokestack
14 industry folks, manufacturers of machinery and
15 equipment, manufacturers of finished goods and products,
16 and then apparently what they call an optional tab which
17 is, again, electric utility people, management,
18 engineer, industrial user, plant engineering, marketing
19 and sales, various capacitor users, capacitor
20 facilities. If we assume all that was done, that would
21 get pretty wide distribution of Monsanto's information?

22 A Yes, I would think so.

23 Q Do you have any basis to know that G. E. did
24 not follow through on that wide a distribution?

25 A No.

1 Q In fact, it's the type of conduct that
2 Monsanto wanted from General Electric and other
3 customers?

4 A That's correct.

5 Q Isn't it accurate to say that if you were in
6 the electrical equipment business in any capacity by
7 1972, the opportunity to be aware of a potential PCB
8 pollution problem was there, wasn't it?

9 A Yes.

10 Q And is it not also accurate to say that that
11 opportunity became available through the efforts of
12 Monsanto?

13 A Yes.

14 Q And through the efforts of General Electric?

15 A Yes. I guess you'd also have to add the
16 media and some of the press.

17 Q Publications like Chemical Week?

18 A Yes.

19 Q Publications like Electricity Week? Is that
20 the electrical equipment --

21 A Yes, some of those things.

22 Q Are you familiar with any of the activities
23 of a group called BOMA, Building Owners' and Managers'
24 Association?

25 A No, I'm not.

1 Q That's an association involving folks that
2 own office buildings, and they get together to discuss
3 problems they have.

4 MR. BAUMER: Is this another question or
5 another dialogue?

6 MR. BURKE: Is that an objection?

7 MR. BAUMER: Yes. Go ahead if you wish
8 to. You know you can't ask that kind of question.

9 MR. BURKE: I guess there's no objection
10 then.

11 MR. BAUMER: There is an objection and
12 you know it, to the form of question.

13 MR. BURKE: The objection is to the form
14 of the question? Very well.

15 BY MR. BURKE:

16 Q Were you aware of any of the activities of
17 BOMA in the early '70s in seeking information about PCB
18 transformers in office buildings?

19 A No, I was not.

20 Q Exhibit 81 is apparently a form letter that
21 announced that Monsanto was going to withdraw from the
22 PCB business entirely?

23 A Correct.

24 Q And is it not accurate to say that that
25 information was provided in 1976 to provide

1 opportunities for customers to plan accordingly?

2 A Yes.

3 Q And Monsanto continued to ship fluids up
4 until the cessation date, didn't they?

5 A I do not know. I was not there.

6 Q You had left by then?

7 A Yes.

8 Q In October of 1976, isn't it true that there
9 was no statute or regulation of any state or federal
10 government that prohibited at this point in time the
11 ownership and use throughout its useful life of an
12 askarel PCB transformer?

13 A I believe that's correct.

14 Q And is it not also accurate that the primary
15 reason that Monsanto was unable to continue production
16 of PCB fluids were stringent water quality and other
17 effluent restrictions that made production virtually
18 impossible at any economic price?

19 A I don't know the exact reason.

20 Q Did those restrictions have any part to play;
21 do you know?

22 A Since I wasn't involved at that time, I
23 really can't comment.

24 Q Is Mr. Potter the fellow that succeeded you?

25 A Yes.

1 Q In the capacity of business director?

2 A Yes.

3 Q Exhibit 82 is the undated Monsanto report on
4 uses and environmental health effects and the disposal of
5 PCB's?

6 A Correct.

7 Q And apparently, this was prepared and
8 disseminated after you had left Monsanto?

9 A Apparently. I don't recall it.

10 Q Was that consistent with Monsanto's efforts
11 to disseminate information for the appropriate use of
12 PCB fluids?

13 A I don't know the purpose.

14 Q And Exhibit 83 --

15 A I'd just like to comment that the data there,
16 it appears to have data up to 1977; and since I left in
17 '76, mid '76, and had no involvement in PCB's six months
18 before that, this part of the data came after I had
19 left. So I was not aware of this. That's my only
20 conclusion is that I was not aware of it.

21 Q Exhibit 83, apparently, is the Monsanto
22 participation in the interdepartmental task force of May
23 of '72?

24 A Yes.

25 Q Do you know if that was included in the final

1 report as part of the report itself?

2 A Report to whom?

3 Q Report of the task force that was published?

4 A I believe there was a report published, and
5 just what they included, I don't recall. But that
6 should be a matter of record.

7 Q The presentation by Monsanto, did that
8 accurately describe the environmental health or, excuse
9 me, the environmental contamination issue and the human
10 health effect issue as it was understood at the time?

11 A Yes.

12 Q And does it accurately summarize Monsanto's
13 knowledge concerning the use of PCB's?

14 A At that time, yes.

15 Q And in May of 1972, to the interdepartmental
16 task force, didn't Monsanto recommend that PCB fluids be
17 permitted for continued use in closed system uses such
18 as capacitors and transformers?

19 A I believe the conclusion and the summary is
20 that we state that in transformers, the use of the lower
21 chlorinated biphenyls along with proper handling during
22 manufacture, use and repair and proper disposal of waste
23 fluid by high temperature incineration should result in
24 acceptable control.

25 Q As of the end of 1973, based upon your

1 experience at Monsanto and trying to put yourself in
2 perspective in 1973, do you know of any scientific or
3 technical reason why a manufacturer of askarel
4 transformers should not continue, should not have
5 continued to provide those transformers for uses in that
6 time frame?

