

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

JOAN MAERTIN, Executrix of)
the Estate of Lothar)
Maertin, JOAN MAERTIN,)
individually and in her) Cause No. L-95-CV
own right, et al.,) 02849 (JBS)
Plaintiffs,)
vs.)
ARMSTRONG WORLD INDUSTRIES,)
INC.,)
vs.)
MONSANTO COMPANY AND AMERICAN)
MINERAL SPIRITS COMPANY,)
Defendants.)

DEPOSITION OF WILLIAM PAPAGEORGE
Taken on Behalf of the Defendants

November 12, 1997

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12 INC.,)
13 vs.)
14 MONSANTO COMPANY AND AMERICAN)
15 MINERAL SPIRITS COMPANY,)
16 Defendants.)

17 DEPOSITION OF WILLIAM B.

18 PAPAGEORGE, produced, sworn and examined on the
19 12TH day of November, 1997, between the hours of
20 eight o'clock in the forenoon and six o'clock in
21 the afternoon of that day, at the offices of
22 Taylor & Associates, Inc., 7494 Ethel, St.
23 Louis, Missouri, before Nancy A. Kuncaitis, a
24 Registered Professional Reporter and Notary
25 Public within and for the State of Missouri in
the cause now pending in the United States
District Court for the District of New Jersey,
wherein Joan Maertin et al. are the Plaintiffs,
and Armstrong World Industries, Inc., and
Monsanto Company and American Mineral Spirits
Company are the Defendants.

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1 IT IS HEREBY STIPULATED AND AGREED by and
2 between Counsel for the Plaintiff and Counsel
3 for the Defendant that this deposition may be
4 taken by Nancy A. Kuncaitis, Notary Public and
5 Registered Professional Reporter, thereafter
6 transcribed into typewriting, with the signature
7 of the witness being expressly reserved.

8
9 WILLIAM B. PAPAGEORGE,
10 of lawful age, being produced, sworn and
11 examined on behalf of Defendant, testified as
12 follows:

13
14 EXAMINATION

15 QUESTIONS BY MR. TURET:

16 Q. Good morning, Mr. Papageorge.

17 A. Good morning.

18 Q. We met a few moments ago. My name is Craig
19 Turet. I'm an attorney representing Armstrong
20 World Industries who's a defendant in this case
21 and also a third party plaintiff with a claim
22 against Monsanto. Mr. Papageorge, I know you've
23 been deposed a number of times before, so I
24 won't bore you with all the details that I know
25 you've already experienced, but I will ask you a

1 series of questions this morning. You'll be
2 expected to answer them as completely as you
3 can. Please don't feel that you must speculate
4 or guess, just tell us whatever you know in
5 response to the questions. If you don't hear my
6 question or you don't understand it, let me know
7 and I'll be happy to repeat or rephrase it. If
8 you do answer a question, that will mean that
9 you've both heard it and understood it. Is that
10 acceptable?

11 A. One thought occurs to me, and I've run across
12 this before where I believe I understand but my
13 understanding is not the same as your intent, or
14 your understanding and mine may not be the
15 same. So with that thought in mind.

16 Q. There is always the possibility of
17 misunderstanding and we can't do much to
18 eliminate that, but do the best you can based on
19 your understanding of the question.

20 A. I will.

21 Q. The only other thing, well, two other things.
22 One, you understand, sir, that if for any reason
23 you're not available at the time of trial that
24 your testimony today is being taken down by the
25 court reporter and could be used just as if you

1 were testifying during that trial?

2 A. I do understand that.

3 Q. The other thing, if you need to take a break at
4 any time, let us know, we'll be happy to
5 accommodate you as long as there is no question
6 outstanding.

7 A. I will.

8 Q. Okay. Mr. Papageorge, can you just tell us very
9 briefly what your employment history was before
10 you came to Monsanto?

11 A. When do you want me to start, as a high school
12 grocery store worker?

13 Q. Let's talk about after college.

14 A. All right. I worked for Phillips Petroleum
15 Company in Bartlesville, Oklahoma, from 1947 to
16 1951. At that time I then joined Monsanto
17 Company in St. Louis.

18 Q. Before we go onto the Monsanto employment, what
19 was your position with Phillips Petroleum?

20 A. There were two distinct types of assignments.
21 For the first two years I was involved in the
22 research department working on oil field
23 production problems associated with drilling for
24 oil, getting more oil out of spent oil fields,
25 the prevention of blockages in the flow of the

1 oil brought about by chemical and physical
2 conditions. And the last two years with
3 Phillips I was involved in the recommendation of
4 the kinds of equipment that would be required to
5 achieve certain fractions of petroleum for use
6 in gasolines and raw materials for chemicals.

7 Q. Are these blending machines of some type to
8 produce a finished product?

9 A. No, these were units that were designed to
10 receive either the crude petroleum or subsequent
11 portions of that crude petroleum and further
12 divide it into usable petroleum products.

13 Q. Okay. So in 1951 you started to say you began
14 your employment with Monsanto?

15 A. Yes.

16 Q. What was the first position you held with
17 Monsanto?

18 A. I was a design engineer assigned to design
19 equipment for the manufacture of a chemical at
20 one of Monsanto's plants.

21 Q. Was that the Queeny plant?

22 A. Yes.

23 Q. Which product was it that you were involved
24 with?

25 A. Phthalic anhydride, P-H-T-H-A-L-I-C, and

1 anhydride, A-N-H-Y-D-R-I-D-E.

2 Q. What were your responsibilities as a design
3 engineer?

4 A. Well, I had to make the necessary engineering
5 calculations and decisions as it related to
6 designing equipment that would produce the pure
7 product, designing the pumps to convey the
8 various streams in the system, to select the
9 instruments to control the conditions under
10 which it was manufactured, the storage tanks
11 which held the starting material, the
12 intermediate material, and the finished
13 product. Those are just some examples of the
14 kinds of things I was involved with.

15 Q. And how long did you remain a design engineer at
16 the Queeny plant?

17 A. Several years as best I remember, two or three
18 maybe.

19 Q. Did you assume a different position within
20 Monsanto after that one?

21 A. Yes. I was assigned as an assistant supervisor,
22 I think was the official title, in a department
23 in the plant that manufactured plasticizers,
24 which are chemicals used as additives in
25 plastics manufacture.

1 Q. This was still at the Queeny plant?

2 A. Correct.

3 Q. Just to clarify, the Queeny plant was or is
4 located in St. Louis?

5 A. Yes.

6 Q. What were your responsibilities as assistant
7 supervisor?

8 A. It was a many faceted job. One, of course, was
9 to see that the proper number of employees
10 reported for their shift duties, that the
11 employees were kept up-to-date regarding any
12 changes in procedures, any planning related to
13 the kind of product that they were expected to
14 make. I was responsible for the scheduling and
15 holding the necessary meetings, whether they be
16 safety meetings, operating meetings, and the
17 like. I was responsible for the quality of the
18 product made, the efficient use of raw materials
19 and utilities, and to make sure that the
20 scheduled production was met.

21 Q. Now, you mentioned that one of your
22 responsibilities was to insure that the workers
23 were kept up-to-date on changes in procedures;
24 is that right?

25 A. Yes.

1 Q. Did you have responsibility for informing them
2 of the existing safe handling or safety
3 procedures?

4 A. Certainly, yes.

5 Q. Also changes that might have been made to those
6 safe handling or safety procedures?

7 A. If any changes, yes.

8 Q. And which -- how many plasticizer products were
9 within your responsibility at that time
10 approximately?

11 A. It's a bit of a guess, 10 to 12, 8 to 12,
12 somewhere in there.

13 Q. Were each of those a separate manufacturing
14 facility within the plant?

15 A. The equipment was such that it could be used for
16 several of these materials, and part of my
17 problem was to schedule what pot and pan, I'll
18 use that expression, would be used to make
19 product A and when. And that then depended on
20 what the warehouse would tell me regarding we're
21 running short, we'd better make some more, that
22 kind of dialogue would take place and help me
23 schedule the production.

24 Q. During the time you were an assistant supervisor
25 were any of the plasticizer products being

1 manufactured at Queeny, PCB products?

2 A. No.

3 Q. Was DOP one of the plasticizer products under
4 your supervision at that time?

5 MR. DiMURO: Objection to form. You
6 can answer.

7 A. If by DOP you mean dioctyl phthalate?

8 Q. Yes, sir.

9 A. Yes, it was one of them.

10 Q. Were any of the Santicizer line of plasticizer
11 products under your supervision as an assistant
12 supervisor?

13 A. Yes.

14 Q. Specifically do you remember whether Santicizer
15 160 was manufactured there?

16 A. Yes.

17 Q. How about Santicizer 140?

18 A. That is not as crystal clear in my thinking as
19 the 160. I don't really remember that.

20 Q. How about 141?

21 A. Again, I don't remember specifically. There
22 were, like I said, a dozen or so of them and we
23 used different terminology in the production
24 line instead of the trade names. This is why I
25 have trouble translating from one system to the

1 other.

2 Q. Fair enough. And how about, do you recall
3 Santicizer 148? That's the last one I'll ask.

4 A. Not really. It blends in with all the other
5 140s.

6 Q. Now, with regard to the manufacture of
7 Santicizer 160, were the employees instructed if
8 they got any on their skin to wash it off?

9 MR. DiMURO: Objection, he's not
10 going to answer any questions on Santicizer and
11 DOP in this case.

12 MR. TURET: On what grounds?

13 MR. DiMURO: On the grounds, it's
14 well beyond the scope of this deposition. We
15 are here to talk about PCBs, not about other
16 products manufactured by Monsanto, and certainly
17 not about other products that were not contained
18 in the plastisol coatings.

19 MR. TURET: I disagree with you. You
20 know our position very well about other agents
21 at issue, but you recognize there was no
22 limitation in advance placed on this deposition
23 as to what could be talked about and what could
24 not. If you terminate this line of questioning,
25 Mr. Papageorge will have to be produced again

1 subject to a ruling by the judge, of course.

2 MR. DiMURO: I understand.

3 MR. TURET: Just so we're clear, with
4 regard to DOP and with regard to each of the
5 Santicizer products?

6 MR. DiMURO: That's right.

7 MR. LIPSHUTZ: I join in the
8 objection.

9 MR. DiMURO: Unless you want to give
10 me a proffer of how it relates to this case.

11 MR. TURET: I'm not under any
12 obligation to give you a proffer. There is no
13 limitation on discovery other than to the extent
14 acceptable so we're accepting your not to answer
15 is recognized and our position is stated as is.

16 MR. DiMURO: There is limitations on
17 discovery beyond the scope.

18 MR. DAVIDSON: You-all haven't stated
19 the limitations.

20 MR. TURET: That works both ways.

21 MR. DiMURO: You do what you have to
22 do. I'll direct him not to answer. If Judge
23 Rosen orders we have to bring him back, that's
24 fine.

25 MR. LIPSHUTZ: Just so I understand,

1 you're not going to permit the witness to
2 testify regarding any other product that's not
3 included in the ceiling tile plastisol?

4 MR. TURET: That's not what he said.

5 MR. DiMURO: I'm not going to allow
6 any testimony on the Santicizer lines of
7 products and DOP. I don't know what else he's
8 got and I'll take it question by question.

9 MR. TURET: I assume you're not
10 closing off questions about Aroclor PCB
11 containing products?

12 MR. DiMURO: Did you hear me say
13 that?

14 MR. TURET: Just so I state for the
15 record so it's clear, I take it if I continue to
16 ask questions with regard to safe handling
17 practices as to any of these other products or
18 toxicity information with regard to the other
19 products or those lines of inquiry with regard
20 to customers of those other products, all of
21 these are ones you're going to instruct him not
22 to answer, again, as to Santicizers and DOP?

23 MR. DiMURO: Ask about customers,
24 Monsanto's customers for Santicizer products?

25 MR. TURET: If that's the one --

1 MR. DiMURO: I'm not letting him
2 answer without a proffer by you, and you said
3 you're under no obligation --

4 MR. TURET: I don't need to go
5 through every question, that's all.

6 MR. DiMURO: Let me say what I want
7 to say. Without a proffer by you about how any
8 of them are relevant, although you're under no
9 obligation to do so, he's not going to answer
10 any questions on Santicizer products or DOP
11 products.

12 Q. (By Mr. Turet) Mr. Papageorge, what was the next
13 position that you held after assistant
14 supervisor? Let me just clarify. You started
15 as assistant supervisor in 1953 or '54; is that
16 about right?

17 A. That's very close, yes.

18 Q. How long were you assistant supervisor in this
19 area?

20 A. About a year.

21 Q. What was the next position that you held with
22 Monsanto?

23 A. I was made a full supervisor of my own operating
24 department.

25 Q. And --

1 MR. LIPSHUTZ: I'm sorry, what was
2 that position again?

3 THE WITNESS: Supervisor as
4 distinguished from assistant supervisor.

5 Q. And was this also within the Queeny plant?

6 A. Yes.

7 Q. Which operating department was yours?

8 A. I don't know that it had any official title
9 other than department A dash 5.

10 Q. Was there any product basis on which one
11 department was separated from another?

12 A. Oh, yes.

13 Q. What was the definition of that particular
14 department?

15 A. This was a department that manufactured
16 chemicals that eventually either directly or
17 with further chemical modification ended up as
18 additives in rubber chemicals.

19 Q. Did any of your work as supervisor in that
20 operating department involve any of the PCB
21 Aroclor products?

22 A. No.

23 Q. How long did you remain as supervisor?

24 A. Couple years.

25 Q. Until roughly '58, '57?

1 A. '57, somewhere in there, yes.

2 Q. What was the next position you assumed within
3 Monsanto?

4 A. I was appointed a maintenance supervisor.

5 Q. And was that also in the Queeny plant?

6 A. Yes.

7 Q. How long did you remain a maintenance
8 supervisor?

9 A. Couple years.

10 Q. What was the next position that you assumed?

11 A. Maintenance superintendent.

12 Q. Also at the Queeny plant?

13 A. Yes.

14 Q. Just so I don't keep asking the same question,
15 were PCB products manufactured at the Queeny
16 plant while you were there to your knowledge?

17 A. I have a little difficulty in the use of the
18 word "manufactured." If you mean were they
19 chemically produced from one type of material to
20 the PCB type, no.

21 Q. I'm not asking about blending operations.

22 A. That's what I had in mind, yes, sir.

23 Q. How long did you serve as a maintenance
24 superintendent?

25 A. Couple years.

1 Q. Until approximately 1961 or '62?

2 A. No, I would say '59ish.

3 Q. What position did you assume after being a
4 maintenance superintendent?

5 A. I joined the Queeny plant engineering department
6 as an, I think the title, as best I recall, was
7 assistant engineering superintendent.

8 Q. How long were you in that position? Would you
9 like to consult -- I notice you have a document
10 next to you. If it would help to look at it to
11 refresh your recollection, by all means do so.

12 MR. DiMURO: What we have is Mr.
13 Papageorge's CV which I can place in front of
14 him so he can get the correct titles and dates
15 for his employment at Monsanto.

16 A. I was an assistant engineering superintendent
17 from 1959 to 1961.

18 Q. I'm sorry, '59 to '61?

19 A. '61.

20 Q. What was the next position?

21 A. I was then appointed the general superintendent
22 of warehouse, inventories, utilities.

23 Q. Also Queeny?

24 A. Yes.

25 Q. How long was that -- were you in that position?

1 A. Until 1964.

2 Q. What position did you hold beginning in 1964?

3 A. I was transferred to the WG Krummrich plant of
4 Monsanto as a general superintendent of
5 manufacturing.

6 Q. And did you have responsibility for plasticizer
7 products manufactured at the Krummrich plant?

8 A. No.

9 Q. I take it the PCB containing Aroclor products
10 were not under your supervision at that time?

11 A. The manufacture of those products was not under
12 my supervision.

13 Q. Was the blending of those products under your
14 supervision at the Krummrich plant?

15 A. No.

16 Q. Was any other operation involving the Aroclor
17 products under your supervision?

18 A. Well, I was a user of these materials in my
19 equipment.

20 Q. How long did you remain a general superintendent
21 of manufacturing at the Krummrich plant?

22 A. About a year, 1965.

23 Q. The Krummrich plant is a plant at which PCB
24 containing products were manufactured at the
25 time; is that right?

1 A. It was a plant that did manufacture PCBs, yes.

2 Q. What was the next position you held after
3 general superintendent at the Krummrich plant?

4 A. I was appointed the plant manager of the
5 Monsanto plant located in Anniston, Alabama.

6 Q. And the Anniston plant was also one at which PCB
7 containing products were manufactured; right?

8 A. That is correct.

9 Q. How long were you a plant manager at Anniston?

10 A. Till the end of 1969.

11 Q. Till December 31, '69?

12 A. Yes.

13 Q. And as plant manager at Anniston, what were your
14 responsibilities and duties?

15 A. The best answer I can give to that question is
16 the buck stopped at my desk for everything,
17 which involved the hiring of the employees, the
18 training of them, the proper design of the
19 equipment they used, the replacement of that
20 equipment, the purchase of materials to use in
21 manufacturing other chemicals, the packaging of
22 those chemicals, the shipping thereof, the
23 handling of all the waste materials that
24 generated at the plant, the relationships with
25 the community, relationships with the

1 governmental authorities of the State of Alabama
2 and the federal government. Everything that
3 occurred at that plant, if not done properly, I
4 was held responsible.

5 Q. When you mentioned governmental authorities
6 specifically you mentioned Federal, which
7 Federal authorities did you have occasion to
8 deal with as plant manager?

9 A. Now, when I mentioned these authorities, I
10 didn't mean that I personally sat down with
11 anybody. The plant had these connections and I
12 was held responsible for all of the plant's
13 actions, so governmental authorities of the
14 Federal type would involve, I'm trying to think
15 of a good example, for example, all of the
16 shipping and hauling regulations regarding the
17 use of the proper containers, the use of the
18 proper vehicles, the tank cars, tank trucks,
19 these kinds of things had to meet the Federal
20 regulations. That's just one example.

21 Q. Did you personally have a relationship with any
22 of the Federal government, Federal authorities,
23 Federal officials that were involved in
24 regulating the Anniston plant?

25 A. No.

1 Q. Now, in your capacity as plant manager at
2 Anniston, were you required to learn the safe
3 handling and safety procedures that were
4 applicable to the workers there?

5 A. Certainly.

6 Q. Did you develop an understanding or have an
7 understanding while you were plant manager about
8 the toxicological information relating to PCBs?

9 MR. DiMURO: Objection to form. You
10 can answer.

11 A. Yes, I had an understanding.

12 Q. Were there documents that existed at the
13 Anniston plant that summarized toxicity
14 information pertaining to PCBs while you were
15 there?

16 MR. DiMURO: Object to the form
17 again. You can answer.

18 A. Yes, there were documents that addressed the
19 PCBs safe handling procedures and toxicity.

20 Q. What documents were those?

21 A. They were -- there were several types, a
22 memorandum from Monsanto corporate medical
23 department, which were addressed to Monsanto
24 plants that either made or used PCBs. There
25 were summaries and notes used by the supervisors

1 and the foremen and the chief operators in their
2 safety meetings at which the proper handling of
3 chemicals was discussed. There were the more
4 sophisticated medical kinds of reports available
5 in the plant doctor's office. And of course, we
6 had copies of the products brochures that
7 Monsanto had prepared that described the
8 products that were shipped out of the plant,
9 made and shipped out of the plant.

10 Q. So those are -- the product brochures you're
11 describing, are those technical bulletins or
12 application data bulletins, for example?

13 A. There is some of each, yes.

14 Q. Are there other things that you would consider
15 to be product brochures that were not technical
16 bulletins or application data bulletins?

17 A. Not that I know of.

18 Q. Based on your review of the documents that
19 you've described while you were plant manager at
20 Anniston, did you have an understanding of
21 whether the workers' exposure to PCB containing
22 products could lead to liver damage?