7 A No, I do not.

8 MR. BURKE: Thank you, sir. That's all I
9 have.

10 MR. BAUMER: I have a few questions.

11 FURTHER EXAMINATION

12 BY MR. BAUMER:

13 Q Let's go in reverse order, if you would. You
14 just read a short paragraph from Exhibit 83 that said
15 the lower chlorinated biphenyls, the use of chlorinated
16 biphenyls --

17 A Yes.

18 Q That doesn't include 1254 and 1260, does it?

19 A I don't know in what context that was made
20 without reading the whole detailed report again.

21 Q Well, but you just answered the question that
22 the task force didn't recommend against the use, and you
23 read that paragraph as support for your answer. Now,
24 are you saying that perhaps your answer needs to be
25 further qualified by a review of the entire report?

1 A Well, that's the safest way to do it, yes.

2 Q But do you consider 1254 and 1260 lower
3 chlorinated biphenyls?

4 A Lower chlorinated than what?

5 Q Than what would classify in what you read
6 there.

7 A I think you have to refer back to what they
8 do say in the report.

9 Q Well, then, do you want to clarify your
10 answer to the last question that Mr. Burke asked you,
11 when you read from that exhibit to indicate that the
12 interdepartmental task force had approved the use of the
13 PCB's in transformers?

14 A Give me one minute to look at the report.

15 I think the main thrust of the report was the
16 elimination of Aroclor 1260 as a transformer dielectric
17 fluid. And then the data that is presented indicates that
18 the other Aroclors, the lower Aroclors, lower than 1260,
19 are to varying degrees biodegradable and that the statement
20 then that the use of the lower chlorinated, meaning the
21 1254, the 48, the 42s, along and the elimination of the
22 1260 --

23 Q Was 1260 used in Pyranol?

24 A Yes.

25 Q So 1260 is not a lower chlorinated biphenyl

1 then as that report reflects?

2 A Yes.

3 Q So the report doesn't then recommend the use
4 of 1260 in transformers?

5 A That's correct. We're talking about
6 eliminating that.

7 Q 1260 was used in General Electric askarel
8 filled transformers?

9 MR. BURKE: Objection. That's not a
10 question.

11 MR. BAUMER: That is a question.

12 BY MR. BAUMER:

13 Q Can you answer it?

14 A Its a matter of record what all the different
15 ones were. I don't want to trust my memory; but
16 obviously, it was used in transformers.

17 Q You don't know whether it was used in G. E.
18 askarel filled transformers, whether Aroclor 1260 was
19 used?

20 A I can't be certain.

21 Q Do you know it wasn't?

22 A No.

23 Q We can probably ask Mr. Papageorge that.

24 A Sure.

25 Q We'll do that.

1 Now, with respect to Exhibit 80, you have no
2 idea, do you, what mailing General Electric made of the
3 items referred to in that exhibit or any items that
4 might have been mailed by General Electric?

5 A I don't have any specific factual data.

6 Q All you have is the assumption?

7 A That's correct.

8 Q You don't know whether they mailed to one
9 customer or 100 customers any particular piece of
10 correspondence?

11 MR. BURKE: Objection, leading.

12 BY MR. BAUMER:

13 Q Do you?

14 A I don't know for a fact what they did.

15 Q You weren't employed by General Electric?

16 A That's correct.

17 Q You weren't involved in the mailing by
18 General Electric?

19 A That's correct.

20 Q As they say, we just want to know what you
21 know.

22 A That's correct.

23 Q Now, you indicated that there is still some
24 investigation of incineration of PCB's on ships?

25 A Yes.

1 Q There is no incineration on land, is there?

2 A To my knowledge, that's correct.

3 Q It's prohibited?

4 A I believe that's correct.

5 Q Because of the toxic materials that come out
6 of the stacks? Isn't that true?

7 A I cannot comment on the reason.

8 Q Well, we know that the government prohibits
9 it, do we not?

10 MR. BURKE: Objection, leading.

11 BY MR. BAUMER:

12 Q Would you agree that the government prohibits
13 it?

14 A I think in my testimony I said at one time
15 they agreed with it, then they disapproved of it, and
16 now they're approving it again.

17 Q Not for land use?

18 A Still gets in the ecosystem.

19 Q What I'm talking about is incineration.
20 There's no incineration on land?

21 A Right.

22 Q But there are some studies to incinerate out
23 on the ocean?

24 A Right.

25 Q Why are we going to do it out in the ocean

1 now as opposed to on land?

2 A That's a good question.

3 Q Would you agree that it would be less apt to
4 come into contact with humans if it's done 150 miles
5 offshore?

6 A Yes.

7 Q And are you indicating, Mr. Bergen, that
8 Monsanto only should have stopped producing Aroclors
9 because of a government regulation?

10 A There could be many reasons why a company
11 will stop production of a material.

12 Q Well, but the thrust of the question by
13 Mr. Burke earlier was that in all of these cases, there
14 wasn't any government regulation to stop doing these
15 things at any particular time. And he even asked you up
16 to like 1974 or '75, there wasn't any government
17 regulation. And what I'm trying to ask you is are you
18 implying by your answer that the only reason to ever
19 stop producing askarel or Aroclors was because of a
20 government regulation?

21 A No.

22 Q Are there other reasons?

23 A Yes.

24 Q Are --

25 A There is a risk benefit reason which

1 Mr. Burke discussed, and there was the risk benefits
2 decision that said that Monsanto would continue to make,
3 and it was the same risk benefits decision that General
4 Electric must have made to say they would continue to buy.

5 Q Risk, meaning no risk of any liability or
6 harm?

7 MR. BURKE: Objection, leading.

8 THE WITNESS: Risk in the broad
9 definition of risk.

10 BY MR. BAUMER:

11 Q What does that meaning?

12 A Read Webster's dictionary.

13 Q You told us I think earlier in your testimony
14 back in December that one of those risks was the risk of
15 lawsuits. Do you recall that?

16 A That's one of them.

17 Q Well, that's one of the risks, is it not,
18 that Monsanto chose to attempt to avoid by the
19 indemnification agreement?