23 A. Yes.

24 Q. What was that understanding?

25 A. My understanding was that repeated high level

1 exposures through improper handling could
2 eventually lead to a condition where the liver
3 could not tolerate nor could it mend itself or
4 recover, and that damage would then be permanent
5 and it could lead to death.

6 Q. Again, based on your review of those same
7 documents while you were plant manager at
8 Anniston, did you have any understanding as to
9 whether or not exposure to PCBs could lead to
10 cancer?

11 MR. DiMURO: Objection to the form.

12 MR. LIPSHUTZ: Same objection.

13 A. No, although that topic came up, there was never
14 any information available from any source that
15 would lead to that conclusion.

16 Q. I recognize I'm asking the question in the
17 negative. Do you recall ever seeing a document
18 while you were at the Anniston plant that
19 specifically said that PCBs could or could not
20 cause cancer?

21 A. I don't recall any document. I do recall
22 conversations.

23 Q. What conversations do you recall that
24 specifically related to cancer?

25 MR. DiMURO: Object to the form. You

1 can answer.

2 A. They were generally questions made by employees,
3 and I have no idea where they got the ideas.

4 Q. When you received those questions from
5 employees, what did you tell the employees?

6 MR. DiMURO: I'll object to the
7 form. I don't think he testified he got
8 questions from the employees, but go ahead.

9 Q. Did I misunderstand your statement a moment ago?

10 A. As I understood your question, did the subject
11 of cancer as it related to PCBs, did it ever
12 come up.

13 Q. Right.

14 A. And as I remember, there was no written document
15 to my knowledge that existed at that time.

16 MR. O'CONNOR: Just so the record is
17 clear, when you're saying that time can you give
18 us a time frame?

19 THE WITNESS: '65 to '69.

20 MR. O'CONNOR: Thank you.

21 A. To '70, well, first of January '70 is when I
22 transferred. Now, I should add the question of
23 carcinogens was not raised only with respect to
24 PCBs, it was raised with all the chemicals that
25 these employees would be exposed to or possibly

1 be exposed to in this plant. My answer had to
2 do with specifically reference to PCBs and there
3 was -- and the answer would be we had no
4 evidence, although we've been in this business
5 for decades, to show that PCBs are associated
6 with any cancer illness.

7 Q. That's what you would tell an employee who had a
8 question about whether PCBs could cause cancer?

9 A. That would be a typical answer, yes, sir.

10 Q. Now, I take it that as of January 1st, 1970, you
11 assumed a different position?

12 A. Yes.

13 Q. What was the position that you assumed as of
14 January 1st of '70?

15 A. I was appointed as manager, environmental
16 control.

17 Q. Okay. How long did you remain as manager of
18 environmental control?

19 A. From 1970 to 1973.

20 MR. TURET: Is there any objection to
21 copying the CV and attaching it?

22 MR. DiMURO: No. Mr. Papageorge was
23 reading it. You can have a copy of it.

24 Q. Would you like to make a copy of this so you can
25 keep the original?

1 A. It's up to you.

2 Q. Do you have more copies for yourself?

3 A. Yes.

4 MR. TURET: Let's mark the curriculum
5 vitae as Exhibit Papageorge 1.

6 (Curriculum vitae
7 marked as Exhibit No. 1
8 for identification.)

9 Q. Mr. Papageorge, since I'm going to ask you some
10 questions in some detail about your experiences
11 as manager of environmental control and manager
12 of product acceptability, perhaps we could pick
13 up in 1977 when you became director of
14 environmental operations. How did your
15 responsibilities differ as director of
16 environmental operations than they had been as
17 manager of product acceptability?

18 MR. DiMURO: Did we set forth what
19 his responsibilities were as manager for product
20 acceptability?

21 MR. TURET: No. I'm going to come
22 back to that since I'm going to ask those
23 questions in detail. I'm jumping ahead because
24 these are just going to be cursory.

25 MR. LIPSHUTZ: Could the court

1 reporter read back Mr. Turet's question?

2 MR. TURET: It's how did his
3 responsibilities differ in 1977 than before.

4 Q. Did you understand my question, Mr. Papageorge?

5 A. I believe I did. As director of environmental
6 operations I was responsible for a part of
7 Monsanto called the Monsanto Industrial
8 Chemicals Company in the areas of releases to
9 the environment, employee safety and health, and
10 product information as it relates to
11 environmental and human exposures for all of the
12 plants assigned to that part of Monsanto and all
13 of the products produced and used by that part
14 of Monsanto.

15 Q. And did that position relate only to products
16 that were then being manufactured by Monsanto or
17 did it also include responsibility for PCBs
18 which may no longer have been manufactured by
19 Monsanto?

20 MR. DiMURO: What year are we talking
21 about?

22 MR. TURET: 1977.

23 A. It included products manufactured by Monsanto
24 including any PCBs. And my hesitation is one of
25 it also included products purchased and used by

1 Monsanto in its plants.

2 Q. Specifically with respect to PCBs, is your
3 answer any different in describing your
4 responsibilities as director of environmental
5 operations?

6 MR. DiMURO: Object to the form. You
7 can answer.

8 Q. Do you understand my question?

9 A. I have a little difficulty in that in the time
10 frame '77 to '82, which describes the period in
11 which I was director of environmental operations
12 for Monsanto Chemical Intermediates Company, I
13 was not directly involved nor were the plant --
14 let me think -- the plants assigned to this part
15 of Monsanto did produce and use PCBs. But the
16 product itself was assigned to another part of
17 Monsanto called Monsanto Industrial Chemicals
18 Company and that part of Monsanto was
19 responsible for the PCBs that left Monsanto and
20 are on their way to the customer.

21 Q. So were there another series of persons as of
22 1977 affiliated with Monsanto Industrial
23 Chemicals Company who had more direct
24 responsibility for PCB issues?

25 A. The word "direct" is confusing to me because the

1 plants where the PCBs were manufactured, my
2 group, my team had responsibility for the impact
3 of those PCBs on the environment of the plant
4 and the workers of the plant as examples. But
5 when it left the plant on its way to the
6 customer, it was really under the other part of
7 Monsanto that had the marketing team reporting
8 to it.

9 Q. I understand.

10 A. But I should add that the time period is such
11 that the early part of 1977, '78 is when PCBs
12 were still in the marketplace and involved. And
13 of course, once you get into the 1980s, the PCBs
14 are no longer an issue.

15 Q. As they were sold to customers or not sold to
16 customers?

17 A. Yes, but none were manufactured and none were
18 shipped.

19 Q. But to the extent there were environmental
20 issues at a particular plant, those continued to
21 be within your responsibility; is that correct?

22 A. Of those plants assigned to me.

23 Q. Yes.

24 MR. LIPSHUTZ: Is that question
25 directed towards just PCBs, Craig?

1 MR. TURET: Yes.

2 Q. Did your job title ultimately change from
3 director of environmental operations from the
4 Monsanto Chemical Intermediates Company -- let
5 me rephrase that question. Did you move over to
6 the Monsanto Industrial Chemicals Company from
7 the Intermediates Chemical Company at some
8 point?

9 A. There was a reorganization within Monsanto in
10 1983 which eliminated the part that used to be
11 called the Chemical Intermediates Company. I
12 was then assigned to the Industrial Chemicals
13 Company.

14 Q. Did your job responsibilities change at all?

15 A. No.

16 Q. And you remained in that position through 1985?

17 A. Yes.

18 Q. And in 1986 you became manager of occupational
19 health?

20 A. There was another reorganization in Monsanto
21 where the entire chemical unit was called
22 Monsanto Chemical Company. And I was assigned
23 as manager of occupational health.

24 Q. And you retired at the end of 1986?

25 A. Yes.

1 Q. Have you remained in retirement since then?

2 A. Yes.

3 Q. Okay. Let's go back, Mr. Papageorge, to your
4 tenure as manager of environmental control
5 beginning in 1970. If I remember correctly,
6 that's beginning as of January 1st of 1970?

7 A. Yes, that's correct.

8 Q. Was that a new position that was created as of
9 January 1st, 1970?

10 A. Yes.

11 Q. Did you have to interview for that position
12 prior to January 1st, 1970?

13 A. I did.

14 Q. When did you first learn that such a position
15 was being created?

16 A. In about, as best I recall, November of 1969.

17 Q. Was it a position for which many people within
18 Monsanto were applying or was it one for which
19 you were the sole candidate?

20 A. I have no idea.

21 Q. When did you learn that you actually had been
22 selected to become manager of environmental
23 control?

24 A. It was after the Christmas holiday season in
25 December, probably the last week of December.

1 Q. And you had to report within a week?

2 A. Well, I was holding down two jobs for a while.

3 Q. What did you do once you had become the manager
4 of environmental control to learn about the
5 subject matters that were then within your
6 responsibility?

7 A. I made arrangements with individuals who had
8 been involved with the PCB environmental
9 situation for a series of in-depth discussions
10 which I am calling lately as tutorials where the
11 individual and I would lock ourselves in a room
12 in a library and just talk and I would be shown
13 all kinds of documents and we would discuss them
14 in depth. That was my way of playing, in
15 essence, catch up.

16 Q. And was one of those tutorials with Elmer
17 Wheeler?

18 A. The longest one, yes, sir.

19 Q. How long was that one? You seem to have a
20 recollection of its being particularly long.

21 A. Yes, it was several weeks, first quarter of 1970
22 or so was pretty much devoted to spending time
23 with Mr. Wheeler.

24 Q. Did you also have tutorials with Dr. Kelly?

25 A. Yes.

1 Q. How about William Richard?

2 A. I had a few with Dr. Richard.

3 Q. Any with Martin Farrar?

4 A. One or two.

5 Q. How about Edward John?

6 A. Ed John, I don't know that I would say I had a
7 true tutorial. I spent a little time with Mr.
8 John to try to find out what role he was
9 involved in, what kind of things he had done up
10 to that point. It didn't take very long with
11 Mr. John.

12 Q. He wasn't someone with a lot of substantive
13 knowledge about the issues?

14 MR. DiMURO: Object to the form. You
15 can answer.

16 A. I don't know how to describe a lot. He was
17 pretty well tuned in to things that had happened
18 in the recent period of time as distinguished
19 from anything that may have happened in 1930,
20 for example.

21 Q. Dr. Kelly had been around a long time at that
22 point?

23 A. Yes, he had.

24 Q. So were he and Mr. Wheeler the sources of the
25 historical information?

1 A. Yes.

2 Q. Actually, let me take a step back. Can you just
3 list off what your responsibilities were as
4 manager of environmental control?

5 A. I'll try. In a very broad sense I felt that one
6 of my jobs was to sort of let the left hand know
7 what the right is doing, not only within
8 Monsanto with the different departments,
9 research, manufacturing, marketing and top
10 management and the labor units and just any
11 part. It also had to do with finding out what
12 was going on in the rest of the world in terms
13 of what laboratories were doing, what were they
14 discovering, who was involved. And this
15 included not only government laboratories but
16 also included other industrial laboratories as
17 well as university laboratories. I had to find
18 out as best I could what the federal, state and
19 local authorities were doing and discovering.
20 And when I say these things, I also would like
21 to suggest that it does include, where I could,
22 foreign countries and their equivalent entities,
23 universities, laboratories, regulatory people,
24 what they were doing and thinking and planning.
25 And it wasn't only a one-way street, it was also

1 a case of where I would disseminate outwardly
2 what Monsanto was doing and planning. That just
3 about describes what I was trying to accomplish.

4 Q. In the category of disseminating what Monsanto
5 was doing and planning and the information you
6 were gathering about PCBs, was one of your
7 responsibilities to communicate information to
8 customers of Monsanto when asked?

9 A. Yes.

10 Q. Was -- you mentioned that, letting the left hand
11 know what the right was doing. Is that
12 essentially obtaining information from the
13 different departments within Monsanto such as
14 research, manufacturing and what have you about
15 PCBs?

16 A. Yes.

17 Q. And also did it include information from the
18 medical department as well?

19 A. Certainly.

20 Q. And was one of your functions to inform more
21 senior management of the information that was
22 available with regard to PCBs as needed?

23 A. Yes.

24 Q. What responsibilities did you have related to
25 public relations?

1 A. I don't know that -- are you speaking of public
2 relations in general or a specific department in
3 Monsanto?

4 Q. I'm referring specifically to public relations
5 matters that relate to the PCB environmental
6 problems.

7 MR. DiMURO: Object to the form.

8 A. I was responsible to see that the information
9 available in Monsanto was disseminated to the
10 public through the appropriate entities,
11 depending on the subject matter. If it was
12 highly professional medical kinds of data, I
13 would see that Dr. Kelly and his team would
14 communicate with their equivalents elsewhere,
15 whether they be in government, in industry, the
16 general public. If it had to do with the
17 environment, I made it a point to make certain
18 that the garden clubs and the fishing, Izaak
19 Walton League and the Audubon Society were tuned
20 in. Now, I personally was involved with some of
21 them, but I had others also involved. They
22 would attend meetings to communicate. And the
23 whole intent was to do it in a responsible way,
24 which meant do it as soon as the data became
25 crystal clear and nondebatable. Sometimes early

1 data is so questionable that it's best to wait
2 until the final results are in before it's
3 disseminated.

4 MR. DiMURO: Can we take a two-minute
5 break?

6 MR. TURET: Sure.

7 (Brief recess.)

8 MR. TURET: Back on the record.

9 Q. Mr. Papageorge, when we broke, I believe we were
10 talking about your role in connection with
11 public relations. I think you completed your
12 answer to that question. Were you done when we
13 broke?

14 A. I believe I finished.

15 Q. When there were press releases issued by
16 Monsanto that related to PCBs in the 1970s, did
17 you have any input into them before they were
18 released?

19 MR. DiMURO: I object to the form.

20 A. Yes.

21 Q. Was that also part of your responsibility as
22 manager of environmental control?

23 A. Yes.

24 Q. More broadly speaking, did correspondence and
25 press releases and documents in general go

1 through you first to insure that information was
2 accurate and consistent with regard to PCBs?

3 MR. DiMURO: Object to the form.

4 MR. LIPSHUTZ: Same objection.

5 A. Many of these documents were discussed with me
6 before they were released. This does not mean
7 that I saw all documents.

8 Q. Was it a practice that existed within Monsanto,
9 once you had assumed the manager of
10 environmental control position that documents
11 going to the media should go through you first
12 as related to PCBs?

13 MR. DiMURO: Objection to form.

14 A. I have trouble with the word "practice." It was
15 strongly suggested to the part of Monsanto that
16 issued such documents to get me involved. But
17 being independent little operations, they at
18 times could not wait for me to return from a
19 business trip or what have you, so they would
20 release it.

21 Q. When you talk about people who issued such
22 documents, are you talking about people within
23 the public relations department?

24 A. In this instance, yes.

25 Q. As it pertains to the PCBs?

1 A. Well, if it's a -- if it's a communication that
2 the public relations department put together for
3 issuing to, say, the news media, yes; but if
4 it's a piece of information that's intended for
5 a customer, public relations department would
6 not participate.

7 Q. Did your responsibilities as manager of
8 environmental control also include the
9 development of a strategic plan for dealing with
10 the problems that had arisen concerning PCBs?

11 MR. DiMURO: Objection to the form.

12 MR. LIPSHUTZ: Same objection.

13 A. I don't personally remember being involved in
14 developing a specific plan, no.

15 Q. Did you ultimately prepare status reports on a
16 regular basis that related to activities
17 relating to PCBs?

18 A. I did.

19 Q. When did you start to issue PCB status reports?

20 A. As best I recall, I think it was in 1971.

21 Q. What was it that prompted you to start doing
22 that in 1971?

23 A. It was primarily a situation where the Monsanto
24 individuals involved with PCB activities were in
25 many cases unable to attend meetings at which

1 the status of the PCB environmental issue would
2 be discussed. And in order to make certain that
3 all of these individuals kept tuned in, I
4 decided to put out a monthly report and
5 attempted to cover all of the areas relating to
6 the PCB environmental issues as they occurred
7 during that month.

8 Q. Now, you also mentioned that one of your
9 functions was to find out what was going on in
10 the rest of the world and you mentioned the
11 government as one of many sources of
12 information. Can you tell me more specifically
13 about your responsibilities with respect to
14 governmental agencies and entities?

15 A. Well, I don't know how to describe it other than
16 the way I've already tried to describe it. It's
17 one of exchange on a frequent basis of
18 information that the agencies had and what
19 Monsanto had, and the offer to conduct some
20 studies together such as sharing samples between
21 the government laboratories and Monsanto's
22 laboratories, the offer to the government
23 agencies samples of the, I'm going to call it
24 virgin PCB products, right off the research
25 department storage shelf, where the government

1 laboratories would be using the same standard
2 that the Monsanto laboratory would use. The
3 contacts with the government agencies would be
4 done either through individuals within each of
5 the agencies. And for a period of time there in
6 1971 and early '72, I was in close contact with
7 the group of agency representatives which called
8 themselves interdepartmental PCB task force or
9 some such title. I don't recall the exact name
10 for it. I guess that's about as best I
11 remember.

12 Q. Okay. Going back into 1970 and focusing on that
13 time period for a moment, did you have contacts,
14 be they either in person or by phone or letter
15 with the executive office of the President of
16 the United States?

17 A. Yes.

18 Q. Was that through the office of science and
19 technology?

20 A. Yes.

21 Q. How frequently did you have occasion to
22 communicate with them?

23 A. I never kept a score sheet. I would suggest
24 that it averaged out about once a month with Dr.
25 Ed Burger.

1 Q. Did you ever travel down to Washington and meet
2 Dr. Burger?

3 A. Yes.

4 Q. Did Dr. Kelly and Dr. Wheeler ever go down to
5 meet with him as well?

6 A. I know Mr. Wheeler did. I do not know if Dr.
7 Kelly did.

8 Q. Okay. How about members of congress, senators,
9 congressmen, did you have occasion to meet with
10 or communicate with them about PCB issues?

11 A. I did speak before a committee of congress on
12 the subject of PCBs in the environment. I did
13 not, because I was not a registered lobbyist,
14 talk to the representatives or senators
15 individually.

16 Q. Did Monsanto have in its Washington office
17 lobbyists who were registered lobbyists during
18 this 1970, 1971 time period?

19 A. Yes.

20 Q. To your knowledge, were individuals from the
21 Washington office of Monsanto meeting with
22 congressmen and senators on PCB issues during
23 that period of time?

24 A. I'm aware that discussions relating to PCBs were
25 held, but I'm under an impression that they were

1 sort of a side subject, that meetings were not
2 held specifically for the PCB subject.

3 Q. Do you know whether the members of the
4 Washington office of Monsanto met with members
5 of congress on a regular basis with regard to a
6 broader range of issues during the 1970 to 1971
7 period?

8 MR. DiMURO: Object to the form.

9 A. I'm aware of this happening. I have no way of
10 knowing personally the frequency, the length of
11 time they would take, and who specifically was
12 involved.

13 Q. So you don't know personally whether Warren
14 Easley, for example, met with congressmen or
15 senators about PCBs or other issues during '70,
16 '71?

17 A. I'm under an impression that Mr. Easley was
18 taken along as a spokesman, but he did not
19 personally go to the congressmen alone.

20 Q. Okay. How about contacts with the Food and Drug
21 Administration, did you have personal
22 involvement with that?

23 A. Yes, I did.

24 Q. And how frequently during the '70, '71 time
25 period did you have occasion to meet with or

1 communicate with the FDA on PCB issues?

2 A. Again, I did not keep a tally sheet. It was
3 quite frequent, and I would suggest that in late
4 1970, all of 1971, I would meet with somebody
5 from the Food and Drug Administration on the
6 average about once a week.

7 Q. And to your knowledge during that same time
8 period was Mr. Wheeler frequently traveling down
9 to Washington to meet with people from the FDA
10 as well?

11 A. I don't know what you mean by frequently. He
12 did go to Washington alone and I also joined him
13 on many trips to Washington with the FDA people.

14 Q. Same questions with regard to Department of
15 Agriculture. How frequently did you have
16 contact with them during the '70, '71 period
17 relating to PCBs?

18 A. That was less frequent than the Food and Drug
19 Administration, and I would suggest again about
20 once a month. This may happen, say the first
21 part of the month I might meet several times and
22 a couple months may go by before I meet again,
23 so it averaged out about once a month.

24 Q. Were there other Federal agencies you can think
25 of other than the ones we've mentioned that you

1 met with or communicated with with regard to
2 PCBs during the '70, '71 time period?

3 A. Yes.

4 Q. What are some of those others?

5 A. There is an Interior Department, Commerce
6 Department, Bureau of Standards, at that time
7 that was the name it had, Bureau of Standards.
8 The National Institutes of Health, Department of
9 Defense. There were others but they don't come
10 to mind at the moment.

11 Q. You also mentioned international -- efforts to
12 communicate internationally on PCB issues with
13 other governments, with other researchers. Can
14 you tell me about some of the international
15 governments that you had opportunities to speak
16 with about PCB issues in this 1970, '71 time
17 period?

18 A. Of course there were, in the United Kingdom,
19 there were several agencies there in England,
20 I've forgotten all their specific names. The
21 office of the chemist, as an example. They just
22 don't come to mind at the moment. There is, I
23 had discussions with the equivalent of Food and
24 Drug Administration in Sweden, I've forgotten
25 its title or name. In the Netherlands, the

1 University of Utrecht individuals, and I was
2 left with an impression that they also had some
3 kind of government agency representation in that
4 staff. That's all that comes to mind at the
5 moment.

6 Q. Did you also as part of your duties as director
7 of -- I'm sorry, as manager of environmental
8 control have responsibility for activity in
9 trade organizations or industry associations?

10 A. Yes.

11 Q. What were some of the trade organizations or
12 industry associations with which you were
13 involved?

14 A. There were a couple in the electrical field,
15 electronic field, I recall I-triple E, IEEE.
16 There is another one, I think Edison something.
17 My memory is failing me here, but we did work
18 with some electrical societies, electrically
19 oriented societies. I dealt with the Society of
20 Plastics Industries, SPI. I can't remember any
21 more.

22 Q. Okay. Do you remember being involved in any
23 ANSI committees?

24 A. Yes.

25 Q. And what was that or what were those?

1 A. American National Standards Institute sponsored
2 a committee designated as C dash 107 which
3 promulgated some standards as it related to the
4 proper handling of PCB type fluids used in
5 electrical equipment.

6 Q. You chaired that committee; right?

7 A. Yes, I did.

8 Q. Were there other committees within the American
9 National Standards Institute that you were
10 involved with?

11 A. No.

12 Q. All right. Before January 1st of 1970 did you
13 have any involvement with meetings or
14 discussions relating to -- let me withdraw that
15 question. Let me show you some documents.

16 (Brief recess.)

17 (Memo dated 3/6/69

18 marked as Exhibit No. 2

19 for identification.)

20 MR. TURET: Back on the record.

21 For the record, the document that is being
22 marked Papageorge 2 is a March 6, 1969
23 memorandum from WR Richard to Elmer Wheeler.

24 Q. Mr. Papageorge, have you ever seen this document
25 before today?

1 A. Yes.

2 Q. Did -- was that document shown to you shortly
3 after you assumed the position of manager of
4 environmental control?

5 A. Yes.

6 Q. Did you have occasion to discuss it with either
7 Mr. Richard or Mr. Wheeler or both?

8 A. Both.

9 Q. Had you also read Dr. Risebrough's paper in
10 "Nature" that's referred to here?

11 A. Yes.

12 Q. Is it your understanding that that paper
13 referred to what's quoted here as a toxic
14 substance endangering man himself?

15 A. That was the gist of the article.

16 Q. Okay. Page 2 of the document, Mr. Richard -- is
17 it Dr. Richard?

18 A. Yes.

19 Q. Dr. Richard indicated that Monsanto was not
20 prepared to defend itself against certain
21 accusations, specifically the indirect
22 accusation of cancer. You'll see that in
23 paragraph (b) at the top?

24 MR. DiMURO: You're not going to read
25 the whole sentence? I don't want it to be taken

1 out of context. If you're going to take
2 portions of the sentence, that's fine.

3 MR. TURET: I'm reading -- there are
4 three successive separate phrases in that
5 sentence with commas between them that are a
6 list. If you're going to take issue with the
7 sentence structure, it says: We are not
8 prepared to defend ourselves against these
9 accusations made of enzyme and hormone activity,
10 the isolation of enzymes or metabolic products,
11 the indirect accusation of cancer, or the
12 splitting of genes when this accusation is
13 made.

14 Q. Focusing on that part of that sentence that
15 relates to the indirect accusation of cancer,
16 did you have occasion to discuss that particular
17 issue with Mr. Wheeler or Dr. Richard?

18 A. Yes.

19 Q. Did you share their view or did you share -- let
20 me withdraw that question. Did you share the
21 view of Dr. Richard as of that time that
22 Monsanto was not prepared to defend itself
23 against an indirect accusation of cancer?

24 MR. DiMURO: I'll object, at that
25 time, the letter is dated March 6, 1969.

1 MR. TURET: At the time he met with
2 Dr. Richard.

3 MR. LIPSHUTZ: What was your
4 objection? I couldn't hear you.

5 MR. DiMURO: My objection is Mr.
6 Papageorge didn't get into a position to read
7 this letter until after 1970. I just wanted to
8 clarify Craig's question. The document is dated
9 1969.

10 Q. Did you understand my question is directed to
11 the beginning of 1970 when you saw the letter?

12 A. I believe I did.

13 Q. Do you remember what the question was?

14 A. As I understood, your question is did I
15 understand after my discussions with Mr. Wheeler
16 and Dr. Richard whether I agreed with the
17 statement that Monsanto was not prepared to
18 defend itself against the indirect accusation of
19 cancer. And my understanding is that we were
20 not prepared to discuss it on a medical,
21 technical, scientific basis. All we could say
22 is that there was no evidence available anywhere
23 to support that accusation.

24 Q. And was it your understanding that steps were
25 going to be taken to develop more of a medical

1 and scientific basis on which to defend an
2 indirect accusation of cancer?

3 MR. DiMURO: Object to the form?

4 A. Yes. It would take a lot in the way of
5 sophisticated information before a cancer cause
6 could be determined and how it might relate to
7 PCBs.

8 Q. Do you know specifically whether there were
9 steps planned to be taken to develop more of a
10 medical and scientific basis to defend against
11 the accusation of cancer?

12 MR. DiMURO: Object to the form
13 again. You can answer it.

14 A. There were animal studies being conducted to
15 determine the effect of PCBs on these test
16 animals. And that's one way that at that time
17 was used to determine the possible effect the
18 test chemical might have on humans.

19 Q. Did either Dr. Richard or Mr. Wheeler tell you
20 that testing was undertaken to establish chronic
21 toxicity data with regard to PCBs?

22 A. Yes.

23 Q. Did either of them tell you why further chronic
24 testing was being undertaken at this point?

25 MR. DiMURO: Object to the form.

1 A. Yes.

2 Q. What was their explanation?

3 A. The explanation was to get a better idea what,
4 if any, effect PCBs could have on living
5 creatures, whether they be test rats and mice or
6 human beings or whatever.

7 Q. Did you have any understanding following your
8 conversations with Mr. Wheeler and with Dr.
9 Richard as to whether chronic testing had been
10 done previously on Aroclor 1254 in particular?

11 MR. DiMURO: Which conversations are
12 we talking about, conversations after this
13 document or at any time?

14 MR. TURET: The tutorials he referred
15 to with them at which this document was
16 discussed.

17 MR. DiMURO: I don't think he said
18 this document was discussed at a particular
19 tutorial. I'm trying to get a time fix.

20 Q. Do you understand my question? If you don't
21 understand, I'm happy to rephrase it.

22 A. Would you rephrase it?

23 Q. Sure. Was the document that's in front of you
24 as Papageorge 2 discussed with Mr. Wheeler in
25 one of the tutorials as you described them?

1 A. Yes.

2 Q. Okay. Was the same document discussed with Dr.
3 Richard in one of the tutorials you described?

4 A. Yes.

5 Q. Were those at the beginning of 1970?

6 A. Yes.

7 Q. Now, during those tutorials -- withdraw the
8 question. After those tutorials with Dr.
9 Richard and Mr. Wheeler, did you have an
10 understanding as to whether chronic toxicity
11 testing had been done to Aroclor 1254
12 previously?

13 A. My hesitation is due to the fact that the tests
14 were done in two steps. There was the
15 subchronic testing, the so-called 90-day test
16 which is done to establish an exposure level
17 that will give the maximum dose of the chemical
18 tested to the test animal without killing off
19 all the animals so when it comes time later to
20 conduct the lifetime feeding study. At this
21 point in time I don't recall when the subchronic
22 90-day study was done and when the lifetime
23 study was begun. So in this interval of time
24 there was serious consideration given to either
25 or both of those. The intent was to continue on

1 and conduct the kind of study that was done at
2 that time for evaluating a material for food and
3 cosmetic use.

4 Q. Just to clarify, the testing that was then
5 underway was with Industrial Bio-Test
6 Laboratories, Inc.?

7 A. Yes.

8 Q. Putting those tests aside, which I understand
9 were underway by the time you came on the scene
10 as manager of environmental control, before
11 those tests were begun, do you know from your
12 meetings with Dr. Richard and Mr. Wheeler
13 whether chronic testing had been done on Aroclor
14 1254?

15 A. There were none.

16 Q. Down below in the same document, there is a
17 statement that if chlorinated -- in the
18 paragraph begins, but, we can't easily -- the
19 third sentence says, "if chlorinated biphenyl is
20 shown to have some long-term enzyme or hormone
21 activity in the PPM range, the applications with
22 consumer exposure would cause difficulty." What
23 applications with consumer exposure were
24 envisioned to cause particular difficulty if
25 that proved to be true?

1 A. I'm certain that I can't give you all the
2 potentials, but the one that comes to mind
3 immediately was the carbonless copy paper
4 application. Or the use in inks, or the use in
5 adhesives, the latter two both of which could
6 occur, say, in bread wrappers. So you would get
7 consumer exposure under those conditions. I'm
8 sure there are many others.

9 Q. In the next paragraph Dr. Richard states that
10 either Dr. Risebrough's position is attacked and
11 discounted or we will eventually have to
12 withdraw product from end uses which have
13 exposure problems. Based on your conversations
14 and tutorials with Dr. Richard and Mr. Wheeler,
15 what steps did you understand were being taken
16 to attack or discount Dr. Risebrough's position?

17 A. Well, the ongoing toxicity studies at IBT
18 Laboratories is an attempt to get data to better
19 understand the toxicity of PCBs. I suppose, a
20 form of response to Dr. Risebrough was the fact
21 that Mr. Wheeler and I actually went and visited
22 Dr. Risebrough at the Berkeley campus of the
23 University of California and discussed his
24 findings. That occurred in early 1970.

25 Q. Any other steps that come to mind?

1 A. Not at the moment, no.

2 Q. In your meeting with, I think you said you and
3 Mr. Wheeler met with Dr. Risebrough?

4 A. Yes.

5 Q. Based on that meeting did you find fault with
6 Dr. Risebrough's findings?

7 MR. DiMURO: Object to the form. You
8 can answer it.

9 A. I don't know that we can say we found fault. We
10 had a good discussion with Dr. Risebrough. We
11 expressed our thoughts based on Monsanto's
12 decades of experience with PCBs. Dr. Risebrough
13 appeared to me to be very receptive to some of
14 thoughts that were shared with him in terms of
15 the evidence that he felt he had. I personally
16 walked away from that meeting with the
17 impression that Dr. Risebrough really down deep
18 suspected DDT. The PCBs just happened to show
19 up in his samples as he analyzed for DDT.

20 Q. Was there something that Dr. Risebrough
21 specifically said that led you to that
22 conclusion?

23 A. I don't remember his exact words, but to the
24 effect something like, well, you know, those DDT
25 levels are so high, you can't ignore them,

1 comments like this. He's the one that kept
2 bringing up DDT.

3 Q. Okay. The next sentence in that document from
4 Dr. Richard says, quote, that since Risebrough's
5 paper in "Nature" December 1968 has just been
6 published, it is timely, perhaps imperative that
7 this paper and its implications be discussed
8 with certain customers. Did Dr. Richard explain
9 to you in his tutorial what he meant by certain
10 customers?

11 A. As best I remember, he was recommending
12 contacting the customers of Monsanto who were
13 the biggest users of PCBs.

14 Q. And was the suggestion that other customers
15 would not be contacted?

16 A. Not initially until more data came about.

17 Q. Did Dr. Richard explain to you during his
18 tutorials with you whether well prepared
19 discussions had taken place with the legal
20 department based on his memo?

21 A. I don't know that that came up as a specific
22 subject. It's customary in Monsanto to involve
23 their legal staff for many, many things.
24 They're part of the team, in other words.

25 Q. Did you happen to have a tutorial with anybody

1 from the legal staff?

2 A. Yes.

3 Q. Was that Mr. Park?

4 A. Yes.

5 Q. Anybody else?

6 A. No, not in the tutorial phase.

7 Q. But the tutorial we're talking about, the
8 beginning of 1970 phase when you were learning
9 the job of manager of environmental control?

10 A. That is correct.

11 Q. Did you have a tutorial with Dr. Keller or Dr.
12 Tucker?

13 A. Yes.

14 Q. Both?

15 A. Separately and collectively, yes.

16 (Memo dated 3/10/69

17 marked as Exhibit No. 3

18 for identification.)

19 Q. For the record, the document being marked as
20 Papageorge 3 is a March 10, 1969, memorandum
21 from Dr. Richard to the file, Bates number MAE
22 053277 to 279.

23 Mr. Papageorge, I'm not going to ask
24 you about too much in this one. If you could
25 flip to the third page. If you wish to read it

1 all, you're welcome to do so. I'm not going to
2 ask you about the first couple of pages. There
3 is a discussion that begins, I guess the second
4 paragraph down says, defense seems to have these
5 elements, and there are Roman numerals one
6 through five. First of all, did you see this
7 document during your tutorials with Dr. Richard?

8 A. Yes, I remember it.

9 Q. Did he explain to you what he meant by "defense
10 seems to have these elements"?

11 A. Yes. When he used the word "defense" he was
12 really talking about getting more information,
13 good information regarding anything relating to
14 PCBs and the environment.

15 Q. Is it fair to say that "defense" means defense
16 against the accusations that had come from Dr.
17 Risebrough and others?

18 MR. DiMURO: Object to the form. You
19 can answer.

20 A. I can only share with you, sir, what I got from
21 Dr. Richard when I sat down with him. And my
22 understanding was that he wanted to get as much
23 in the way of good hard data that when the issue
24 of PCBs arose at any time we would be in a
25 position to respond with some good data.

1 Q. Okay.

2 (Minutes of meeting
3 marked as Exhibit No. 4
4 for identification.)

5 Q. For the record, Papageorge 4 is -- states at the
6 top, Minutes of Aroclor, quote, Ad Hoc, close
7 quotes, Committee, first meeting, dated
8 September 5, 1969, Bates number MAE 021976 to
9 79.

10 Mr. Papageorge, have you seen this
11 document before today?

12 A. I have.

13 Q. Was this one of the documents that was shared
14 with you during your tutorials with Dr. Farrar
15 or Dr. Richard or Mr. Wheeler?

16 A. Yes.

17 Q. What was your understanding of what the ad hoc
18 committee was?

19 A. These individuals were appointed to collectively
20 sit down and address the evolving PCB
21 environmental issue and advise management as to
22 what was the then current knowledge and
23 eventually to advise management on how to
24 address this issue.

25 Q. By this issue, you mean the PCBs?

1 A. PCBs and the environment.

2 Q. First of all, which of the gentlemen that I
3 mentioned before did you discuss this document
4 with during your tutorials?

5 A. Well, of course, Mr. Wheeler, Mr. Richard, those
6 are the two principal individuals.

7 Q. And did those gentlemen share with you that the
8 three objectives listed at the top of that page
9 had been agreed to by the ad hoc committee?

10 MR. DiMURO: Object to the form. You
11 can answer.

12 A. Yes, I recall that they felt those were
13 reasonable objectives.

14 Q. And as of the time you became manager of
15 environmental control, which I guess was three
16 months or so after this meeting, were you aware
17 that -- let me withdraw that question. Let me
18 refer you to Page 3 of these notes, the
19 paragraph numbered eight, "Environmental
20 Contamination by Customers"?

21 A. I see it.

22 Q. Did you have occasion to discuss with Dr.
23 Richard or Mr. Wheeler the issue of highway
24 paints?

25 A. Yes, among others.

1 Q. Was it your understanding that was one of the
2 applications that was particularly of concern?

3 MR. DiMURO: Object to the form.

4 A. It was an application that was perceived to be a
5 good example of a use in which the PCBs are
6 directly introduced into the environment. I
7 personally don't know that I would call it a
8 particular concern. It was just a good example
9 to describe an open, quote unquote, use.

10 Q. Is it fair to say it was an application that was
11 of concern because of its direct possibility of
12 emission into the environment?

13 A. Yes.

14 Q. Was it your understanding that a million pounds
15 a year was a substantial quantity of PCBs for
16 one application as of 1970?

17 MR. DiMURO: Objection to form.

18 MR. LIPSHUTZ: Same objection.

19 Q. Did you have an understanding?

20 A. My understanding was based on the fact that 85
21 million pounds a year of PCBs were produced by
22 Monsanto and a million of that went into this
23 paint, but that didn't strike me and doesn't to
24 this day strike me as a major use.

25 Q. Was that 85 million pounds of PCBs that were

1 used for open applications in 1970?

2 A. No.

3 Q. What number of million pounds were used for open
4 applications at that time?

5 A. I don't have an exact number.

6 MR. O'CONNOR: Let me object in terms
7 of are you talking about sales or uses by the
8 ultimate customer? I'm a little confused. You
9 need to clarify.

10 MR. TURET: Sales.

11 A. The only measure I personally have is that when
12 the open uses were terminated and the heat
13 transfer uses were terminated, the use of PCBs
14 dropped to about half from 85 million down to
15 say 40 million or so. That's the only measure I
16 have as to what possibly could have been used in
17 open uses. I don't have any other data.

18 Q. Can you flip back to the second page of those
19 minutes? At the very top of Page 2 at the top
20 numbered four, did Dr. Richard or Mr. Wheeler
21 share with you their concerns about doing
22 corroboration of testing of samples of PCBs?

23 MR. DiMURO: Object to the form.

24 A. I don't remember any concern about that. In
25 fact, it was, as I remember, it was really

1 encouraged. This is one way for Monsanto to
2 find out where are those PCBs out in the
3 environment without having to send its own
4 people out to get samples.

5 (Executive summary
6 marked as Exhibit No. 5
7 for identification.)

8 Q. For the record, Papageorge 5 is an October 29,
9 1969, Executive Summary, PCB Pollution. Mr.
10 Papageorge, have you seen this document before
11 today?

12 A. Yes, I have.

13 Q. Is this also one of the documents discussed
14 during your tutorials?

15 A. Yes.

16 Q. Was that with Mr. Wheeler?

17 A. Yes.

18 Q. With Dr. Richard as well?

19 A. No, just Mr. Wheeler.

20 Q. Who put this executive summary together?

21 A. The ad hoc committee which we discussed
22 previously worked and prepared this document.

23 Q. Is this their final report if you know?

24 MR. DiMURO: Object to the form.

25 A. It seems to me as best as I can recall that

1 there was another report that contained many of
2 these paragraphs in it but contained a little
3 more detail information.