20 MR. BURKE: Objection, leading.

21 THE WITNESS: The indemnification
22 agreement served several purposes. One was getting the
23 other company to go on the line, saying they're willing
24 to share in the responsibility and the decision making
25 on this whole venture. And the other part of it was, of

1 course, the liability side of it.

2 Q But they weren't sharing on the
3 responsibility side. They were assuming the entire
4 responsibility, were they not?

5 MR. BURKE: Objection, leading.

6 THE WITNESS: Yes.

7 BY MR. BAUMER:

8 Q From a legal standpoint, were they not?

9 A I'm not a lawyer, so I can't answer that.

10 Q From the standpoint of lawsuits, which we saw
11 some information about in some of these documents, the
12 purchasers of askarel were assuming full responsibility
13 for this?

14 A That's correct.

15 Q So what other risks did Monsanto have other
16 than the risk of lawsuits and the liability that was
17 associated with that?

18 A Then you get into the benefit demand, benefit
19 to mankind, benefit to the public; and you get into the
20 economic issues.

21 Q What are the economic issues?

22 A You make a profit or you don't.

23 Q And what is the benefit to the public we're
24 talking about with respect to PCB's?

25 A Safety.

1 Q Were there other alternative types of
2 transformers in 1960?

3 A There was the oil transformer in a vault.

4 Q And were there dry transformers?

5 A Yes. They all performed differently. They
6 had different performance characteristics and different
7 cost benefit features, also.

8 Q You mean they cost more to the customer than
9 perhaps a PCB transformer? Is that what you mean?

10 A Just what I said, that there were various
11 cost benefits to the different types of transformers,
12 and the customer made the decision of what he was going
13 to do, as to which benefit he wanted.

14 Q He made that decision based on the
15 information that was supplied to him?

16 A Caveat emptor, let the buyer beware.

17 Q Mr. Bergen, you don't suggest that in the
18 instance of PCB's that the buyer was supposed to beware,
19 do you?

20 A I don't think that was the thrust of the
21 question. The thrust of the question was what
22 transformer should a buyer buy. That is the buyer's
23 decision.

24 Q The thrust of the question was the buyer
25 makes his decision based upon the information he knows;

1 and you said yes, plus caveat emptor. And my follow-up
2 question then to you was you don't suggest that from the
3 standpoint of PCB's that the buyer should be judged and
4 that Monsanto judge buyers only by caveat emptor
5 as opposed to the information they knew?

6 A I think caveat emptor is the fact that
7 Monsanto and General Electric did keep people informed
8 about the environmental issues, and so the buyer should
9 have been aware of what the possible environmental
10 concerns were.

11 Q Let me ask this then. Would it then be your
12 judgment that the buyer should be told back in 1970,
13 '71, '72, that there are certain things about the fluids
14 in transformers and about PCB's that we want you to know
15 before you buy this transformer so you can make a
16 judgment based upon the risk reward concept? Is that
17 what you suggested?

18 A Yes.

19 Q And would those items that the buyer should
20 know be the same type of items that Monsanto told General
21 Electric in the various correspondence that we've gone
22 through in 84 or some odd documents?

23 A It's a question to a degree; but basically,
24 yes.

25 Q Should the buyer be given less or a greater

1 degree of information?

2 A That's a judgment called by the seller.

3 Q Well, in the case of Monsanto, you told G. E.
4 everything you knew, didn't you?

5 A We think we did.

6 Q And you're saying that the seller should then
7 determine whether he should tell everything he's been
8 told or less?

9 A That's his decision.

10 Q And that would have been GE's decision from
11 the standpoint of any sale it made?

12 A Right.

13 Q Are you suggesting that there should be less
14 information passed on to the consumer than you would pass
15 on to a person that has the capability or a company that
16 has the capability to research and know as G. E. --

17 MR. BURKE: Objection, leading.

18 THE WITNESS: I don't think a doctor, for
19 example, actually tells a patient all that he knows
20 about a certain illness that the patient might have
21 just to make the patient feel more knowledgeable. So I
22 think there are some cases where, because of the
23 technical features and the need to know, that there is a
24 different type of information that could be passed on.

25 BY MR. BAUMER:

1 Q The patient is not making the diagnosis, is
2 he, in your analogy? The doctor makes the diagnosis; is
3 that correct?

4 A Normally.

5 Q So in the buy/sell, the buyer make the
6 diagnosis as to whether to buy a product based upon the
7 information he has, does he not?

8 A That's correct.

9 Q So the more information the buyer has, the
10 more informed he was as a buyer?

11 A Correct.

12 MR. BURKE: Objection, leading.

13 BY MR. BAUMER:

14 Q Now, there was discussion during
15 cross-examination concerning the existence of an agency
16 that might regulate PCB's with respect to this lawsuit,
17 and --

18 A I'm sorry?

19 Q There was discussion on cross-examination by
20 Mr. Burke concerning the existence of an agency, a
21 federal agency or a state agency, that would regulate
22 perhaps PCB's?

23 A Oh, yes, back early.

24 Q Early on. And there was discussion as to
25 whether or not information flowed from Monsanto and

1 General Electric to the agencies when they came into
2 existence, the EPA, for instance.

3 And you would give information to the EPA,
4 and the EPA would then make a judgment based upon that
5 information and whatever information it could gather,
6 would it not?

7 A Yes.

8 Q And, in fact, the information that Monsanto
9 gave and that G. E. gave to the EPA concerning PCB's
10 differed from the decision that was finally made about
11 PCB's by the agency, did it not?

12 A I don't know what the final decision was.

13 Q You do know that the EPA has banned the use
14 of PCB's in certain circumstances?

15 A That's correct.

16 Q And certain of those circumstances were
17 situations where Monsanto recommended that the PCB's not
18 be banned, such as certain closed transformers?