4 Q. Is it your understanding from your tutorial
5 sessions that the information that was contained
6 in this executive summary was information that
7 was gathered by the ad hoc committee?

8 A. Yes.

9 Q. So to the extent there is information in this
10 executive summary that reflects quantity of
11 sales or dollars in sales or dollars in profits,
12 is that information that was gathered by the ad
13 hoc committee?

14 A. Yes.

15 Q. Did Dr. Richard explain to you -- I'm sorry, it
16 was Mr. Wheeler that discussed this with you.
17 Did Mr. Wheeler explain to you what he meant on
18 Page 2 about legal responsibility under, "Effect
19 on Monsanto"?

20 A. We did talk about that item and it had to do
21 with the general subject of Monsanto's legal
22 responsibility regarding any product and its
23 uses. I don't recall any specific highlight
24 here as it relates to PCBs only.

25 Q. Did Mr. Wheeler make any reference to legal

1 liabilities for personal injuries caused by
2 PCBs?

3 A. We talked about the legal liability of injuries
4 relating to any chemicals sold by Monsanto,
5 nothing specific to PCBs, again.

6 Q. What was the nature of discussion about
7 chemicals manufactured by Monsanto?

8 A. Well, we had to package them properly, warn
9 against any health effects, give guidance on
10 proper handling, assist in any transportation
11 accidents as examples, that kind of thing.

12 Q. During your tutorial sessions with either Mr.
13 Wheeler or Dr. Richard or any of the others whom
14 you've mentioned, was there a discussion about
15 the wide range of paints and coatings that are
16 referred to on Page 2, No. 5?

17 MR. DiMURO: Could we have the
18 question read back by the court reporter,
19 please?

20 (Question read)

21 MR. DiMURO: Objection to form.

22 A. I don't recall our discussion giving any unique
23 attention to that particular item, that being no
24 different than for other uses of PCBs.

25 Q. That's your answer?

1 A. Yes, sir.

2 Q. On the third page there is a reference to
3 Monsanto outside statements which says, letter
4 sent to electrical customers regarding problem.
5 Do you remember discussing that with Mr.
6 Wheeler?

7 A. Yes.

8 Q. What letter is that referring to?

9 A. This was a letter dated March, 1969, as I
10 recall, bringing the electrical customers, and I
11 believe there was some other large users in that
12 group in addition to the electrical use,
13 up-to-date and referring to Dr. Risebrough's
14 findings as reported in the news media.

15 Q. And your recollection is that was March of 1969?

16 A. Yes, sir.

17 Q. I may have overlooked that letter, but does
18 counsel know whether that letter was produced as
19 part of the health and safety documents?

20 MR. DiMURO: I don't know.

21 MR. DAVIDSON: Probably.

22 MR. DiMURO: That's if, in fact, he's
23 referring to the right letter. He thinks it's
24 the March '69 letter. It may have a different
25 date.

1 Q. Under the next section says, presentation to
2 CDC. Is that the corporate development
3 committee?

4 A. Yes.

5 Q. What was the corporate development committee at
6 the time?

7 A. This consisted of the top executive officer in
8 Monsanto, and the senior vice presidents of the
9 corporation.

10 Q. Was that entity at the time different than a
11 board of directors?

12 A. Yes.

13 Q. Do you have an understanding of what the
14 corporate development committee's area of
15 responsibility was specifically as it would
16 pertain to PCBs?

17 A. I don't know that the area -- that PCBs is any
18 different than any other product line within
19 Monsanto. They had the ultimate authority to
20 make decisions relating to Monsanto's businesses
21 and the execution of activities related to those
22 businesses. The chairman and chief executive
23 officer was also the chairman of the board, so
24 there is this connection with the board of
25 directors.

1 (Outline
2 marked as Exhibit No. 6
3 for identification.)

4 Q. For the record, Papageorge 6 is a rough draft,
5 November 10, 1969, Outline, PCB Environmental
6 Pollution Abatement Plan, Bates No. MAE 023703
7 through 726.

8 Mr. Papageorge, have you seen this
9 document before today?

10 A. Yes, I have.

11 Q. And is this also a document that was discussed
12 during one of your tutorials?

13 A. Yes.

14 Q. With whom?

15 A. Mr. Wheeler.

16 Q. What's your understanding of who prepared this
17 document?

18 A. It appears to be the ad hoc committee's draft of
19 the text that would be shared with the corporate
20 development committee.

21 Q. Is that understanding based on your meeting with
22 Mr. Wheeler or something else?

23 A. Primarily from what Mr. Wheeler told me.

24 Q. Now, on Page 3 there is an identification under
25 Roman numeral two, says problem, damage to the

1 ecological system by contamination from the
2 polychlorinated biphenyl, PCB. Is that your
3 understanding of the problem being addressed
4 with regard to PCBs?

5 A. I don't think I understand your question.

6 Q. Well, that statement does not refer to damage or
7 -- let's rephrase that -- does not refer to
8 alleged health hazards to humans. Is it your
9 understanding that the problem being addressed
10 by the ad hoc committee was limited to damage to
11 the ecological system by contamination from
12 PCBs?

13 A. In that particular part, yes.

14 Q. What particular part?

15 A. Roman numeral two, the problem area that was to
16 be covered at a meeting with the CDC.

17 Q. So you're saying that this report only relates
18 to the problem that was to be raised with the
19 corporate development committee at the next
20 meeting?

21 MR. DiMURO: I'm going to object to
22 the form.

23 A. I don't know what you mean by the next meeting.

24 Q. Okay. I'll clarify when we come back in a few
25 minutes.

1 officially notified about known effects nor do
2 our labels carry this information?

3 A. That meant the effect on creatures. The known
4 effects as reported in '69 included Risebrough's
5 contentions and other reports that came out of
6 some other study groups, Cornell University
7 study on the falcon, for example.

8 Q. Okay. Am I understanding you correctly that
9 those issues had not been brought to the
10 attention of some of the customers of Monsanto
11 and that those issues were not addressed on the
12 labels of PCBs?

13 A. That's right.

14 Q. Now, there is also the sentence in that report
15 that says, quote, those are only a few of the
16 possible legal implications which would best be
17 covered by the legal department. Did you and
18 Mr. Wheeler talk about any of the other legal
19 implications?

20 A. I don't remember any discussion, any further
21 discussion on the legal implications.

22 Q. On Page 6 there is a statement that, down under
23 Roman numeral seven, quote, although Monsanto is
24 most probably responsible for the U.S.
25 contamination and jointly responsible with MCL

1 all PCBs?

2 A. No one was supporting that one.

3 Q. Is it your understanding that there was
4 unanimous recommendation that alternative C be
5 chosen?

6 A. Yes.

7 (Minutes of meeting
8 marked as Exhibit No. 7
9 for identification.)

10 Q. For the record, Papageorge 7 is November 17,
11 1969, minutes of the corporate development
12 committee. Mr. Papageorge, have you seen this
13 document before?

14 A. Yes, I have.

15 Q. Is that also one of the documents that you
16 reviewed during your tutorial sessions?

17 A. Yes.

18 Q. With whom?

19 A. Mr. Wheeler.

20 Q. And do you know who DW Miller was or is?

21 A. He was one of Monsanto's attorneys.

22 Q. Do you know what was referred to under legal
23 aspects, number three, testing program to
24 determine the possible escape of PCBs from
25 plasticizers?

1 MR. DiMURO: Where are you reading
2 from, Craig?

3 MR. TURET: I'm sorry, the second
4 page, legal aspects, number three.

5 A. Yeah, I see that. I don't understand your
6 question. That's Mr. Miller's suggestion to the
7 corporate development committee that that item
8 be looked into.

9 Q. Do you know whether tests of that type were, in
10 fact, undertaken?

11 A. As possible escape from plasticizers, no they
12 were not undertaken.

13 Q. Do you know whether at the corporate development
14 committee that recommendation was approved by
15 the CDC?

16 A. It was not approved because they approved a
17 discontinuance of sales to plasticizers, so they
18 came up with a different approach.

19 Q. Do you know one way or another whether these two
20 alternatives were viewed as mutually exclusive
21 during the CDC meeting?

22 MR. DiMURO: I'll object to the
23 form.

24 A. I don't know that.

25 Q. During your discussion with -- during your

1 tutorial sessions with Mr. Wheeler, did you
2 discuss the part down below that in plasticizer
3 uses, evidence is not available as to whether
4 Aroclors escape from end products either through
5 leaching or by dispersal and burning?

6 A. It was mentioned. I don't know that we had any
7 lengthy discussion. It was a well understood
8 piece of information.

9 Q. It was well understood that that evidence was
10 not available?

11 A. That's right.

12 Q. On the final page there is a list of 12 items.
13 Is this essentially the plan of action that was
14 being proposed to the CDC?

15 A. Yes.

16 Q. And is it your understanding that the CDC
17 approved that plan of action?

18 A. Yes.

19 Q. Where it says appoint a project manager up at
20 the top, was that William Papageorge?

21 A. Yes.

22 Q. Where it refers to a task force from members of
23 each business group plus medical, law,
24 engineering and manufacturing, did you, in fact,
25 work with a task force on PCB issues?

1 A. Yes.

2 Q. That's not the same task force as the ad hoc
3 committee; correct?

4 A. That is correct.

5 Q. Who was on the task force as it ultimately was
6 constituted?

7 A. It was the -- it consisted of the directors of
8 the two Monsanto business groups, Mr. Bergen and
9 Mr. Springgate, their sales directors, Mr.
10 Schalk and -- his name escapes me, it will come
11 back to me later -- director of marketing. Dr.
12 Farrar and Dr. Richard representing research.
13 There were the directors of manufacturing, Mr.
14 Savage, and I've forgotten the other
15 individual. We had a representative out of the
16 Monsanto Corporate Engineering Department, Bob
17 Kountz, K-O-U-N-T-Z. Mr. John representing
18 public relations activities, Mr. Park
19 representing legal department, Mr. Wheeler
20 representing the medical department. I believe
21 that covers all the functions. Now, either they
22 or their lieutenants would participate, together
23 or singly. I forgot Mr. Keller, Dr. Keller from
24 analytical research. I believe that covers it.
25 Q. Dr. Tucker on it?

1 A. Well, he was Dr. Keller's lieutenant, his second
2 in position.

3 Q. No. 5 on that list of 12 items says, develop and
4 implement new packaging systems for Aroclor 1254
5 and 1260. Is that a euphemism for changing the
6 labels on those items?

7 A. No, it's not a euphemism. The intent was to
8 design a system for packaging these Aroclors
9 that was less apt to cause leakage and overfills
10 and sloppy, dirty conditions that existed prior
11 to this recommendation. It's part of the
12 attempt to keep it out of the environment.

13 Q. Down at the bottom, second paragraph from the
14 bottom where it says, conclusions, says quote,
15 in light of the recent and developing evidence
16 of a possible threat to certain species of bird
17 and aquatic life, we should plan to discontinue
18 the manufacture of Aroclors 1254 and 1260. Was
19 that also endorsed at this 11/17/69 meeting, to
20 your knowledge?

21 A. Yes.

22 Q. Is that for all applications?

23 A. At that time, yes.

24 (Presentation to field sales
25 marked as Exhibit No. 8

1 for identification.)

2 Q. For the record, Papageorge 8 is a, quote,
3 Presentation to Field Sales, personal and
4 confidential, Bates number MAE 033475 through
5 484.

6 Mr. Papageorge, have you ever seen
7 this document before?

8 A. Yes, I have.

9 Q. Was this one of the documents discussed in your
10 tutorials?

11 A. No, this was developed -- this was developed
12 early in 1970 about the time I was undergoing
13 the tutorials, so this wasn't available for
14 discussion with my tutors, if you will.

15 Q. And do you know who prepared it?

16 A. I am having difficulty recalling just who
17 prepared it. It is written for the plasticizer
18 application customer. That's all I can say
19 about it.

20 Q. Did anything within this document that you've
21 been shown come to you first for editing or
22 approval?

23 MR. DiMURO: I'm just going to object
24 to it. I don't think he's gone through it. If
25 you want him to read the entire document, we can

1 do that.

2 MR. TURET: Skim it.

3 Q. Did you have substantive input into this
4 document before it was drafted?

5 A. Not to my recollection.

6 Q. Flipping to Page 3, Mr. Papageorge, in the third
7 sentence it says, we will recommend that your
8 distributors mail a similar letter promptly to
9 each of their Aroclor customers. Do you know
10 one way or on other, sir, whether ultimately
11 distributors were instructed to send letters to
12 Aroclor customers relating to the withdrawal of
13 PCBs from the market?

14 MR. DiMURO: Object to the form.

15 A. Yes, they were.

16 Q. Next sentence says, copies of our letter will be
17 made available to our distributors in quantities
18 sufficient to meet their needs. Do you know
19 whether that was done?

20 A. Yes, it was.

21 Q. Did you participate in that effort at all?

22 A. You mean did I stuff envelopes and take them to
23 the mail office?

24 Q. Did you have any substantive input into the
25 drafting of the letters?

1 MR. DiMURO: That were sent to the
2 distributors?

3 Q. That were sent to the distributors?

4 A. I was in a position where I reviewed drafts of
5 letters that were going to distributors as well
6 as to customers.

7 Q. Do you know whether the practice was actually
8 implemented to supply copies of letters to the
9 distributors for them to send onto customers?

10 A. I was --

11 MR. LIPSHUTZ: Object to form.

12 A. I was led to believe that that was done.

13 Q. The sentence after that says, it's not our
14 responsibility to alert our distributors'
15 customers. Do you have any understanding as to
16 what the basis for that sentence is?

17 A. It's primarily one of we are not aware of who
18 the distributors' customers were. Therefore, we
19 were in no position to address anything to
20 anybody. So under those conditions how can a
21 company like Monsanto be responsible?

22 Q. Now, the last sentence in that paragraph says,
23 quote, to explain the action to our distributors
24 we have visited the head offices of Central
25 Solvents and American Mineral Spirits, period.

1 Did you personally visit the head offices of
2 Central Solvents or American Mineral Spirits?

3 A. I did not, no.

4 Q. Do you have any knowledge as to whether that
5 meeting actually took place with Central
6 Solvents and American Mineral Spirits?

7 A. I was so informed.

8 Q. Who informed you that a meeting took place with
9 American Mineral Spirits?

10 A. As far as I remember, it was Mr. Walter Schalk.

11 MR. LIPSHUTZ: I'm sorry, I didn't
12 hear your response.

13 THE WITNESS: Walter Schalk,
14 S-C-H-A-L-K.

15 Q. Did Mr. Schalk tell you that he had personally
16 visited American Mineral Spirits?

17 A. I don't remember that, no.

18 Q. You just remember generally that he told you a
19 meeting had occurred?

20 A. Yes.

21 Q. Do you remember anything else Mr. Schalk told
22 you about discussions with American Mineral
23 Spirits on this issue of withdrawal from the
24 market of open applications?

25 A. All I remember is that the two, Central Solvents

1 and American Mineral Spirits, were both
2 responsive and they were willing to go along
3 with it.

4 Q. Do you know whether Mr. Schalk is deceased?

5 A. I don't think he is. I haven't heard
6 otherwise. He's not deceased to my knowledge.

7 Q. Do you know, Mr. Papageorge, whether Central
8 Solvents and American Mineral Spirits were the
9 only distributors of Aroclor PCB products for
10 Monsanto?

11 A. At that time --

12 MR. LIPSHUTZ: Let me object to the
13 form of that question.

14 A. At that time they were the two that were still
15 active.

16 Q. Were there other distributors that had
17 previously distributed Aroclor products but were
18 no longer active by 1970?

19 A. That's my understanding.

20 Q. Do you know one way or the other whether
21 American Mineral Spirits had a particular
22 geographic area in which it was a sole
23 distributor for Monsanto products?

24 A. I don't remember the details, no.

25 Q. Do you know whether there was anybody mentioned

1 to you as the person who was the primary contact
2 with American Mineral Spirits?

3 A. No.

4 Q. How about at Central Solvents?

5 A. I do not remember.

6 Q. If you would flip ahead to Page 6?

7 MR. LIPSHUTZ: Craig, off the
8 record?

9 MR. TURET: Yes.

10 (Discussion off the record)

11 Q. You'll see at the bottom of Page 6, Mr.
12 Papageorge, there is a discussion about when a
13 customer calls a regional office about the
14 letter that's going out announcing the
15 withdrawal of Aroclor PCB products from the
16 market, and there is a list of DOs and DON'Ts
17 and likely customer questions that, it states
18 that are approved by Jim Springgate and our
19 legal department. Jim Springgate was who?

20 A. He was the director of the business group that
21 marketed PCBs as plasticizers.

22 Q. The legal department, presumably we're speaking
23 of Mr. Park?

24 A. Don't know.

25 Q. Okay. Flipping on to Page 8 it says, beware of

1 decreased sales to any account after the letter
2 is sent out. If you suspect this, your plan of
3 attack could be, colon, and there is a proposed
4 set of questions and answers. Do you see those?

5 A. I see it.

6 Q. You see down in the middle, the recommendation
7 is that the Monsanto sales representative ask
8 whether the customer has switched to a
9 replacement for the particular product?

10 A. I see that.

11 Q. Then you see if the customer says yes, the
12 Monsanto person is to probe to find out what it
13 is and is it inferior to Aroclor, is it really
14 not a contaminant, too. Mr. Papageorge, do you
15 have any understanding of why that matters if
16 the product is being pulled from the market as
17 an environmental contaminant?

18 A. No, I don't.

19 Q. Do you have any understanding as to whether
20 that's an attempt to boost sales of Aroclor
21 products before they're no longer offered for
22 sale?

23 MR. DiMURO: Object to the form.

24 A. Not to my knowledge.

25 Q. At the bottom, quote that's anticipated from the

1 customer is no, but I'm living off inventory
2 till my boys can get a replacement and there is
3 a suggested response. Do you see any suggested
4 response that would advise the customer not to
5 use inventory?

6 MR. DiMURO: Object to the form. You
7 can answer it.

8 MR. LIPSHUTZ: I'll join that
9 objection.

10 A. I'm having some difficulty responding because I
11 interpret the proposed dialogue as one of
12 assisting the customer finding a replacement in
13 the hopes of Monsanto that that replacement will
14 be a Monsanto product.

15 Q. Was it your understanding, Mr. Papageorge, at
16 the time that the Aroclors were being withdrawn
17 from the market that it was likely customers
18 would have Aroclor products in inventory that
19 would be used up before they switched to other
20 products?

21 A. Yes, that's a given.

22 Q. Flip ahead to Page 9. There is a section
23 entitled "competition."

24 A. I see it.

25 Q. And the statement to the sales representative of

1 Monsanto is, remember that Aroclor plasticizers
2 are outstanding products. They are inert,
3 oxidatively and chemically stable, give good
4 adhesion, et cetera. I can read this word for
5 word. In other words they're used because of
6 performance. Again, do you have an
7 understanding of why the sales rep would be
8 reminded of the virtues of Aroclor products in
9 response to a letter that's withdrawing it from
10 the market?

11 A. There was no letter withdrawing from the market
12 when this -- all it said is that -- the letter
13 said that PCBs of a certain type are being
14 discovered by some laboratories in some
15 samples. There was nothing up to this point
16 that said, we are withdrawing from these
17 applications.

18 Q. So this was at the time where just the issue of
19 environmental contamination has been raised?

20 A. Correct, the presence in the environment.
21 That's all that was known, and only of a certain
22 type, not all the PCBs. So this question and
23 answer sheet tries to address the situation
24 where, hey, we don't know enough to take drastic
25 action. There are some good things in Aroclors

1 or PCBs that you may want to continue benefiting
2 from. That's all this says. It doesn't say a
3 thing about withdrawing as yet.

4 Q. As of the time this was proposed, you said early
5 1970?

6 A. Yeah, at the time the letter to customers went
7 out in February of '70, or thereabouts, that's
8 what this indicates.

9 Q. At the time that this was prepared it was
10 already decided that the letter was going to go
11 out withdrawing Aroclors from the market, wasn't
12 it?

13 MR. DiMURO: I'll object.

14 A. No, it wasn't.

15 Q. Had the corporate development committee already
16 decided that manufacturing was going to cease?

17 MR. DiMURO: Manufacture of what, any
18 Aroclors, Aroclor with PCBs?

19 Q. Do you understand my question?

20 A. Yes, at that particular time --

21 MR. DiMURO: I'll object to the
22 form.

23 A. Your timing is off.

24 MR. LIPSHUTZ: Same objection.

25 Q. Help me to understand it. We had gone through

1 the corporate development committee meeting
2 November 17 of '69?

3 A. Correct.

4 Q. Where we should plan -- the conclusion was we
5 should plan to discontinue the manufacture of
6 Aroclor 1254 and 1260?

7 A. Doesn't say anything about 1242, 1248, all the
8 other PCBs.

9 Q. So is it your interpretation of this document
10 that it is --

11 MR. DiMURO: Which document?

12 Q. The document that's been marked Papageorge 8,
13 that it is encouraging -- that it is encouraging
14 -- I lost my line. Let me start that question
15 again. Is it your understanding that the intent
16 of this presentation to field sales was to
17 promote sales of the other Aroclor products but
18 not Aroclor 1254 and 1260?

19 A. No, the intent was to continue to support the
20 uses of these PCBs until further information
21 indicated that it was not wise to do so. That's
22 all this does. In other words, Mr. Customer,
23 don't panic. You've got a good product in your
24 product, keep using it. That's the intent of
25 this document.

1 MR. TURET: Okay. I have no further
2 questions about it.

3 MR. O'CONNOR: We're going to take a
4 break and get those documents to you.

5 MR. LIPSHUTZ: I appreciate it. What
6 time are we going to reconvene?

7 (Lunch recess.)

8 (Management plan
9 marked as Exhibit No. 9
10 for identification.)

11 MR. TURET: Back on the record.

12 Q. For the record, Mr. Papageorge is being shown a
13 document that's been marked Papageorge 9 which
14 is a "Rough Draft Management Plan PCB
15 Environmental Problem," Bates number MAE 032890
16 dash 901.

17 Have you ever seen the document that
18 has been marked as Papageorge 9 before?

19 A. Yes, I have.

20 Q. What is it?

21 A. This is the rough draft of a management plan
22 addressing the PCB environmental problem.

23 Q. Who prepared it if you know?

24 A. As best as I recall, this is the ad hoc
25 committee we discussed earlier.

1 Q. So if it was from the ad hoc committee, do you
2 have any understanding as to when this would
3 have been put together?

4 A. The more I study this document, I realize that
5 my answer is incorrect. This appears to be a
6 document that I prepared.

7 Q. What leads you to believe it was one you that
8 you prepared, sir?

9 A. As I read it, it includes activities which I
10 shared with the CDC or its successor, CAC in
11 Monsanto.

12 Q. I didn't realize you were finished. I'm sorry.
13 Would you flip to Page 3? I take it that the
14 paragraph that appears under objectives is your
15 articulation of --

16 A. Yes.

17 Q. -- the objective?

18 A. Uh-huh.

19 Q. No further questions about that one.

20 (Minutes of meeting
21 marked as Exhibit No. 10
22 for identification.)

23 Q. For the record, Papageorge 10 is the minutes of
24 a meeting of the corporate management committee
25 May 11, 1970. Bates number MAE 058660 dash 61.

1 Mr. Papageorge, have you seen this document
2 before?

3 A. Yes, I have.

4 Q. Okay. Do you know one way or the other whether
5 this was the meeting when the final decision was
6 made to terminate sales of all chlorinated
7 biphenyls to non-controllable end uses?

8 A. Yes.

9 Q. Yes, that was the meeting?

10 A. Yes.

11 Q. And before May 11, 1970, had there been any
12 final decisions made by Monsanto to terminate
13 sales of Aroclor 1254 to open uses?

14 A. No.

15 Q. The deadline for completion that's listed in the
16 minutes is August 30, 1970. Is that the
17 deadline that you had recommended to the
18 committee?

19 A. I don't know that I had the specific date of the
20 30th. I think I told them the last of August
21 and somebody forgot that August has 31 days in
22 it.

23 Q. Fair enough. That's all I have on that.

24 (Memo dated 10/6/70

25 marked as Exhibit No. 11

1 for identification.)

2 Q. For the record, Papageorge 11 is a document
3 dated October 6, 1970, PCB Environmental
4 Problem, September Status Report. Mr.
5 Papageorge, have you seen this document before
6 today?

7 A. Yes, I have.

8 Q. If you would flip to the last page, is that your
9 signature down at the bottom?

10 A. Yes.

11 Q. Is this a document that you put together
12 yourself?

13 A. Yes. Well, I used the scissors and paste
14 approach. Others contributed the paragraphs
15 that are included.

16 Q. Okay. Under the section on Page 2 that says
17 marketing, there is a statement that our
18 distributors are well on their way to zero
19 inventories of the Aroclors, having pretty well
20 matched their purchases from Monsanto with firm
21 orders from customers. Is that a section that
22 you drafted, Mr. Papageorge?

23 A. No, that would be a marketing representative.

24 Q. This status report is dated October 6, 1970.
25 That's after the deadline or the cutoff for

1 sales of Aroclors to open ended applications;
2 correct?

3 A. It is.

4 Q. And there were no further sales of those
5 products that were made after August 30 of 1970
6 for end user --

7 MR. DiMURO: For open --

8 Q. For open applications other than NCR carbon
9 paper?

10 A. That's the exception, yes. All the others were
11 terminated.

12 Q. This is now a little over a month past that
13 deadline?

14 A. Yes.

15 Q. Does distributors here refer to American Mineral
16 Spirits Company and Central Solvents, the two
17 distributors we talked about before?

18 A. Yes.

19 MR. LIPSHUTZ: I'm going to object to
20 the form of the question as well as to the
21 foundation of the question.

22 Q. Did you hear him answer?

23 MR. LIPSHUTZ: I did not.

24 MR. DiMURO: Did you answer, Mr.
25 Papageorge?

1 A. My answer is yes.

2 Q. Mr. Papageorge, is it your understanding that
3 distributors were utilized by Monsanto for
4 smaller purchases of Aroclor products?

5 MR. LIPSHUTZ: Object to the form.

6 MR. DiMURO: I'll object to the form
7 also. You can answer it.

8 A. Generally I have difficulty with the word
9 "small." It varied. And the distributors
10 handled more than just PCBs.

11 Q. I understand.

12 A. Generally it was the smaller quantities, whether
13 per shipment or per year and so on. Sometimes
14 it would be a big shipment at one time,
15 sometimes it would be a drum a week type of
16 approach, so it would vary.

17 Q. I take it from the sentence that you and whoever
18 drafted this section for the marketing
19 department were aware that the distributors
20 still had some inventory on hand as of October
21 of 1970?

22 MR. LIPSHUTZ: I'm going to object to
23 the form and the foundation of the question.

24 A. Well, they had some inventory, but this
25 particular paragraph implies that the inventory

1 was not too big and it appeared that very
2 little, if any, unsold material would be
3 returned.

4 Q. And that it's on its way to zero?

5 A. Yes.

6 Q. Then paragraph after that says it would be
7 several months before substantial volumes are
8 being sold, however, as most companies have some
9 inventory of the old products in stock. Again,
10 was it your understanding back in October of
11 1970 that customers had inventories of the
12 Aroclor products in stock that were not being
13 sold any longer by Monsanto?

14 MR. O'CONNOR: Let me object because
15 I think you're mischaracterizing that
16 paragraph.

17 MR. DiMURO: Join in the objection.

18 MR. O'CONNOR: By not reading the
19 sentence previous.

20 MR. LIPSHUTZ: I'm not sure I heard
21 the objection.

22 MR. TURET: Let me read both
23 sentences together.

24 MR. DiMURO: Let me have the witness
25 -- if you're going to ask him about the

1 paragraph, he needs to read the paragraph.

2 MR. TURET: That's fine.

3 A. I have finished reading it.

4 Q. I want my question to be clear. This is
5 reference to non PCB products that were designed
6 to replace the Aroclor PCB products; correct?

7 MR. DiMURO: Objection to form.

8 MR. O'CONNOR: Objection to form.

9 MR. LIPSHUTZ: Same objection.

10 A. The first sentence refers to non PCB replacement
11 product.

12 Q. And the sentence that follows it says, it will
13 be several months before substantial volumes are
14 being sold, however, because most companies have
15 some inventories of the old products in stock.
16 Does that mean that the non PCB replacement
17 products will not be sold in substantial volumes
18 for some months because customers are still
19 working off inventories of the old products?

20 A. That's what it says.

21 Q. That doesn't come as a surprise?

22 A. That's normal business behavior; you always work
23 with an inventory.

24 Q. No further questions on this one.

25 (Handwritten note

1 marked as Exhibit No. 12
2 for identification.)

3 Q. For the record, Papageorge 12 is on the cover, a
4 cover note from the desk of WB Papageorge with
5 some attached materials, MAE 058693 through
6 723.

7 Mr. Papageorge, have you ever seen
8 the document that's been marked as Papageorge 12
9 before?

10 A. Yes, I have.

11 Q. What is it?

12 A. It's a collection of copies of transparencies
13 used by a Mr. John Mason of Monsanto in a
14 presentation to the corporate management
15 committee on the status of the PCB environmental
16 program.

17 Q. And John Mason was who?

18 A. At that time he was, I think his title was
19 assistant general manager of the organic
20 division of Monsanto Chemicals Company.

21 Q. So the attachments to this cover page you said
22 were transparencies that were shown to the
23 corporate management committee?

24 A. Yes.

25 Q. In March of 1971?

1 A. Yes.

2 Q. The second page -- the first page of the
3 attachment says non-controllable end uses, and
4 in parentheses, plasticizers, at the top?

5 A. Yes.

6 Q. Number three says sales to date slow but
7 attributed to high inventories accumulated prior
8 to August 30?

9 MR. DiMURO: We're on a different
10 page.

11 Q. First page of the attachment, No. 3. This
12 refers to the non-controllable end uses for
13 plasticizers, in other words the open end uses?

14 A. Yes.

15 Q. This was what was being reported to the
16 corporate management committee in March of '71?

17 A. Yes, it is.

18 Q. Now, do you have an understanding as to when the
19 purchases of Aroclor 1242 by NCR terminated?

20 A. Not exactly. I have a lasting impression that
21 they terminated by mid year 1971.

22 Q. And flip ahead to Bates numbered page 058708.
23 Let me ask, why was an exception made for sales
24 to NCR?

25 A. They had not developed a technology in which a

1 replacement material was found and they were
2 also relying on some research that was taking
3 place in England -- yes, in England. And it
4 took at least six months as best I recall before
5 the alternative solvent could be found to take
6 the place of the PCB that was used.

7 Q. Was that the only open application for which
8 there was not a readily available alternative?

9 A. To my knowledge, yes.

10 Q. And according to the page we flipped to, there
11 were 6.699 million pounds of Aroclor 1242 sold
12 by Monsanto to NCR in 1970.

13 A. Yes.

14 Q. Now, flip ahead to page 058712 for a moment.

15 A. I have it.

16 Q. I'm sorry, that's my mistake. Never mind. I
17 have no further questions on that.

18 (Minutes of meeting
19 marked as Exhibit No. 13
20 for identification.)

21 Q. For the record, Papageorge 13 is minutes of a
22 meeting of the corporate management committee
23 March 8, 1971.

24 Mr. Papageorge, have you ever seen
25 this document before today?

1 A. Yes, I have.

2 Q. And do you recognize it as the meeting minutes
3 from the corporate management committee of March
4 8, '71?

5 A. I do.

6 Q. There is a reference on the third page to the
7 fact that the division has essentially met its
8 goals in the six point program. Was that -- is
9 that, the six point program that's referred to
10 throughout those minutes, the termination of
11 sales to open end uses and so forth?

12 A. Yes.

13 Q. And there is a statement that PCB usage has been
14 reduced from 75 million pounds in 1969 to 45
15 million pounds in 1971 without a major reduction
16 in profitability. Was it your understanding
17 that notwithstanding the withdrawal from the
18 market for all open end applications that the
19 PCB containing products were still maintaining
20 the same level of profitability?

21 MR. DiMURO: Object to the form.

22 A. I don't know if it was the same level. There
23 was a reduction but it was not described as a
24 major reduction.

25 Q. I have no further questions on that.

1 (Documents

2 marked as Exhibits Nos. 14-A & 14-B

3 for identification.)

4 Q. For the record, 14-A is a June 2, 1971 Telex or
5 fax from HA Vodden, V-O-D-D-E-N, to Dr. Kelly.
6 14-B is a memo communication from Dr. Kelly to
7 HA Vodden dated June 3. Mr. Papageorge, have
8 you ever seen these two documents before today?

9 A. I have.

10 Q. And what is your understanding of what they are?

11 A. Well, the first one is a Telex from our research
12 representative in the United Kingdom asking Dr.
13 Kelly about the questions they've asked
14 regarding carcinogenic properties of Aroclors
15 which are PCBs, and Exhibit 14-B is Dr. Kelly's
16 memorandum response indicating that in essence
17 he had no information, no evidence of
18 carcinogenic properties as a result of some
19 feeding experiments. In his 35 years experience
20 in manufacturing of PCBs he'd never heard of an
21 occupationally induced cancer in our workers.

22 Q. Mr. Papageorge, do you know whether testing was
23 ever performed on Monsanto employees in the
24 Krummrich plant who were involved in
25 manufacturing of PCBs? By that, I mean blood

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1 testing?

2 A. I am not personally aware of any testing of
3 employees' blood for PCBs.

4 (Letter dated 5/10/72
5 marked as Exhibit No. 15
6 for identification.)

7 Q. For the record, Papageorge 15 is a May 10, 1972
8 letter from Dr. Kelly to Dr. Davies of the
9 Council for Environmental Quality, Bates number
10 MAE 021600.

11 MR. DiMURO: What's the question?

12 MR. TURET: I don't want to interrupt
13 him if he's trying to read the document.

14 Q. Have you seen this letter before today?

15 A. I don't recall it.

16 Q. Do you know one way or the other whether the
17 testing that's referred to in this letter ever
18 took place?

19 A. First I've seen of it. I don't know.

20 Q. Mr. Papageorge, you're being shown a document
21 that was marked in the previous deposition as
22 McKee 13. Have you ever seen that document
23 before?

24 A. I recognize it, yes.

25 Q. Did you first see it while you were still

1 employed by Monsanto?

2 A. Yes.

3 Q. In which capacity?

4 A. As best I recall, I was the director of the
5 environmental operations at the time and because
6 of my previous close relationship to the PCBs I
7 was asked to glance at or review a draft version
8 of this document and I was then shown a finished
9 copy.

10 Q. And the draft version that you were shown, was
11 that for your general interest or was that to
12 give you an opportunity to revise it before it
13 was finalized?

14 A. For both.

15 Q. Let me direct your attention to Pages 011683 to
16 684 which is a chart of PCBs manufacturing and
17 sales by Monsanto. This is -- you're going to
18 have to follow along two pages since the years
19 seem to go onto the next page, but do you see
20 where it says, plasticizers applications, which
21 is about the middle of the page?

22 A. I see it.

23 Q. If you follow it along onto the next page?

24 MR. DiMURO: What does it begin with
25 on the next page?

1 MR. TURET: 13361.

2 MR. DiMURO: Okay.

3 Q. First of all, did you have a role, Mr.
4 Papageorge in assembling the information about
5 sales of PCBs?

6 A. No. Let me correct that. I was the one that
7 requested and eventually got the information
8 from the period 1957 to 1971 or so. The
9 information from that '71 period to the '78
10 shown here was obtained by others.

11 Q. Focusing on the time period from '68 through and
12 including 1970, there appears to be a --
13 roughly, this is in thousand pounds, so there
14 appears to be a 2 million pound increase from
15 1968 to 1969 of plasticizer applications for
16 PCBs?

17 MR. DiMURO: Are these millions?

18 MR. TURET: Says thousand.

19 Q. You've got a 2,000 thousand increase is that how
20 you read it as well? How much of an increase do
21 you see between 1968 and 1969 for plasticizer
22 applications of PCB sales?

23 A. I'm subtracting 14 from 19, gives me five. '69
24 -- okay. That's three million pounds.

25 Q. Two million pounds, 14 to 16?

1 A. I'm sorry, I'm looking at the 1970 number. All
2 right, yeah, 2 million pounds.

3 Q. From 1969 to 1970, there is an increase of three
4 million pounds?

5 A. Yes.

6 Q. And the first of the letters informing customers
7 about environmental concerns went out in
8 February of 1970?

9 MR. DiMURO: I'll object to the
10 form.

11 A. Yes.

12 Q. And notwithstanding that letter going out in
13 February, there was still a substantial increase
14 in sales in 1970?

15 A. But that letter in February had nothing to do
16 with production sales.

17 Q. I'm not asking you to equate cause and effect;
18 I'm making an observation.

19 MR. O'CONNOR: About cause and
20 effect. I'm going to object to the form. The
21 numbers speak for themselves.

22 Q. Also, take a look down, if you would, to the
23 first page, see where Aroclor 1254 is listed?

24 A. I see it.

25 Q. If you trace that along onto the next page

1 you'll see it's the column that has 6696 in the
2 first column?

3 A. I see it.

4 Q. Tracing it through, there were increases in
5 Aroclor 1254 in particular from '68 to '69;
6 correct?

7 A. '68 to '69 about a million pounds.

8 Q. And then it was a 2.6 million pound increase
9 from '69 to '70?

10 A. Yes.

11 Q. Mr. Papageorge, you're looking at a document
12 that was marked in the previous deposition as
13 McKee 2, possible customer questions on PCBs.
14 Have you seen this document before?

15 A. Let me glance at it a bit. I have glanced
16 through the article or through the exhibit, but
17 I don't recall seeing this document before.

18 Q. Okay. I won't ask further questions on it.
19 Pull out McKee 3. Mr. Papageorge, you're now
20 being shown a document marked in the previous
21 deposition as McKee 3. It's a press query from
22 October 28, 1970. You're listed as one of the
23 addressees on it. Do you remember having seen
24 this document before?

25 A. I remember it, yes, sir.

1 Q. And the subject in that press query is Aroclor
2 1254 that had been used in paints on silos.
3 When is the first instance that you can recall
4 hearing about contamination as a result of use
5 of Aroclor as paint on silos?

6 MR. DiMURO: Object to the form.

7 A. At about this time, mid 1970.

8 Q. And do you know if there was ever any legal
9 action instituted against Monsanto based on the
10 contamination from silo paint containing PCBs?

11 A. Yes, there were.

12 Q. Where did that take place?

13 A. I remember some legal activity in which I was
14 involved in Indiana relating to cattle exposed
15 to silage in painted silos, concrete silos.

16 Q. Was, to the best of your knowledge, was that a
17 case involving people who were seeking money to
18 compensate them for the cows or was it people
19 who were claiming personal injury?

20 A. These were -- these were money related, loss of
21 herd, loss of income.

22 Q. In this particular press query there is a
23 reference to a silo painted by Michigan Silo
24 Company and the reference is not only to cows
25 and calves dying and having difficulty

1 reproducing, but also a farmer's son breaking
2 his leg and the wound from the break that
3 wouldn't heal. Does that refresh your
4 recollection any about any legal action?