19 MR. BURKE: Object to the form of the
20 question. There is no factual showing of that.

21 MR. BAUMER: Well, there will be.

22 THE WITNESS: That happened after I left,
23 so I can't comment.

24 BY MR. BAUMER:

25 Q Does Georgia-Pacific have any PCB problems?

1 MR. ROBERTO: I would object to him
2 answering any questions regarding Georgia-Pacific.

3 THE WITNESS: On the advice of counsel, I
4 defer to answer.

5 MR. BAUMER: We'll certify that question.
6 BY MR. BAUMER:

7 Q Have you dealt with any PCB problems since
8 you left Monsanto?

9 MR. ROBERTO: To the extent the question
10 asks for any information regarding the conduct of his
11 job at Georgia-Pacific, I instruct the witness not to
12 answer.

13 THE WITNESS: The only involvement I've
14 had has been on the other deposition or the marine case.
15 BY MR. BAUMER:

16 Q What I mean is in your job.

17 A I have instruction not to comment.

18 Q Do you disagree with the conclusion that
19 PCB's should be banned from use in closed transformers?

20 MR. BURKE: Objection. It assumes that
21 such a ban exists. It's never been demonstrated.

22 MR. BAUMER: We haven't tried the case
23 yet.

24 THE WITNESS: I'm too humble to make that
25 decision.

1 BY MR. BAUMER:

2 Q What was your judgment while you were at
3 Monsanto as to whether or not PCB's should be banned in
4 closed transformers?

5 A Up to the point that I was responsible for
6 PCB's, it was my feeling that the risk benefit to
7 society was that we should continue to make them because
8 there were no known replacement products at that time.

9 Q There were substitute products at that time,
10 were there not?

11 MR. BURKE: Objection, leading.

12 THE WITNESS: No. There were no proven
13 substitute materials in transformers at that time.

14 BY MR. BAUMER:

15 Q Were there optional products at that time?

16 A I'll go by my previous statement. To my
17 knowledge, there was no proven replacement product.

18 Q By replacement, you mean a product that had
19 the same characteristics from the fire standpoint or
20 flash point standpoint as askarel as opposed to, say, a
21 dry transformer?

22 A I'll go back to what I said. No proven
23 replacements for the performance of an askarel type.

24 Q If I wanted a transformer back in 1971 or '72
25 of a certain size, I could buy an askarel filled

1 transformer, I could buy a mineral oil filled
2 transformer, or I could buy a dry transformer. Would
3 that be accurate?

4 A Yes.

5 Q So I had some options at the time as to the
6 size of transformers I could buy?

7 A That's correct.

8 Q And depending upon how much I wanted to spend
9 and where I wanted to place those transformers, I had to
10 make a judgment as to what to buy?

11 A That's correct.

12 Q So if I wanted to place those transformers
13 outside my building, I could buy, what, any of three?

14 A I believe you could.

15 Q If I wanted to place them inside my building,
16 I could buy any of the three?

17 A But there were more restrictions on where you
18 could put them, as I understand it. I'm not an expert
19 on that.

20 Q But I can buy any of the three for use inside
21 the building?

22 A You could have designed your building to
23 accommodate it.

24 Q And if I wanted to have a mineral oil
25 transformer, I would have to put it in a vault?

1 A I believe so.

2 THE WITNESS: Excuse me. Can I have a
3 two minute break?

4 MR. BAUMER: Sure.

5 (Thereupon, there was a brief recess.)

6 BY MR. BAUMER:

7 Q I believe that there was a question on
8 cross-examination on Exhibit 72 with Santovac having
9 nothing to do with application, directs application, to
10 transformers; is that correct?

11 A I think that was the question.

12 Q And you answered it affirmatively?

13 A Yes.

14 Q But the information that was gathered with
15 respect to PCB's, whether they be in Santovac or in
16 askarel or in some other product, have application,
17 direct application, to transformers, do they not?

18 A Well, the chemical facts and the facts on the
19 Aroclors are the same whether they are in transformers
20 or Pydraul fluids or Therminol fluids.

21 Q So if I told you that if you are using
22 Santovac, you have this long list of adverse
23 circumstances that could occur with respect to the PCB's
24 in there, would you consider that that would have equal
25 application to the PCB's that would be in askarel and

1 transformers?

2 A It would be inferring that saying that.

3 Q If you learned of the dangers of PCB's while
4 studying Santovac, would you not apply that to any other
5 fluid that had PCB's in it?

6 A I would.

7 Q You wouldn't deal with it in a vacuum, would
8 you?

9 A I would?

10 Q You wouldn't?

11 A No, I said I would consider your earlier
12 statement. The I would was to your first question, not
13 the second question.

14 Q The answer is that you would consider all of
15 those circumstances when it came to considering PCB's
16 whenever you received the information?

17 A Yes.

18 Q So, in fact, if G. E. is being told by a
19 group that the PCB's and Santovac have adverse effects
20 on birds, aquatic, and animal life, then you would apply
21 that equally to PCB's that might be found in askarel?

22 MR. BURKE: Objection, leading.

23 THE WITNESS: The letter said that
24 Santovac 1 and 2 contain polychlorinated biphenyls at
25 varying types.

1 Q Read the next --

2 MR. BURKE: Objection. Let him finish
3 his answer.

4 THE WITNESS: My point is I don't recall
5 today the composition of Santovac 1 or 2, but we are
6 talking about several different types of polychlorinated
7 biphenyls. Now, whether those are the same
8 polychlorinated biphenyls that are used in transformers
9 or not, I'm not certain because I don't recall what
10 Santovac 1 and 2 was. It could be that they were a
11 lower chlorinated Aroclor which are not used in
12 transformers; so that might have been 1242, for example,
13 which wasn't used in transformers.

14 Q Doesn't say that here though, does it?

15 A No; but that's what you have -- you have to
16 have the facts to know what Santovac 1 or 2 are. Are
17 they the same products that are, in truth, used in
18 transformers? That, I don't know.