5 A. There was no legal action regarding an injury to
6 a human being in Indiana or Ohio.

7 Q. Okay. Do you remember any legal action
8 subsequently that involved alleged personal
9 injury as a result of exposure to PCBs from
10 grain silos?

11 A. No.

12 Q. By the way, Mr. Papageorge, that press query we
13 just were looking at, was that run by you first
14 before it was circulated, for your comments?

15 A. I don't remember this one; but I just don't
16 remember.

17 Q. Pull out McKee 4. Mr. Papageorge, you're being
18 shown a document marked at the previous
19 deposition as McKee 4 which is also a press
20 query. Do you remember this document, sir?

21 A. I believe I do. Yes, this rings a faint bell.

22 Q. Down -- were you finished with it?

23 A. Yes.

24 Q. Down at the bottom, very end of the document it
25 says, staffer EV John, source WB Papageorge.

1 What does that mean?

2 A. Mr. John got a query from the individual with
3 Chemical Week, and he prepared a pencil draft of
4 his response and came by my office and we sat
5 down and talked about it. That's what that
6 says. And I don't remember my exact comments or
7 words or what I added or deleted, but I did
8 participate before the final typewritten version
9 was sent.

10 Q. Is that typically the case where someone is
11 listed as source and staffer at the bottom of a
12 press query?

13 A. Yes, that is typical.

14 Q. This press query seems to pose the question if
15 Monsanto knew 40 years ago what it knows today
16 about PCBs and its effects on the environment,
17 what would the company do differently?

18 MR. DiMURO: Where are you reading
19 from?

20 MR. TURET: The second sentence in
21 the query.

22 MR. DiMURO: Okay.

23 Q. And the response includes a quote, today we'd do
24 biodegradation studies, we would also do more
25 extensive toxicity studies including not just

1 acute toxicity, but also subacute (chronic)
2 studies to show effects over longer exposure
3 times at lower exposure levels. In other words,
4 if the product were completely new and
5 different, we would take a closer look at it
6 than we might have in the past.

7 Had that come from you as the source?

8 A. I saw the pencil version of that and as I
9 remember, Mr. John had talked to a medical
10 department representative to get that kind of
11 input as to the kinds of studies that they might
12 conduct knowing then -- knowing -- if they knew
13 back in the past what they knew in the '70s.
14 That's the kinds of studies they would make and
15 Mr. John told me that and I went along with it.

16 Q. Okay. Let's go on to Papageorge Exhibit 16.

17 (Letter dated 11/29/76

18 marked as Exhibit No. 16

19 for identification.)

20 MR. LIPSHUTZ: We're up to 16; is
21 that correct?

22 MR. TURET: Yes, indeed.

23 Q. Mr. Papageorge -- for the record, Papageorge 16
24 is a November 29, looks like 1976 letter from
25 Mr. Papageorge to Dr. Jerry Johnson, acting

1 chief of looks like NIOSH, with an enclosure.
2 Mr. Papageorge, have you seen the document
3 that's just been marked as Papageorge 16
4 previously?

5 A. Yes, I have.

6 Q. Can you tell me what it is?

7 A. This is a letter I composed back in November of
8 1976 addressed to a Dr. Johnson at NIOSH in
9 Cincinnati, Ohio, commenting on a proposed PCB
10 criteria document regarding toxicity studies,
11 analytical procedures, medical examinations and
12 the like.

13 Q. What is the PCB criteria document, just
14 generally?

15 A. Criteria documents issued by NIOSH are research
16 type summaries prepared by NIOSH for the benefit
17 of OSHA to use in setting exposure criteria for
18 workers throughout the country.

19 Q. And your letter refers to answers to the
20 questions on the draft criteria document. What
21 questions is that addressing?

22 A. Well, I got copies of the proposed document.
23 Attached to that were these questions. And what
24 we see here are answers to those questions that
25 are numbered as such, one through 7, 8,

1 whatever.

2 Q. So those were questions that were posed by Dr.
3 Johnson?

4 A. Correct.

5 Q. Okay. In the first paragraph, your observation
6 is that, quotes, the document dwells at great
7 length upon the effects observed in a population
8 of Japanese citizens who were accidentally
9 exposed to an acute dose of PCBs in a cooking
10 oil. No relation is established between this
11 accidental, acute oral exposure to a relatively
12 high concentration of PCB and industrial type
13 exposures. Can you explain what that means?

14 A. I'll try. NIOSH was using an incident that
15 occurred in Japan in which PCBs leaked into oil
16 intended for human consumption. The individuals
17 who ate food prepared in that oil developed all
18 of these symptoms, pigmentation changes, I
19 forget all the symptoms, but they were quite
20 serious. The levels of exposure were, and I
21 forget the exact numbers, but they were very,
22 very high when compared to the type of exposure
23 that even a careless employee might experience.
24 And the intent there was to say that you're
25 comparing apples and oranges. It just doesn't

1 fit, doesn't make sense. So what we were trying
2 to tell them, that to use that oil contamination
3 incident as a basis for establishing an exposure
4 level was not appropriate.

5 Q. Okay. Now, a little further down in that
6 paragraph you observe, no sound basis has been
7 established to support the contention that PCBs
8 are human carcinogens. The use of the words,
9 "no sound basis has been established," might be
10 interpreted to mean that there was some basis
11 but not a sound basis. Can you explain that
12 sentence?

13 MR. DiMURO: I object to the form.

14 MR. LIPSHUTZ: Same objection.

15 A. The basis that we occasionally heard was one of
16 an allegation that someone out there would make
17 without any data. So this is what we
18 interpreted as an unsound basis. Somebody
19 alleged that this person got his cancer from
20 PCBs, and that's it. No further data.

21 Q. Flipping ahead to paragraph 12 there is a
22 similar statement that there is no persuasive
23 evidence supporting the, quote, cancer suspect
24 agent, close quote, labeling all PCBs;
25 therefore, such labeling is inappropriate.

1 Again, when you say there is no persuasive
2 evidence, what evidence did you have at the time
3 that PCBs were carcinogens?

4 MR. DiMURO: I object to the form.

5 A. We had no evidence. We had allegations, and
6 NIOSH was proposing in this document to use that
7 parenthetical, the cancer suspect agent, on all
8 labels. And we told them we have no basis for
9 that.

10 Q. That's all I have on that one.

11 (Letter dated 12/20/76
12 marked as Exhibit No. 17
13 for identification.)

14 Q. For the record, Papageorge 17 is a December 20,
15 1976, letter from Mr. Papageorge to Dr. Jerry
16 Johnson again, Acting Chief of Criteria
17 Documentation, NIOSH. Mr. Papageorge, have you
18 seen the document that's been marked as
19 Papageorge 17?

20 A. Yes, I have.

21 Q. And is that a letter that you wrote to Dr.
22 Johnson?

23 A. Yes.

24 Q. In the first paragraph you refer to an
25 impression you had when you left a particular

1 meeting that NIOSH would continue -- that future
2 drafts of the document would continue to contain
3 allegations that PCBs are human carcinogens and
4 that they should be labeled as, quote, cancer
5 suspect agents. Was your impression accurate at
6 the time?

7 A. I believe it was, yes.

8 Q. To your knowledge, did NIOSH continue to label
9 PCBs as cancer suspect agents?

10 A. Eventually they dropped that.

11 Q. When, if you remember, did they drop it?

12 A. All I can recall is that this criteria document
13 was not issued, as best I remember, for several
14 years. I believe eventually it was issued, but
15 since I was no longer directly involved with the
16 PCBs issue, I don't recall the year of issuance
17 and the final version of their suggestions.

18 Q. Okay.

19 (A Perspective
20 marked as Exhibit No. 18
21 for identification.)

22 Q. For the record, the document I've just shown Mr.
23 Papageorge has been marked as Papageorge 18 is a
24 document entitled Polychlorinated Biphenyls, A
25 Perspective, John H. Craddock document, Bates

1 numbered MAE 010245 to 257. Have you ever seen
2 that document before?

3 A. Yes, I have.

4 Q. And who is Mr. Craddock?

5 A. Dr. Craddock is, was a Monsanto employee at the
6 time, who in about 19 -- the late '70s or early
7 '80s was assigned, along with other duties, the
8 task of monitoring PCB activities.

9 Q. How did you come to see this particular
10 document?

11 A. I don't remember the exact circumstances. As
12 best I recall, it's because of my past
13 involvement Dr. Craddock sent me a copy.

14 Q. Did you have any substantive input into the
15 document before it was finalized?

16 A. No.

17 Q. Just flipping all the way to the end, the
18 summary conclusions, there is a statement, In
19 some cases these compounds, referring to PCBs,
20 have been labeled by regulatory agencies,
21 legislative bodies, the populace and the media
22 as human cancer causing agents and deadly
23 toxins. However, scientific evidence does not
24 support these claims. Is that statement
25 consistent with your belief and understanding as

1 of January of 1981?

2 A. Yes, and so to date.

3 Q. That's still your belief today?

4 A. Yes.

5 Q. Have you ever in your time as a Monsanto
6 employee seen a study that suggests that
7 exposure to PCBs has caused cancer?

8 MR. DiMURO: Objection to form.

9 A. Well, I'm aware of Dr. Kimbrough's work with
10 rats.

11 Q. Fair enough. Other than Dr. Kimbrough's work?

12 A. No, I have not seen any other study.

13 Q. And is your answer the same regardless of
14 whether we're talking about cancer in animals or
15 cancer in humans?

16 A. Correct.

17 Q. Have you seen any documents which cite specific
18 evidence of the propensity of a PCB containing
19 product to cause cancer in humans?

20 MR. DiMURO: Objection to form.

21 A. I don't remember seeing any such documents, no,
22 I have not seen that.

23 Q. Have you seen any document in your time as an
24 employee of Monsanto that cites specific
25 evidence that exposure to PCBs causes cancer in

1 animals?

2 MR. DiMURO: Object to form.

3 Q. Again, other than the Kimbrough study?

4 A. No.

5 Q. Mr. Papageorge, did you have any direct
6 involvement in submissions to regulatory
7 agencies where there were preparation of
8 proposed regulations relating to PCBs? I
9 recognize that's a very broad question. We've
10 already talked about some submissions that you
11 made already. Are there any other instances we
12 have not talked about yet where you were
13 involved with regulatory agencies that were
14 proposing to regulate PCBs?

15 MR. DiMURO: Object to the form.

16 A. Well, I do know that I was involved in hearings
17 and in responding to Federal Register
18 notifications of proposed rule makings. I
19 recall drafting letters to the appropriate
20 people at the agencies. An example would be one
21 where, as I remember, EPA was proposing a
22 certain level of PCBs in water and I commented
23 that the -- something to the effect that the
24 analytical methodology was such that that level
25 is just unrealistically low. It could not be

1 reliably detected, therefore, you couldn't
2 monitor it at that level. The FDA had come out
3 with a proposed list of food type items and the
4 PCB levels that would be tolerated in them and I
5 made comments on that. It's been 30 years. I
6 don't remember the details anymore, but we did
7 participate wherever we could.

8 Q. How about legislation that was being proposed
9 when the Clean Water Act, for example, was being
10 proposed, is that the submission you just
11 referred to?

12 A. I don't recall personally participating in the
13 Clean Water Act. This came after my assignment
14 to the PCB issues as I recall. Other than that
15 my memory fails me at the moment.

16 Q. How about, were you involved directly in any
17 submissions that related to one of the Toxic
18 Substances Control Acts? I know they took
19 various forms before reaching the final form.

20 A. I understand. I don't recall being involved
21 with the Toxic Substances Control Act. I think
22 that also came after my direct involvement.

23 Q. Meaning after you moved onto the -- I don't have
24 the resume --

25 A. The broad environmental operations director,

1 yes.

2 Q. Mr. Papageorge, you mentioned before the
3 interdepartmental task force. Can you tell me
4 what that was and what it was convened to do?

5 A. I'll give you my understanding of it.

6 Q. That's fine.

7 A. As I understood it, this was an informal
8 grouping made up of representatives of several
9 Federal agencies, departments that heard a lot
10 about PCBs, wanted to learn more, so they
11 started meeting and comparing notes and
12 contacted our Washington office for Monsanto's
13 input. And I learned of this and I was asked to
14 participate on occasion, not to attend every
15 meeting. I in turn got Elmer Wheeler involved
16 and the analytical people through Dr. Keller and
17 Scott Tucker. And we met with that group on
18 several occasions. I, again, did not keep a
19 score sheet, so I don't know how many times we
20 met with them. My principal contact was with Ed
21 Berger who acted as sort of chairman of the
22 group and he was assisted by Dr. Davies of the
23 Council of Environmental Quality. I remember we
24 gave them one more or less formal presentation
25 in early '72, 1972, on the biodegradation work

1 that Monsanto was conducting and the latest on
2 our toxicity studies, the results of which had
3 just been issued, and that group in 19 -- in May
4 of 1972 published their findings in which they
5 supported Monsanto's continued sales to the
6 electrical and closed systems and were
7 supportive of Monsanto's phasing out of the open
8 uses and the difficult to contain uses such as
9 leaking hydraulic systems and so on. I don't
10 know what else to add to that. We found them
11 very responsive and I would like to think they
12 appreciated our contributions.

13 Q. I just have a handful of things left?

14 (Copies of labels

15 marked as Exhibits Nos. 19-A & 19-B

16 for identification.)

17 Q. For the record, Papageorge 19-A appears to be a
18 label that says Aroclor 1254 at the top; and
19 Papageorge 19-B also appears to be a label with
20 Aroclor 1254 at the top. There are differences
21 among them. Have you seen those two documents
22 before today?

23 A. Yes, I have.

24 Q. Can you tell me what they are?

25 A. These are copies of labels from Monsanto's

1 product Aroclor 1254 to be affixed to drums
2 containing 600 pounds of the Aroclor.

3 MR. LIPSHUTZ: Do those have an MAE
4 number?

5 MR. TURET: Yes, MAE 048716, that's
6 19-A and 048640, that's 19-B.

7 Q. Mr. Papageorge, did you, once you had assumed
8 your position as manager of environmental
9 control, is that correct, the position you held
10 in January of 1970?

11 A. Yes.

12 Q. Did you have as one of your responsibilities
13 seeing to it that a label change was made on the
14 Aroclor 1254 drums?

15 A. When you added drums, that limited it, yes.

16 Q. What was it that would have made it too broad to
17 answer?

18 A. There are pails, there are tank cars, there are
19 other containers besides the steel drum.

20 Q. How large was a pail?

21 A. Five gallon.

22 Q. Aroclor 1254 was sold in five-gallon increments?

23 A. In some instances, yes.

24 Q. To your knowledge, were the labels on the
25 five-gallon pails the same as the labels on the

1 600-pound drums?

2 A. Except for the weight designations.

3 Q. Okay. What was your role, if any, in adding
4 this section all the way to the right, this
5 product contains polychlorinated biphenyls, et
6 cetera, on 19-B?

7 A. I see it. I drafted a paragraph and circulated
8 it to this task force we talked of earlier for
9 comments and I received some comments, not too
10 many, and included some minor changes in wording
11 and decided on the paragraph we now see on
12 Exhibit 19 dash B, referring to environmental
13 contaminant.

14 Q. The rest of the language wasn't changed?

15 A. That is correct.

16 Q. Just to clarify, there is some handwritten notes
17 on 19-A says, used prior to May 19 '70, last
18 printed April 30, 1969. Do you know one way or
19 the other whether that information is accurate?

20 A. Yes, that's very accurate. It was in May of
21 1970 that this environmental paragraph was
22 included as indicated on Exhibit 19-B, the
23 handwritten notes.

24 Q. Are those your handwritten notes?

25 A. No.

1 Q. But the information contained on the handwritten
2 notes on 19-B also is accurate?

3 A. Correct.

4 Q. Mr. Papageorge, as an employee of Monsanto have
5 you had occasion to communicate with employees
6 of Armstrong Cork or Armstrong World Industries?

7 A. It seems to me that I wrote a letter to somebody
8 at Armstrong, but at this point in time I don't
9 recall the date or the subject matter. I
10 believe I had at least one contact by mail with
11 an Armstrong employee.

12 Q. Do you know whether that letter took place while
13 you were employed in St. Louis as opposed to
14 when you were in Anniston?

15 A. Yes, it would have to be while I was involved
16 with the environmental issue with PCBs.

17 Q. Do you remember whether this was in the 1970 to
18 '76 period as opposed to '77 on that you were
19 involved in the other types of environmental
20 issues?

21 A. It was the '70 to '76 period.

22 Q. Do you remember anything about why you wrote a
23 letter to Armstrong?

24 A. I just know -- not the specifics, I don't
25 recall.

1 Q. Did you ever have occasion to travel to any
2 Armstrong facilities for any reason?

3 A. I did not.

4 Q. Did you personally have any involvement in
5 reviewing sales records to determine who the
6 customers of Monsanto were that had purchased
7 Aroclor products?

8 A. On occasion.

9 Q. What circumstances prompted you to review sales
10 records?

11 A. Certainly in preparation for depositions and all
12 I did get to see some. And before that, I
13 recall seeing some sales information, but at the
14 moment cannot recall why. I had no need for
15 that information. I just can't recall the
16 details any longer.

17 Q. Did you see any sales records in advance of this
18 deposition?

19 A. Yes.

20 Q. Are those sales records reflecting products sold
21 by Monsanto to Armstrong?

22 A. Yes.

23 Q. Are they also sales records reflecting sales by
24 Monsanto to American Mineral Spirits Company?

25 A. Not for this case, no.

1 Q. Did you review any other documents in advance of
2 this deposition in preparation for this
3 deposition?

4 A. Yes.

5 Q. Are there any documents other than the ones that
6 you've been shown so far today that you
7 reviewed?

8 A. I don't propose to tell you that I remember each
9 and every document. I remember two bundles of
10 about four inches each. Many of them we glanced
11 through today. There were copies of letters to
12 customers. Then I recall seeing some call
13 reports that the salespeople made calls to
14 Armstrong facilities.

15 Q. Did any of those call reports relate to
16 activities that you were involved in?

17 A. They did refer to the use of PCBs and --

18 Q. No, I'm talking about you, William Papageorge.
19 Were they calls on Armstrong or communications
20 with Armstrong that you personally participated
21 in?

22 A. Oh, no, no, no.

23 Q. Did you ever have occasion to meet with or
24 communicate with any representatives of American
25 Mineral Spirits Company?

1 A. No.

2 MR. DiMURO: Off the record.

3 (Discussion off the record).

4 Q. Mr. Papageorge, did you personally compile the
5 list of customers from which the letters were
6 sent out in the 1970 time period to let the
7 customers know that Aroclors were being
8 withdrawn from the market for certain
9 applications?

10 A. I did not.

11 Q. Who actually compiled that list if you know?

12 A. Many people, must be 50 people or more involved
13 in putting this list together.

14 Q. What department had responsibility for that?

15 A. There is, of course, the marketing department,
16 and the shipping function, the accounts
17 receivable function, the billing invoicing
18 function. I think that covers most of them.

19 Q. Mr. Papageorge, let me just ask generally, in
20 your efforts to compile information about PCBs,
21 their uses while a Monsanto employee, what uses
22 do you recall that related to paints that
23 contained PCBs?

24 A. Are you talking about uses of paint?

25 Q. Uses, the applications for paint that you had

1 come across in which the paint contained Aroclor
2 products.

3 MR. DiMURO: Object to the form.

4 A. Of course the most commonly known one is the one
5 of paint used on the yellow and white stripes on
6 the roadways. There were, it's my understanding
7 some heavy duty industrial coatings used to
8 paint steel structures and manufacturing
9 buildings and all, especially where fumes would
10 exist to corrode the surface or damage different
11 kinds of coatings. I understood that some
12 paints used on concrete surfaces, floors and the
13 like contained PCBs. I recall also -- and none
14 of these, I did not have the opportunity to
15 personally follow up and double check these, but
16 I was also told that some marine paints
17 contained PCBs in them. And this was also
18 supposed to inhibit barnacle formulations and so
19 on. I can't think of any more at the moment.
20 I'm sure there are others.

21 Q. When you talked about concrete floors with
22 paints on them, what types of structures were
23 those concrete floors located in, if you know?

24 A. I have an idea an example would be a warehouse
25 floor with fork lifts running on it and they

1 wanted a heavy duty coating that would last.
2 And I understood some service centers for
3 automotive repairs and all to make them easy to
4 hose down when they got grease and oil on them
5 were coated with these heavy duty coatings.
6 That's all I know at the moment.

7 Q. How about lacquers and varnishes that contained
8 PCBs?

9 A. Yeah, forgot about those. There were some of
10 the heavy duty varnishes and lacquers used on
11 furniture and the like and floors to make them
12 scratch and scuff resistant.

13 Q. And can you think of any specific types of
14 locations where those varnishes and lacquers were
15 used?

16 A. No, not at the moment.

17 Q. How about as a protective or decorative coating
18 for swimming pools or stucco homes?

19 A. Oh, well, okay.

20 Q. I'm not trying to trick you.

21 A. I understand. In my mind I group that with the
22 concrete paint applications, the surfacing of
23 masonry type surfaces.

24 Q. How about coatings on wallboard or other
25 construction materials?

1 A. I don't know about that.

2 Q. How about as a fire retardant coating for
3 fabrics or paper products?

4 A. I recall comments made regarding that kind of
5 use, but I personally don't know if it was just
6 a research effort or whether it was actually in
7 practice. I'm limited in my knowledge of that.

8 MR. O'CONNOR: Do you mind if we take
9 a two-minute break?

10 MR. TURET: That's fine.

11 (Brief recess.)

12 (Notice dated 10/29/70

13 marked as Exhibit No. 20

14 for identification.)

15 MR. TURET: Back on the record.

16 Q. For the record, the document marked as
17 Papageorge 20 is an October 29, 1970, notice
18 from the U.S. Department of Agriculture, Bates
19 No. MAE 052663.

20 Mr. Papageorge, have you ever seen
21 the document that you've been shown marked as
22 Papageorge 20 before?

23 A. I have.

24 Q. What is your understanding of what it is?

25 A. This is a response from the U.S. Department of

1 Agriculture to Dr. Kelly's request, that PCBs
2 not be permitted as an ingredient in pesticide
3 formulations.

4 Q. Is it your understanding that the Department of
5 Agriculture did not ban outright immediately the
6 use of PCBs in pesticide?

7 A. Well, it didn't happen immediately. As I
8 recall, Dr. Kelly wrote to the department in
9 early 1970, and no action was taken until late
10 October as reflected by the date of this letter.

11 Q. Let me refer you to the second to last
12 paragraph, last sentence there, that from the
13 assistant director of the U.S. Department of
14 Agriculture stating a period of six months is a
15 reasonable period of time within which to effect
16 such formula changes. My question was more
17 geared toward the Department of Agriculture's
18 decision to phase out rather than ban
19 immediately the use of PCBs in pesticides. Do
20 you have an understanding one way or the other?

21 MR. DAVIDSON: Objection.

22 MR. TURET: There is only one lawyer
23 here objecting.

24 MR. DiMURO: All right. Objection to
25 form.

1 MR. TURET: Thank you.

2 MR. DiMURO: You can answer.

3 A. If I remember the question. This notice does
4 give a six-month period to effect the formula
5 change. Realistically, however, PCBs were not
6 available after August 30, so unless a
7 formulator had an ample inventory of PCBs, he
8 could not have added it to his formulation
9 anyway.

10 Q. Okay. Just a few names, Mr. Papageorge. Do you
11 know who E. Mather is, M-A-T-H-E-R?

12 A. The name is familiar and I can't associate it
13 with any specific activity or position. I can't
14 help on you that.

15 Q. How about Dr. JW Barrett, B-A-R-R-E-T-T, London?

16 A. London, yes, Dr. Barrett was a research chemist
17 with Monsanto in London.

18 Q. How about Dr. HR Newman?

19 A. He was a medical doctor with Monsanto in London.

20 Q. Was he the medical director out there?

21 A. Yes.

22 Q. How about DV Hardy, H-A-R-D-Y?

23 A. H-A-R-D-Y, I don't remember him.

24 Q. How about Dr. JA Gardner?

25 A. I don't remember that.

1 MR. TURET: I have no further
2 questions at this time. Thank you.

3
4 EXAMINATION

5 QUESTIONS BY MR. O'CONNOR:

6 Q. Mr. Papageorge, we were introduced earlier. My
7 name is Brian O'Connor and I represent the
8 plaintiffs in this case who brought a case
9 against Armstrong World Industries for exposures
10 specifically at Burlington County College. The
11 allegation is in reference to PCBs that were
12 contained in ceiling tiles from 1971 until
13 approximately 1985. Those ceiling tiles were in
14 place at the college. Monsanto has been brought
15 in as a third-party defendant as well as
16 American Mineral Spirits Company. Do you
17 understand that?

18 A. I do.

19 Q. Now, you've testified in quite a few litigated
20 matters on behalf of Monsanto; correct?

21 A. Yes.

22 Q. Is it fair to say that you've testified in over
23 50 matters related to litigation?

24 A. I don't know that it's quite that high. I would
25 suggest 30 to 40, somewhere in there.

1 Q. Okay. And you've testified frequently since
2 you've retired; correct?

3 A. Yes.

4 Q. Are you compensated at all for the testimony you
5 give?

6 A. No, I don't get paid to be a fact witness.

7 Q. But you've had to travel quite a bit as witness
8 in various litigations in different venues
9 around the country; correct?

10 A. A little bit.

11 Q. Who pays for your travel expenses?

12 A. The law firms that work on these matters.

13 Q. Let me ask you, you've testified in matters that
14 you weren't subpoenaed on; correct?

15 MR. DAVIDSON: Were or were not?

16 MR. O'CONNOR: Were not.

17 MR. DIMURO: Such as today, he didn't
18 get a subpoena today.

19 MR. O'CONNOR: Correct.

20 A. All right. There are times when I'm a little
21 confused regarding whether or not a subpoena was
22 suggested or threatened or -- but nevertheless,
23 I do show up in both types of situations, yes.

24 Q. Do you currently receive a pension from
25 Monsanto?

1 A. Yes.

2 Q. Do you have any stock in the company? Do you
3 hold any stock?

4 A. Yes.

5 Q. What kind of income do you get through Monsanto
6 either through your stock or your pension
7 currently on an annual basis?

8 A. I haven't calculated the sum of the two. I
9 would suggest something like 60,000 a year.

10 Q. What year was it that you retired?

11 A. The end of 1986.

12 Q. Now, you've been involved in litigation that
13 related to property damage claims; is that
14 correct?

15 A. Yes, if that includes presence of PCBs in soil
16 of a company's plant, yes.

17 Q. Have you testified in court in any case where
18 the plaintiff was alleging that PCBs
19 manufactured by Monsanto resulted in a personal
20 injury to the plaintiff?

21 A. Yes.

22 Q. A physical injury?

23 A. Yes.

24 Q. Where was that?

25 A. I'm trying to recall some of them. There was a

1 case in Indiana, Westinghouse employees claiming
2 many different kinds of physical ailments
3 because of their working with PCBs in the
4 manufacture of electrical capacitors. I don't
5 know if this one fits your description of
6 physical ailments, but there was a -- trying to
7 think -- there was a case up in Michigan
8 involving dairy cattle and the farm family
9 consuming -- in this case cattle were exposed to
10 PCBs, the milk presumably contained the PCBs and
11 the family claimed some physical problems as a
12 result.

13 Q. Did you testify in court in those cases?

14 A. The Haley case, yes.

15 Q. How did those cases turn out?

16 MR. DiMURO: I'll object to the
17 form.

18 A. The Indiana case, the Westinghouse employees,
19 they didn't get anything.

20 Q. This was a jury verdict?

21 A. Jury verdict. As I remember, the Haley case up
22 in Michigan, they got something.

23 Q. The jury awarded some type of monetary award?

24 A. Yes. There was another case where there was a
25 transformer in transit from Georgia to its

1 destination across Tennessee, as I recall.

2 Q. Is that the case where the transformer leaked on
3 the roadway, leaked on the roadway and the
4 driver was told to drain it and it got into the
5 pond and the cattle and the pasture lands?

6 A. The cattle were presumably affected and as I
7 remember, it's been so long ago, the farmer
8 claimed some personal injury. I don't remember
9 the details anymore.

10 Q. Let me ask you, have you ever testified in court
11 on a case where the plaintiff was alleging that
12 he or she had contracted cancer as a result of
13 exposure to PCBs?

14 A. Yes, there is an employee also from Westinghouse
15 claiming a brain cancer, as I recall.

16 Q. That case is pending?

17 A. No. That was held and the plaintiff's widow and
18 children didn't get anything. The jury did not
19 award anything.

20 Q. Where was that venue? Do you know what state
21 that was in?

22 A. It was held in St. Louis here, the Bechtel
23 (phonetic) case.

24 Q. That was recent, was it not, 1994?

25 A. A couple three years, yeah.

1 Q. Today Mr. Turet asked you what documents you
2 reviewed and you said many of the documents that
3 you had reviewed prior to today's deposition
4 you've been provided by counsel and you also
5 mentioned that you looked at some reports of
6 sales calls?

7 A. Yes.

8 Q. On Armstrong, by Monsanto employees?

9 A. Yes.

10 Q. Anything else? Is there anything else that
11 sticks out in your mind that you didn't review
12 today that you reviewed prior to today's
13 deposition?

14 MR. DiMURO: I'll put on the record
15 that we did show him the request to dismiss that
16 we served on Armstrong by Monsanto and he
17 reviewed some of those documents.

18 A. I forgot that. I can't think specifically of
19 anything. I think that about covers the
20 description of the types of documents I saw.

21 Q. Are you familiar with plasticizers?

22 A. In a way, yes.

23 Q. Can you describe your familiarity with them?

24 A. Well, they are chemical ingredients of many
25 different compositions that are added to

1 materials we call plastics to make them pliable,
2 flexible instead of brittle. Does that help?

3 Q. Sure. And at one point in time Monsanto Company
4 was selling Aroclor 1254 as a plasticizer;
5 correct?

6 A. That was one use, yes, sir.

7 Q. Are you familiar with plastisol coating
8 formulations at all? Are you familiar with that
9 phrase?

10 A. I've heard plastisol, but that's the extent of
11 my knowledge.

12 Q. Have you ever dealt with any customers of
13 plasticizers at all in terms of customers, of
14 Monsanto's customers?

15 A. Only in the PCB issue, not as to whether or not
16 it could be used but as to what effect does it
17 have on the environment and why should I stop
18 using it, that kind of discussion.

19 Q. Other than Armstrong, do you recall any customer
20 that you had contact with with regard to
21 discussions on plasticizers and/or PCBs?

22 A. Yes, there were several. I just -- my memory is
23 not that crystal clear anymore. There were
24 customers, very unhappy incidentally --

25 Q. About the cessation?

1 A. About the discontinuation of sales.

2 Q. Have you spoke with any customer in your career
3 at Monsanto about the use of Aroclor 1254 in
4 application on ceiling tiles?

5 A. No.

6 Q. And I believe you told Mr. Turet that you don't
7 remember having ever had any contact with anyone
8 at Armstrong World Industries with the exception
9 of one correspondence by way of letter and you
10 didn't remember the subject matter of that
11 letter; is that correct?

12 A. That is correct.

13 Q. So it's fair to assume that you never had any
14 discussions with any Armstrong employees about
15 the application of Aroclor on 1254 in ceiling
16 tiles?

17 A. That is correct.

18 Q. At some point in time did you become aware that
19 Armstrong World Industries had applied Aroclor
20 1254 as part of a plasticizer formulation to
21 ceiling tiles?

22 A. Only as it relates to this suit.

23 Q. When was that?

24 A. My first inkling that such a use was made as
25 best I can tell happened earlier this year. I'm

1 going to -- well, the first quarter of this year
2 is as close as I can get to it.

3 Q. If I'm understanding your testimony, then, you
4 had never heard of the application of Aroclor
5 1254 as part of a plasticizer or plastisol
6 coating formulation in application to ceiling
7 tiles prior to the early part of 1997?

8 A. That is correct.

9 Q. Are you familiar with all the plasticizers that
10 don't contain PCBs?

11 A. Yes; there are many.

12 Q. Monsanto makes a lot of those; correct?

13 A. Yes.

14 Q. Have you ever done any research on or work on
15 plasticizers themselves or is it information you
16 came about as a result of that involvement with
17 PCBs?

18 A. Of course, my involvement with PCBs did include
19 some exposure to its use as plasticizer. My
20 only previous relationship with plasticizers was
21 during the period I was an assistant supervisor
22 in the manufacture of other types of
23 plasticizers, non PCB types.

24 Q. Do you have any belief or opinion as to whether
25 or not PCBs were efficient as plasticizers?

1 MR. DiMURO: In any way?

2 MR. O'CONNOR: In any use?

3 A. It depends on the use. In some uses they were
4 superior additives; in other uses they were
5 total failures, they just didn't do the job.

6 Q. Are you familiar at all with phosphate
7 plasticizers?

8 A. Yes.

9 Q. Did Monsanto sell phosphate plasticizers?

10 A. Yes.

11 Q. Did they sell phosphate plasticizers in the '50s
12 and '60s?

13 A. Yes.

14 Q. Did you have any involvement at all with
15 phosphate plasticizers?

16 A. Not in the chemicals per se.

17 Q. Did you have any involvement at all with regard
18 to the sales of phosphate plasticizers with the
19 plants that you were affiliated with while you
20 were going through your various promotions at
21 Monsanto?

22 A. No.

23 Q. Have you spoke with anyone at Monsanto or any
24 former employee of Monsanto about the use of
25 Aroclor 1254 as a plasticizer to be applied to

1 ceiling tiles?

2 A. No.

3 Q. Do you know a Dr. Coaker, I believe his first
4 name is William?

5 A. I know I've heard of the man. If I had dealings
6 with him, they were very minimal to the point
7 where I can't recall a specific face-to-face
8 kind of discussion or presence at any meeting or
9 other types of contacts.

10 Q. Have you personally seen any literature
11 recommending the use of Aroclor 1254 for
12 application to ceiling tiles?

13 A. No.

14 Q. At some point in time during 1970 Monsanto made
15 a decision to stop manufacturing and
16 distributing Aroclors which contained PCBs for
17 open uses; correct?

18 A. Correct.

19 Q. I believe there was a letter that was referred
20 to earlier that went out in June of 1970 --

21 A. Yes.

22 Q. -- informing customers that Aroclors were no
23 longer going to be available for open uses as
24 plasticizers?

25 A. Correct.

1 Q. And you had direct involvement with the decision
2 to stop manufacturing PCBs?

3 A. Yes. I'm sorry, stop manufacturing you say?

4 Q. Stop manufacturing PCBs for open uses?

5 A. Yes.

6 Q. What was your involvement? We've looked at some
7 documents that are directed to the executive
8 committee?

9 A. Yes. My involvement really was one of putting
10 together the opinions of the individuals within
11 Monsanto who were directly involved with PCBs as
12 plasticizers and I suppose you can say I
13 encouraged their thinking that leaned to maybe
14 we ought to get out, and I kind of reinforced
15 that belief, that listen, it's not that big a
16 business, let's drop it and save it for the real
17 important uses like transformers and electric
18 equipment, let's not jeopardize that important
19 use. So I would like to think that I influenced
20 the thinking that supported that. And I went to
21 the business directors, Mr. Springgate and Mr.
22 Bergen and recommended this. And it was passed
23 onto the top management and accepted.

24 Q. Did you have any involvement at all in the
25 decision to stop the manufacture of PCBs

1 completely in 1977?

2 A. No.

3 Q. By that time you were no longer involved?

4 A. Not directly I was not.

5 Q. What was your understanding as to what
6 Monsanto's corporate position was with regard to
7 stopping the production of the Aroclor PCB line
8 for use as plasticizers in June of 1970?

9 A. My understanding was that Monsanto had made that
10 decision and took the appropriate action to get
11 out of that business.

12 Q. Based on what?

13 A. You mean my understanding is based on?

14 Q. Yes.

15 A. Intimate relationships with the individuals who
16 put together the letters of notification and
17 individuals that manufactured the material.

18 Q. Prior to the letters of notification how was it
19 brought to Monsanto's attention that PCBs were a
20 potential environmental contaminant? Was that
21 gleaned from the media?

22 A. Well, of course, the media helped disseminate
23 the information as it was accumulating from many
24 sources, but Monsanto on its own analysis of
25 samples from the environment led to the

1 understanding that surprisingly, PCBs are
2 appearing in samples that bear no relationship
3 to the industrial applications. The question
4 then became one of, if there is no industrial
5 site nearby how did the pine tree needles get
6 it. So it was decided, then, that it must be
7 those uses that are directly out in the
8 environment that eventually end up in that pine
9 needle, as an example. And that is an
10 industrial chemical, man-made, and Monsanto's
11 leadership decided it's inappropriate, it should
12 not be, so let's get out of the business.
13 That's how that evolved, really.

14 Q. Did that thinking of let's get out of the
15 business begin about 1969 or so?

16 A. There were individuals then, as the laboratory
17 data accumulated, there were individuals that
18 were beginning to perceive it as, yes, this data
19 is not misleading, it's truthful, we've been
20 waiting to confirm it, so it must come from
21 those uses or those practices that lead to its
22 escape out there when we lose control.

23 Q. Earlier today Mr. Turet marked Papageorge No. 7,
24 the minutes of a meeting of the corporate
25 development committee November 17, 1969.

1 A. Yes.

2 Q. On the third page of that document, Mr.
3 Papageorge, is the discussion of a tailored
4 program to look at the PCB situation with regard
5 to the sale and distribution to customers for
6 open uses; correct?

7 A. I'm having a difficult time finding --

8 Q. The 12 items that are enumerated there?

9 A. Yes.

10 MR. DiMURO: Which one?

11 MR. O'CONNOR: Just talking about
12 them all in general.

13 A. Oh, all in general.

14 Q. Yeah. This was a program Monsanto was planning
15 on; correct?

16 A. Yes.

17 Q. This was basically an outline of that program?

18 A. That was my charter.

19 Q. Out of this charter developed a series of
20 letters that were mailed to customers and
21 distributors of Aroclor 1254 and other Aroclors
22 that contained PCBs; correct?

23 A. I'm trying to determine whether it's -- well,
24 item No. 2 is the notification item. And item
25 four is one where you caution them to keep it

1 out of the environment.

2 Q. Well, the notification letter, Mr. Papageorge,
3 just so we're all on the same page, let me give
4 you copies of these letters. Through the course
5 of discovery my office has been provided with
6 these letters, the first being dated February 9
7 of 1970; correct?

8 A. Yes.

9 MR. DAVIDSON: Are these already
10 marked?

11 MR. O'CONNOR: Some of them are
12 already marked as Coaker exhibits. If you like,
13 we can mark them again.

14 MR. TURET: No need as long as we
15 refer to Bates numbers.

16 MR. O'CONNOR: I'll refer to Bates
17 number. What I'm referring to February 9, 1970,
18 letter from Monsanto Bates No. MAE 054389.

19 MR. TURET: Through what?

20 MR. O'CONNOR: Through 054396.

21 MR. DiMURO: Just indicate that
22 letter has an attachment. It's a two-page
23 letter with an attachment from Chemical Week.

24 Q. Mr. Papageorge, you made reference to Papageorge
25 No. 7 as being a charter -- Page 3, the 12

1 enumerated items as being a charter that you
2 were following; correct?