19 Q The next sentence says, "As you are aware,
20 PCB's have increasingly come under the scrutiny of
21 various governmental agencies and scientific
22 laboratories." Is that PCB's, as you would read the
23 letters, just PCB's found in Santovac 1 or 2?

24 A Just in general.

25 Q Certain studies have found PCB's to be

1 injurious to certain forms of bird, aquatic and animal
2 life. That's also a general statement?

3 A Yes.

4 Q So that general statement is applicable
5 to Santovac. The PCB's, are the certain types
6 they say here when it says certain PCB's as it
7 is to askarel in transformers?

8 A Yes.

9 Q And I think that that same type of
10 questioning went on with respect to three or four other
11 documents in here. I think one was -- what was the
12 other? Fire resistant -- I can't remember the product.
13 What was the other product we talked about.

14 A Therminol.

15 Q The same questions were asked about Therminol
16 saying Therminol didn't have anything to do with any
17 direct application to transformers. But any information
18 in correspondence relating to PCB's in general, no
19 matter what the product, has an application to
20 transformers, does it not?

21 A I'd repeat what I said before. You have
22 to know specifically which Therminol, which Aroclor
23 you're talking about to make a factual statement.

24 Q Were there any particular PCB's that no one
25 was concerned about back in '70, '71, and '72?

1 A PCB's were loosely termed for the whole
2 group. There are some 250 different chemical isomers of
3 PCB, so you can talk about 250 different products if you
4 wanted to.

5 Q But in all this literature that we have been
6 through for the best part of almost two days now, it
7 talks about PCB's in general, does it not?

8 A That's correct.

9 Q And it says that generally, PCB's have some
10 unacceptable qualities?

11 MR. BURKE: Objection. That's not what
12 the documents say.

13 MR. BAUMER: Well, the documents speak
14 for themselves; and the jury will be able to analyze the
15 documents.

16 BY MR. BAUMER:

17 Q The question then is there are general
18 statements in these documents about PCB's?

19 A There are general statements about PCB's,
20 correct.

21 Q And there are several statements about what
22 Monsanto believes has been communicated or should be
23 communicated to its customers relative to those
24 qualities of PCB's?

25 A That's correct.

1 Q And it is some adverse qualities of PCB's
2 that they were communicating?

3 A Yes.

4 Q And those qualities, those adverse qualities,
5 that appear in all this literature are equally
6 applicable, no matter whether they're talking about
7 whatever the product might be, whether it be askarel or
8 whether it be Santovac or whether it be the other
9 product?

10 A That's true.

11 Q And would you take a look at Exhibit 69 for
12 me, please. I think Mr. Burke asked you the question
13 that there was nothing any more significant about this
14 exhibit other than that it was just a recitation of a
15 price increase, and I believe you answered yes. Do you
16 recall that?

17 A I think I said yes, and I also said there are
18 some continuing policy statements there made about what
19 we intend to do in the fifth paragraph.

20 Q How about the fourth paragraph? Do you
21 consider that to be a significant part of this letter?

22 A Yes. That's a statement of what we've done,
23 part of our actions we've taken, at Monsanto.

24 Q What I'm referring to is where it says, "Due
25 to this PCB environmental pollution problem, Monsanto

1 has withdrawn certain askarels from non-electric product
2 applications where confinement and control of PCB's are
3 not possible."

4 A Yes. That's why we had to raise the price.

5 Q How about the fourth paragraph? Do you
6 consider that to be a significant part of this letter?

7 A Yes. That's the one we're talking about.

8 Q "Certain of the more highly chlorinated PCB's
9 (polychlorinated biphenyls) have been found to persist
10 in the environment and may be harmful to sensitive
11 marine and bird species."

12 A Excuse me. That's the third paragraph.

13 Q Do you consider the third paragraph to be a
14 significant paragraph?

15 A It redundant, but it's significant.

16 Q It's redundant in the fact that it's been
17 said before in other correspondence?

18 A Yes.

19 Q But it's significant when it was in the other
20 correspondence, perhaps then for the first time being
21 said?

22 A Yes.

23 Q Do you recall in the questioning by
24 Mr. Burke the discussion that you had with him on a
25 number of occasions concerning the degree of the

1 development of analytical instrumentation for the
2 measuring of Aroclors in liquids?

3 A Yes.

4 Q Do you remember that?

5 A Yes.

6 Q And there was discussion that as late as 1973
7 or '74, it may not be to the degree that it could be or
8 should be?

9 A Yes, referring to the samples and the
10 possible cross-contamination, yes.

11 Q And in relation to whether or not a
12 particular product contained PCB's or whether or not it
13 contained them to the degree that should require that
14 they be removed from the market?

15 A I think we were just talking about analytical
16 procedures and the accuracy of analytical procedures.

17 Q Do you consider that the accuracy of
18 analytical procedures was not adequate in '70 and '71 to
19 make a reasonable determination as to whether or not
20 PCB's should continue to be sold?

21 MR. BURKE: Objection to the form of the
22 question. It assumes that analytical procedures are
23 going to be the determining factor.

24 BY MR. BAUMER:

25 Q You can answer the question.

1 A The analytical procedures of '70 and '71 were
2 not adequate, period.

3 Q They were adequate enough for someone to make
4 a determination to remove PCB's from the market at
5 Monsanto for open usage, were they not?

6 A The decision was made based on the data that
7 we had available to us regardless of how perfect or
8 imperfect it was.

9 Q So it was adequate enough at that time, no
10 matter how perfect or imperfect it was, to result in the
11 conclusion and the determination to remove askarel from
12 the market for open-ended uses?

13 MR. BURKE: Objection, leading.

14 THE WITNESS: That is your conclusion.

15 BY MR. BAUMER:

16 Q Well, that's what happened, was it not?

17 A The result happened, yes.

18 Q And did it happen in a vacuum? When you say
19 it was my result, did it happen in a vacuum or in
20 relation to the information that was available at the
21 time?

22 MR. BURKE: Excuse me. I'll object.
23 It's argumentative and leading.

24 THE WITNESS: The decision was made at
25 Monsanto, and you have the record of that; and that's

1 enough to say, I think.

2 BY MR. BAUMER:

3 Q Well, was the decision made upon the current
4 information at the time?

5 A It was a management decision that was made
6 which involved this aspect, period.

7 Q Was it made based upon the information that
8 was available at the time of the decision?

9 A Partially that, but partially other
10 considerations, as well.

11 Q What other considerations?

12 A I can only speculate.

13 Q You were there when that decision was made,
14 were you not?

15 A I was only one part of management.

16 Q What do you know were the other reasons?

17 A I don't know.

18 Q You don't know what the other reasons were?

19 A No.

20 Q You were charged with the responsibility of
21 or part of those charged with the responsibility for
22 removing it from the market, were you not?

23 A That's correct. The decision was made by the
24 Corporate Management Committee, CMC.

25 Q And you weren't on that committee?

1 A That's correct.

2 Q Were you an ad hoc member?

3 A No.

4 Q And you don't have any idea what the other
5 reasons were other than the state of information that
6 was available?

7 A I was not present in their mind or in their
8 presence when they made that decision.

9 Q Was the published reason the state of the
10 information?

11 A Would you repeat that?

12 Q Was the published reason or acknowledged
13 reason to the public the state of the information that
14 was available?

15 MR. BURKE: Let me object to the form of
16 the question. It assumes it was published. There is no
17 showing of that. Go ahead, sir.

18 THE WITNESS: We wrote our letters to the
19 customers, and that was our decision.

20 BY MR. BAUMER:

21 Q But the letter to the customers reflected the
22 state of the information that was available at the time
23 as the basis for your decision. Isn't that accurate?

24 A If you want to conclude that.

25 Q Do you disagree with that?

1 MR. BURKE: Objection, argumentative.

2 THE WITNESS: I already answered that, I
3 believe.

4 BY MR. BAUMER:

5 Q It's not argumentative, but I just wanted to
6 know, I'm trying to find out the answer to this question
7 because it was brought up in the cross-examination. If
8 there are other reasons other than the state of the
9 information that was available at the time, that is what
10 I'm trying to get at.

11 A If there are other reasons, they are not
12 known to me.

13 Q Now, those same reasons existed in 1973, say,
14 or '72 when it was determined to use askarel only in the
15 closed environment. Isn't that right?

16 MR. BURKE: Objection. That's not his
17 testimony.

18 MR. BAUMER: The record will correct it
19 if it's not.

20 THE WITNESS: I can only go by what the
21 record shows and what the notes reflect.

22 BY MR. BAUMER:

23 Q Was there any difference in the information
24 that was available between 1970 and 1972?

25 A Not a lot of basic difference, no.

1 Q In 1970, a decision was made to take
2 open-ended uses off the market?

3 A Correct.

4 Q And in 1972, a decision was made to do what?

5 A To sell it only to the closed dielectric
6 systems.

7 Q So what is the significance or what is the
8 difference from the standpoint of the use of PCB's in
9 the closed systems as opposed to the open systems that
10 led to the distinction between the two and the decision
11 to continue to sell in closed as opposed to stop selling
12 it in open?

13 A Well, the key reason was there were no
14 replacement products.

15 Q Meaning what? No replacement for Pyranol?

16 A Just what you said, they were no replacement
17 products to do exactly the same thing.

18 Q Then what was the necessity for the
19 indemnification if the reason to continue to sell it
20 was the fact that there were just no replacement
21 products?

22 MR. BURKE: Objection, repetitious.

23 THE WITNESS: I believe we answered that
24 earlier.

25 BY MR. BAUMER:

1 Q Well, I don't think you answered that for me.
2 You may have answered it for Mr. Burke, but why require
3 an indemnification if the reason for continuing was the
4 fact that there was no substitute product?

5 MR. BURKE: Objection. It's repetitious
6 to direct examination. Go ahead, sir.

7 THE WITNESS: I believe I answered that
8 earlier, saying that there were several reasons for the
9 indemnification, one of which was the responsibility, to
10 get the other companies fully aboard on the
11 responsibility for the use of the product, and the
12 second was the liability.

13 MR. ROBERTO: Let the record reflect that
14 it's now 6:30, and Mr. Bergen and I are leaving in about
15 two minutes.

16 MR. BAUMER: You can leave when you choose
17 to leave.

18 MR. ROBERTO: I know I can.

19 MR. BURKE: I've got a couple of
20 re-cross.

21 MR. ROBERTO: We were going to quit at
22 6:00, and it's now going on 7:00; and I don't think it's
23 fair to the witness.

24 THE WITNESS: I'm going to have to make a
25 phone call.

1 MR. ROBERTO: You all can come back
2 again. There is a local rule in the Northern District
3 of Georgia that deposition witnesses don't have to stay
4 longer than six hours. I think we've been more than
5 generous.

6 MR. BAUMER: Do you want to adjourn and
7 come back for another hour of this to finish it? If you
8 want to do that, we'll do it right now. We'll quit and
9 stop. But we'll have to come back and take about an
10 hour or less to finish it.

11 THE WITNESS: If I can finish up in the
12 next ten to 15 minutes, I'd rather finish now.

13 MR. BAUMER: I may be able to, but I
14 don't know about Mr. Burke. I'll proceed, and you can
15 make your own decision. But I'll come back if you choose
16 to leave.

17 MR. ROBERTO: It's not going to be ten or
18 15 minutes, so let's leave.

19 MR. BURKE: I know I can finish in five.
20 I'll warrant that to you.

21 MR. ROBERTO: Do I have a warranty from
22 you?

23 MR. BAUMER: No, because my client --
24 this is our only chance with you, as you know, unless
25 you want to come to Florida.

1 THE WITNESS: I'm leaving at 7:00,
2 period.

3 (Thereupon, there was a brief recess.)

4 BY MR. BAUMER:

5 Q Let's see if we can help you out here.
6 Mr. Burke asked you about the TLV for PCB's?

7 A Yes.

8 Q And the protection of people in the industry.
9 Do you know whether there was a TLV for asbestos?

10 A No, I don't.

11 Q Do you know that it was some years after
12 people worked with asbestos that it was determined that
13 it was a carcinogenic?

14 A Yes.

15 Q And I believe you said that one of the
16 policies, reasons, for removing it was that PCB's were a
17 potential environmental contaminant; is that correct?

18 A Yes.

19 Q And humans live in the environment, do they
20 not?

21 A Yes.

22 Q And humans eat the fish or the wildlife that
23 live in the environment?

24 A That's correct.

25 Q Now, I think you also indicated that you

1 thought that G. E. took precautions to eliminate the
2 introduction of PCB's in the environment; is that
3 correct?

4 A Sounds like a statement out of context.

5 Q Well, I think there was discussion about
6 whether or not G. E. did everything it could to
7 eliminate the introduction of PCB's into the
8 environment, and you responded affirmatively?

9 MR. BURKE: Object. The question and
10 answer speak for themselves.

11 BY MR. BAUMER:

12 Q Do you recall that it's a predicate for a
13 question by Mr. Burke. Do you recall that?

14 A I recall it in general discussion, and that's
15 about all.

16 Q Is it your view that General Electric did
17 everything and took all precautions to eliminate
18 introduction of PCB's into the environment?

19 A My feeling was that they were acting
20 responsibly and taking reasonable precautionary actions
21 based on the knowledge at the time.

22 Q Would that have been in '70 '71, '72, '73?

23 A Yes.

24 Q Are you aware of the dumping of PCB's by
25 General Electric in the Hudson River?

1 MR. BURKE: Object to the form. It omits
2 the permitted uses and the permitted dumping.

3 THE WITNESS: I'm aware of the Hudson
4 River incident.

5 BY MR. BAUMER:

6 Q Are you aware that G. E. was cited for
7 contaminating the river?

8 MR. BURKE: Objection, misstatements of
9 what happened.

10 BY MR. BAUMER:

11 Q Are you aware that G. E., through a settlement
12 with the state of New York, had to spend money to clean
13 up the Hudson River?

14 A I believe there was such a thing.

15 Q How about in Massachusetts? Are you aware of
16 a similar occurrences in Massachusetts?

17 A Not specifically.

18 Q Generally, are you?

19 A No.

20 Q Now, there has been this discussion about
21 closed versus open uses; and am I accurate in assuming
22 that by closed use, you mean the type of transformers
23 that were sold by General Electric are closed uses?

24 A Yes. That is the nomenclature we use.

25 Q And by closed uses, you mean what?

1 A Hermetically sealed transformers.

2 Q What does hermetically sealed mean?

3 A Excluding air and sealed hermetically so that
4 air can't go in and out and moisture and things like
5 that, like a tin can.

6 Q Also the fluids inside can't get out?

7 A Yes.

8 Q And is this the same type of transformer that
9 was leaking fluid on the highway in Tennessee?

10 A I don't know. I imagine it might have been
11 similar to it.

12 Q Well, if it's hermetically sealed, do you
13 have any explanation as to how it could leak Pyranol on
14 the highway in Tennessee?

15 A Could have had a fractured weld or something
16 on it.

17 Q Are you aware that there is a ceramic bushing
18 on larger General Electric transformers?

19 A Not the details. I think there is.

20 Q And are you aware that that ceramic bushing
21 can crack and break under certain heat conditions?

22 A Not totally, no.

23 Q Well, are you aware that it could or that
24 ceramic will crack and break?

25 A I believe I heard something to that effect,

1 yes.

2 Q And if that ceramic cracks and breaks, are
3 you aware that the fluid inside could leak out?

4 MR. BURKE: Objection to the form. It
5 assumes that it's below the liquid level shown. There
6 is no showing of that in this or any other transformers.

7 THE WITNESS: I'm not technically
8 competent to comment on that.

9 BY MR. BAUMER:

10 Q Are you an analytical chemist?

11 A No, I'm not.

12 Q And the various opinions you rendered as to
13 the state of art or analytical chemistry, were those
14 rendered by you in some expert capacity?

15 A No.

16 Q Have you studied analytical chemistry?

17 A Yes, I studied it.

18 Q How many courses did you have in it?

19 A College.

20 Q You've been in sales for how long with
21 Monsanto?

22 A About 23 of the 30 years.

23 Q And you weren't in the analytical chemistry
24 side, were you?

25 A No.

1 Q And you didn't have anything to do with
2 studying the degree and development of analytical
3 instrumentations, did you?

4 A That's correct. I would comment when we were
5 discussing about that particular point, I was quoting
6 from a letter that was written by an analytical chemist,
7 Dr. Mourier?

8 Q Did that letter say that analytical chemistry
9 hadn't developed --

10 A It pointed out the difficulties of
11 measurements in contamination and sampling, of how
12 critical sampling was.

13 Q But it got to the point where it could be
14 determined by the tenth part per billion, didn't it, in
15 '73?

16 MR. BURKE: No, they were off more than
17 that. Objection.

18 BY MR. BAUMER:

19 Q Look at Exhibit 15, would you. What is the
20 degree of detection of Aroclor 1254?

21 A It says the lower detection for 1016-type PCB
22 is one tenth ppb, and the lower detection of 1254 was
23 point one five parts per billion. But then that later
24 memo or letter was somewhat contradictory to that.

25 Q This is written by the Monsanto research

1 group leader, was it not?

2 A Proves that even they make mistakes.

3 Q Are you saying that's wrong?

4 A I'm saying that it was right under the
5 context in which it was written; but he also wrote
6 another letter which is one of these exhibits that said
7 that there was an error which shows how critical the
8 samplings could go and things like that which shows the
9 sensitivity of testing procedures and the methodology.

10 MR. BURKE: Could you give us the date of
11 Exhibit 15 again?

12 THE WITNESS: The date is October 8th,
13 1975.

14 BY MR. BAUMER:

15 Q Is it true that Monsanto only stayed in the
16 business of supplying Aroclors for use in transformers
17 in closed-end uses because the purchasers were given the
18 indemnity agreement?

19 A I'd say that reason, plus there were no known
20 replacement products.

21 Q You wouldn't sell to someone who wouldn't
22 give an indemnity agreement?

23 A That's correct.

24 Q So if no one gave you an indemnity agreement,
25 you wouldn't have sold --

1 A That's correct.

2 Q And you sold to those persons who had certain
3 financial capabilities to support the indemnity
4 agreement?

5 A That's correct.

6 I think there is a legal question there that
7 I'm not qualified to answer, and that is if nobody had
8 signed an indemnification letter and if Monsanto had
9 terminated it, what would have happened to the liability
10 of Monsanto then.

11 MR. BAUMER: That's all.

12 FURTHER EXAMINATION

13 BY MR. BURKE:

14 Q In your work with Monsanto over the course of
15 30 years, did you rely on and become familiar with the
16 work of analytical chemists?

17 A Yes.

18 Q And did the chemists report to you?

19 A Indirectly, through the chain of command,
20 yes.

21 Q And did you use the data which they generated
22 in their work for the decisions you made as business
23 manager?

24 A Yes.

25 Q Was it the type of data that business

1 managers like yourself would rely upon in making
2 business decisions?

3 A Yes.

4 Q If the General Electric Company was operating
5 a furnace destroying PCB liquids today, would that be
6 contrary to your current state of knowledge? If they,
7 in fact, had an incinerator today they were operating,
8 would that be contrary to your understanding?

9 A Yes. My understanding is that nobody is
10 currently doing it.

11 Q Exhibit No. '72 concerning Santovac 1 and 2,
12 these were open-ended uses, weren't they, sir?

13 A By our definition, yes.

14 Q Is it the type of use Monsanto eliminated?

15 A That's correct.

16 Q 1254 and 1260, the production of those, did
17 that stop when the open-ended uses were terminated in
18 1970, the sales of open-ended?

19 A No.

20 Q Do you remember when 1254 and 1260 stopped
21 being produced?

22 A No, I don't.

23 Q If the General Electric Company was advising
24 its customers in '70, '71, '72, and '73 that PCB fluids
25 were a potential environmental contaminant, would they

1 have been doing what Monsanto wanted done? Is that the
2 information Monsanto wanted conveyed?

3 A Yes.

4 Q Do you know of any end user that had a need
5 for a nonflammable dielectric fluid refusing to buy a
6 PCB transformer because it was a potential environmental
7 pollutant?

8 Q Would you repeat that question?

9 Q Are you aware in the period of 1970, '71,
10 '72, or '73, of any end user who required nonflammable
11 dielectric fluid who refused to buy a PCB transformer
12 because it was a potential environmental contaminant?
13 Do you know of any?

14 A I don't know of any.

15 MR. BURKE: That's all I have.

16 FURTHER EXAMINATION

17 BY MR. BAUMER:

18 Q Mr. Burke, asked you if all Monsanto wanted
19 communicated to the public was that PCB's were potential
20 environmental contaminants, and you said yes. Am I to
21 understand that that's the only information that
22 Monsanto wanted communicated to the public, just that
23 general conclusion?

24 MR. BURKE: Objection to the form of the
25 question. It had to do with their customers and General

1 Electric's customers. Answer if you can.

2 THE WITNESS: The Monsanto statement was
3 that we pointed out the concerns of the environment and
4 the concerns of not to release things into the
5 environment, two concerns. And so we were urging that
6 it be restrained so it didn't get out into the
7 environment.

8 BY MR. BAUMER:

9 Q In a number of methods; by leakage,
10 spillage, vaporization, all those things?

11 A Right.

12 Q And you were expecting that all those items
13 would be communicated to the ultimate consumer?

14 A As deemed necessity.

15 Q By G. E. in that case?

16 A By the supplier.

17 MR. BAUMER: You have the right to read
18 and sign this deposition when it is prepared or you may
19 waive that right if you chose.

20 MR. BURKE: I'll look forward to it.

21 (Deposition concluded.)

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HOWARD S. BERGEN

I hereby certify that I have
read or have had read to me
the foregoing.

Sworn to and subscribed before me

this ____ day of _____, 1985.

Notary Public.

My Commission expires -----

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C E R T I F I C A T E

G E O R G I A:

FULTON COUNTY:

I hereby certify that the foregoing deposition was taken down, as stated in the caption, and the questions and the answers thereto were reduced to typewriting under my direction; that the foregoing pages 1 through 297 represent a true and correct transcript of the evidence given upon said hearing, and I further certify that I am not of kin or counsel to the parties in the case; am not in the regular employ of counsel for any of said parties; nor am I in anywise interested in the result of said case.

This, the 1st day of February, 1986.

Sharon D. Upchurch
SHARON D. UPCHURCH, CCR-B-938
My Commission Expires the
22nd day of September, 1989

1 CERTIFICATION OF QUESTION

2
3 STATE OF GEORGIA:4 COUNTY OF FULTON:
5
67 In the foregoing transcript, the following
8 question was requested to be certified by counsel for
9 the Plaintiff:10 At Page 340, Line 25: "Does Georgia-Pacafic
11 have any PCB problems?"
12
1314 Sharon D. Upchurch
15 SHARON D. UPCHURCH, CCR-B-938
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