3 A. Correct.

4 Q. This February 9, 1970, letter was in essence a
5 notice letter; correct?

6 A. That is correct.

7 Q. And there was an attachment to it from Chemical
8 Week dated October 29, 1969; correct?

9 A. Correct.

10 Q. What was the purpose of sending out the notice
11 letter and this literature?

12 A. The purpose is to inform the customers that PCBs
13 of a certain type, 54 and 60 percent type, were
14 being discovered in the environment, and that
15 they should avoid getting it into the
16 environment because of their products or their
17 activities.

18 Q. And why was Monsanto informing customers that
19 they should avoid getting the higher Aroclors,
20 54 and 60 as you itemized, out into the
21 environment?

22 A. Because they were the types that were being
23 identified by reliable laboratories in samples
24 and the belief by Monsanto management was that
25 an industrial chemical should not be present in

1 some of the samples that were being reported.

2 Q. Why with specificity was Aroclor 1254 and
3 Aroclor 1260 not supposed to be in the
4 environment?

5 A. Because at that point in time they were the only
6 PCBs being identified by the laboratories.

7 Q. They were the higher chlorinated Aroclors?

8 A. That is correct.

9 Q. Now, in 1970, was Monsanto aware of any
10 potential health risks to humans as a result of
11 exposure to, at certain levels, to Aroclor 1254
12 or Aroclor 1260?

13 MR. DiMURO: Object to the form. You
14 can answer.

15 A. They were aware of levels that would result in
16 some health effects.

17 Q. What were the health effects you are making
18 reference to?

19 A. Depending on the amount of exposure and
20 frequency of exposure. And by amounts I'm
21 talking not only of level, but time period, an
22 acute exposure as distinguished from the
23 prolonged low exposure. There was evidence that
24 chlorinated biphenyls, like other chlorinated
25 products, could result in skin problems and also

1 eventually liver problems.

2 Q. The skin problems -- are you finished with your
3 response?

4 A. Yes.

5 Q. Are you referring to chloracne?

6 A. That's one.

7 Q. Or dermatitis?

8 A. There were various symptoms that show up as the
9 exposure continues. What I call the early
10 warning symptom on skin problems is a reddening
11 of the skin like chapped hands. And if it gets
12 bad enough, you start bleeding from the cuts in
13 it. That's the early warning that tells you
14 maybe you should wear gloves or wash your hands
15 or do something, don't get it on the skin.
16 Continued exposures will also result in an acne
17 condition caused by the presence of chlorinated
18 materials. That is sort of a second step in the
19 progression. And by continuing the exposure, in
20 other words, not taking corrective action, you
21 can get the liver to the point where it is
22 affected seriously.

23 Q. When you say affected seriously, generally
24 speaking, there can be an enlargement of the
25 liver?

1 A. Yes.

2 Q. There could be atrophy of the liver referred to
3 as yellow atrophy?

4 A. Yes.

5 Q. And there can be a situation similar to
6 cirrhosis of the liver?

7 A. Yes.

8 Q. And that could lead to death at certain levels?

9 A. Correct.

10 Q. The purpose of the February 9 letter that we've
11 identified was an attempt to, by Monsanto to
12 inform its customers that Aroclor 1254 and
13 Aroclor 1260 could be potentially dangerous
14 products; correct?

15 MR. TURET: Objection.

16 MR. DiMURO: I'll object also.

17 A. When you use the word "potentially," yes, it
18 depends how much and where. And the attachment
19 really is an attempt to share with our customers
20 what the states were requiring in terms of water
21 presence. That's before the days of the EPA.
22 There was no Federal agency to monitor these
23 activities.

24 Q. And this particular letter, as far as you know,
25 how was this letter served on customers that had

1 purchased Aroclor 1254 and Aroclor 1260?

2 A. I'm assuming -- how was the mailing list
3 determined?

4 Q. How was the mailing list determined and how
5 physically, how was the letter communicated or
6 given to the customers if you know?

7 A. The letter was mailed to customers on record of
8 at least three years' standing. That three-year
9 list was supplemented by searching records for
10 customers who had bought the product prior to
11 that three-year period, particularly in systems
12 that were still known to be in existence but the
13 customer hadn't needed topping off or refill
14 shipment, so the record was quiet for three
15 years, so to speak. It was also supplemented by
16 contacting Monsanto's field sales offices who
17 had files, notes, and the salesman's own address
18 book, so to speak, that he would make calls on.
19 So by putting all that information together, we
20 ended up with the mailing list and the mailing
21 was then determined by type of use as to who
22 signed the letter the customer received. If it
23 was, let's say a transformer user or maker, he
24 got his letter from a Mr. Olson. If it was a
25 plasticizer use, he got his letter from Mr.

1 Schalk who represented the plasticizer
2 activity. I hope that's helpful.

3 Q. Yes, this is helpful. Do you know whether or
4 not mailing lists were devised, with regard to
5 the letter in February of 1970, for the letter,
6 was the mailing list developed?

7 A. Yes, that's the list I'm talking about.

8 Q. Right. And where did the letters go? Where
9 were they mailed to?

10 A. Generally it was an attempt made to address it
11 to the president of the company.

12 Q. Is there any specific reason why Monsanto
13 decided to send a letter directly to the
14 president of the company?

15 A. It was our sincere belief that if the top
16 manager gets a letter like this he's in the
17 position to pursue it and if necessary to
18 provide the resources it takes to make the
19 change, whatever it takes. It may take hiring
20 more people or buying a ventilator or a water
21 treatment plant. The president is in a better
22 position to get those resources to comply with
23 this suggestion.

24 Q. Now, another letter went out in June of 1970;
25 correct?

1 A. That is correct.

2 Q. And we've had marked as Coaker No. 9 at Dr.
3 Coaker's deposition this June 1, 1970, letter
4 Bates Nos. MAE 054455 through 054457?

5 MR. DiMURO: Through 57?

6 MR. O'CONNOR: Uh-huh.

7 MR. DiMURO: Okay.

8 Q. Do you recall this letter going out?

9 A. Yes.

10 Q. And did you have any input into the letter
11 itself?

12 A. I was privileged to see the rough draft that Mr.
13 Schalk was working on.

14 Q. Were you working under Mr. Schalk at the time,
15 in essence?

16 A. No, I was reporting over to Mr. Bergen in the
17 functional fluids business group.

18 Q. The only reason Mr. Schalk signed off on that
19 letter was because he was affiliated with the
20 plasticizers group?

21 A. Correct.

22 Q. This letter informs customers that Monsanto was
23 no longer going to manufacture and distribute
24 PCBs for open uses as of August 30, 1970;
25 correct?

1 A. That is correct.

2 Q. What happened between February of 1970 and June
3 of 1970 that led Monsanto to make that decision?

4 A. Well, there were several things going on. We
5 were still, Monsanto was still trying to gather
6 the latest information. So in April and May Dr.
7 Keller, Mr. Wheeler and I went to Europe and
8 talked to the people in Sweden, London, Holland,
9 and talked to the other producers of PCBs in
10 like the people in Germany and the French and
11 the Italian. That took us to May and we came
12 back and shared our impressions with top
13 management in May. And also in May Mr. John
14 Mason spoke, made a presentation before the
15 corporate management committee and at that
16 meeting it was decided that we would bow out of
17 the plasticizer uses in open applications. And
18 that took us into June, so we moved as fast as
19 we could.

20 Q. During that time up until late August of 1970
21 Monsanto continued to sell Aroclor 1254 and
22 Aroclor 1260; correct?

23 A. That's correct.

24 Q. Mr. Turet had asked you earlier, it was a
25 regular or routine business practice for

1 customers to request items that they had prior
2 inventory on and items or products that they
3 were notified were going to cease to be sold and
4 distributed; correct?

5 A. Correct.

6 Q. Are you aware if any of Monsanto's customers
7 that purchased Aroclor 1254 or Aroclor 1260
8 stopped purchasing those items after the
9 February, 1970, letter?

10 A. I'm not aware of any such action.

11 Q. Do you know whether or not any company ordered
12 additional amounts of Aroclor 1254 and Aroclor
13 1260 after this June letter?

14 A. There is some evidence that those that didn't
15 have an easy replacement material were forced to
16 buy a little bit more than normal to buy them a
17 little more time after August 30 to replace the
18 PCB ingredient.

19 Q. And have you seen any statistics that, in fact,
20 sales for Aroclor 1254 and Aroclor 1260
21 increased from 1969 to 1970 during those years?

22 A. Yes.

23 Q. And even though in 1970 the Aroclor 1254 and
24 1260 were only sold from January to the end of
25 August of 1970, the volume of sales was higher

1 than the calendar year of 1969; correct?

2 A. That is correct.

3 Q. At some point in time Monsanto offered a
4 returned goods policy in essence to purchase
5 back the PCBs that they had sold; correct?

6 A. Yes, we've seen documentation today as to some
7 reference to that.

8 Q. There was very little return back to Monsanto;
9 correct?

10 A. That is correct.

11 Q. Why did Monsanto endeavor to purchase back or
12 develop a returned goods policy with regard to
13 PCBs?

14 A. I think it just boils down to a desire to
15 maintain good relationships and maintain a good
16 reputation, if you will, and there was also a
17 hope that by having a return policy the customer
18 would be tempted to try a substitute product
19 from Monsanto instead of going elsewhere.

20 Q. Was it an attempt by Monsanto to limit the use
21 -- strike that. Was it an attempt by Monsanto
22 to limit the amount of PCBs that were getting
23 into the environment at the time?

24 A. That was the whole purpose of this activity.

25 Q. Right, but specifically with regard to the

1 returned goods policy itself?

2 A. That is part of it, yes, because we didn't want
3 people disposing of this material in a quick and
4 easy way which could be an improper way.

5 Q. Why is that?

6 A. Well, some of these smaller operators would
7 contract out to hauling away of surplus material
8 and we never knew where it would end up.

9 Q. Did Monsanto have concerns about the effects
10 that PCBs might have on human beings as a result
11 of their customers' disposal of those products?

12 A. There is always this concern not knowing exactly
13 how it's handled.

14 Q. Were those concerns related to health risks?

15 A. Sometimes, yes.

16 Q. At some point in time Monsanto endeavored to
17 develop an incinerator system for PCBs; correct?

18 A. Yes.

19 Q. And in fact, by way of letters, Monsanto had
20 contacted customers and requested that they
21 return the goods and offered to actually
22 incinerate the PCBs for the customers; correct?

23 A. Yes.

24 Q. Did Monsanto provide any replacement suggestions
25 for any of the Aroclor line, 1254, 1260?

- 1 A. Yes.
- 2 Q. Did they -- did Monsanto go to efforts to
3 provide literature with regard to replacements
4 through the mail?
- 5 A. Yes.
- 6 Q. By way of letters?
- 7 A. Yes.
- 8 Q. And what was that purpose?
- 9 A. To sell Monsanto chemicals.
- 10 Q. To hold onto the market; correct?
- 11 A. Right.
- 12 Q. While replacing the PCBs with Monsanto products
13 that didn't contain PCBs?
- 14 A. Correct.
- 15 Q. Do you have any idea of what the impact of that
16 communication was in terms of the PCBs for open
17 applications being pulled from the market and
18 Monsanto using non PCB containing replacements?
- 19 A. I have no measure of that. I have never seen
20 any data.
- 21 Q. Was it your understanding that Monsanto after it
22 stopped selling and distributing PCB containing
23 products for open uses lost a significant amount
24 of profits over, say the years '71 through '75?
- 25 A. I have no measure of it.

1 Q. Do you know specifically with regards to
2 plasticizers if Monsanto offered any alternative
3 non PCB containing products for the replacement
4 of Aroclor 1254?

5 A. Yes.

6 Q. What were some of those products?

7 A. They were the phosphate esters, the phthalate
8 esters and some of the maleic esters. I suspect
9 there were others, but I at the moment don't
10 recall them.

11 Q. Were those replacement products that you just
12 made reference to, were they available back in
13 the mid '60s?

14 A. Yes.

15 Q. Now, do you have any knowledge at all as to
16 whether or not Armstrong World Industries was
17 notified of Monsanto's decision to withdraw
18 Aroclor 1254 from the market?

19 A. Yes.

20 Q. And what's your knowledge?

21 A. They were on the mailing list of that June
22 letter and as I understand it, they were also on
23 American Mineral Spirits' mailing list.

24 Q. How about the documents that you made reference
25 to, the sales call reports that you talked

1 about, documents that you said reviewed we
2 haven't looked at today; is that correct?

3 A. That's right.

4 Q. What time period were those from?

5 A. '71 time frame.

6 Q. What was the subject matter of those reports?

7 A. I have to ask. I've forgotten. They had to do
8 with PCBs. That's all I remember about them.

9 Q. Did it have to do with any discussions between
10 Monsanto employees and Armstrong employees with
11 reference to replacements for Aroclor 1254 as a
12 plasticizer?

13 A. I believe they did, but I am not certain.

14 Q. Let me show you, rather you can turn to a letter
15 dated September 23, 1970, Bates number MAE
16 054497. It's a two-page document 054498. You
17 remember any input that you had to this
18 particular letter?

19 A. I don't recall any input per se. I was aware
20 that it was being prepared and was going to be
21 sent out.

22 Q. Do you know at the time that this letter went
23 out in late September of 1970 whether or not
24 customers of Monsanto's who had purchased
25 Aroclor 1254 were continuing to use Aroclor 1254

1 despite the evidence of a replacement that
2 didn't contain PCBs?

3 A. I was aware that those who had an inventory of
4 1254 continued to use up that inventory.

5 Q. Did Monsanto make any recommendations with
6 regard to the continued use of that inventory
7 other than what's contained in these letters?

8 A. I cannot speak for the field salesmen. I don't
9 know what they told them.

10 Q. So you wouldn't have any information with regard
11 to any field salespeople talking to Armstrong
12 about the continued use of Aroclor 1254 on
13 ceiling tiles?

14 A. Correct.

15 Q. Now, there were other letters that were sent out
16 with reference to items or products other than
17 the Aroclor line; correct?

18 A. Correct.

19 Q. Products that contained PCBs?

20 A. Correct.

21 Q. They were Therminols?

22 A. Is an example yes.

23 Q. Did Monsanto endeavor to contact customers who
24 were using different products that contained
25 PCBs?

1 A. Certainly.

2 Q. Was Monsanto's primary concern initially, would
3 it be fair to say that their primary concern was
4 with regard to open uses of Aroclor 1254 and
5 Aroclor 1260?

6 MR. DiMURO: Object to the form, but
7 you can answer.

8 A. Primarily concerned?

9 Q. In 1970?

10 A. In 1970, those open uses were perceived to be
11 the bigger source of PCBs entering the
12 environment so there was a concern there. On
13 the other hand, there was also a concern of even
14 so-called closed systems that were allowed to
15 leak and run down the local streams and all were
16 of concern also, depending, of course, on the
17 size of the leak, so to speak.

18 Q. Nonetheless, Monsanto continued to manufacture
19 PCBs for use in closed systems such as
20 electrical transformers and heat transfer
21 fluids?

22 A. Yes.

23 Q. Up until 1977; correct?

24 A. Heat transfer fluids were eliminated by the end
25 of '72 as I remember. The electrical systems

1 lasted until 1977 and they are still in
2 existence, by the way.

3 Q. Do you have an understanding as to what
4 Armstrong did with the Aroclor 1254 that ended
5 up on the ceiling tiles? Do you have any
6 personal knowledge?

7 A. No, I don't.

8 Q. Do you know who at Armstrong made the decision
9 to utilize Aroclor 1254 for the plastisols in
10 the application for ceiling tiles?

11 A. I was never told.

12 Q. Do you know whether or not Monsanto ever gave
13 any recommendations to Armstrong World
14 Industries with reference to application of
15 Aroclor 1254 on ceiling tiles?

16 A. No.

17 Q. Do you know whether or not Monsanto had ever
18 contemplated the use of Aroclor 1254 as a
19 component part of a plastisol coating
20 formulation for application to ceiling tile
21 prior to 1970?

22 A. It was never discussed in my presence. I don't
23 know anything about it.

24 Q. You would agree with me, Mr. Papageorge, that
25 certainly PCBs are not intended to be ingested;

1 correct?

2 A. That's true.

3 Q. I was reading one of your transcripts and I
4 believe you made reference to Dr. Kelly used to
5 say that you're not supposed to put it in root
6 beer?

7 A. Put it in where, sir?

8 Q. Root beer?

9 A. That's right, yes.

10 Q. And you would also agree with me that PCBs are
11 not contemplated to be inhaled by human beings;
12 correct?

13 A. Correct.

14 Q. And PCBs are not contemplated to come in contact
15 with a person's skin; correct?

16 A. Correct.

17 Q. Were all of those factors, for example, the
18 ingestion, inhalation and skin contact part of
19 Monsanto's decision to withdraw Aroclors as open
20 uses in the early '70s?

21 MR. DiMURO: Object to the form.

22 A. Of course, there is certainly items that are
23 exposure that are constantly considered, but the
24 open use application was over and above that.
25 Because those so-called open uses were such that

1 the PCBs would enter the environment but not
2 necessarily cause a skin exposure or inhalation
3 or ingestion. They could still be in the
4 environment.

5 Q. Would you agree with me that Monsanto
6 recommended avoiding open uses because the
7 ultimate user or consumer of the products that
8 contained PCBs couldn't control the material
9 from entering the environment?

10 A. That is true.

11 Q. Earlier Mr. Turet had discussed with you the use
12 of paints that contain PCBs. In your experience
13 as an employee at Monsanto, did Monsanto ever
14 provide any literature or suggest the use of
15 PCBs in paints in residential or commercial
16 premises, commercial office space for instance?

17 A. I don't recall any paint or coating application
18 using PCBs as ingredients, making any
19 distinction between commercial or residential or
20 outdoor applications.

21 Q. Are you familiar at all with the allegations of
22 this case with regard to levels of PCBs in terms
23 of parts per million that were found at the
24 college after the fire in the mid 1980s?

25 A. I believe I was told a number, but I don't

1 remember it.

2 Q. Earlier you told us that you did not believe
3 that PCBs when used in a proper industrial
4 setting posed a health risk to human beings;
5 correct?

6 A. Correct.

7 MR. TURET: Objection,
8 mischaracterization of what he said.

9 Q. Is it also your belief that PCBs at certain
10 levels do not cause cancer?

11 MR. DiMURO: Objection to the form.

12 A. I would suggest that PCBs at any level has not
13 been shown to cause cancer, any known level.

14 Q. Are you familiar with NIOSH standards with
15 regard to permitted levels of PCB exposures?

16 MR. DiMURO: Speaking generally?

17 MR. O'CONNOR: Generally, any time,
18 any place?

19 A. Are you using the word NIOSH or OSHA?

20 Q. NIOSH.

21 A. I used to know, but I don't remember them
22 anymore.

23 Q. I'm not asking for specific levels. I'm just
24 asking generally if you have any knowledge about
25 NIOSH standards with regard to permissible

1 levels of exposure.

2 A. Yes, we went through earlier that criteria
3 document and development of these exposure
4 levels and so on.

5 Q. You haven't done any analysis in this case with
6 regard to levels or parts per million of PCBs
7 that were found at the college or length of
8 exposures regarding these particular claimants?

9 A. I have not.

10 Q. So you don't have any opinion as to whether or
11 not these particular claimants in this case
12 suffered any physical injury as a result of
13 exposure to PCB levels at the college; correct?

14 A. I am in no position to know that.

15 Q. Eventually manufacturing of PCBs for closed uses
16 was stopped also; correct?

17 A. Yes.

18 Q. Manufacture and distribution?

19 A. Yes.

20 Q. What happened between June of 1970 and 1977 that
21 caused Monsanto to conclude that it would be
22 appropriate to completely stop the manufacturing
23 and distribution of PCBs?

24 A. I suspect that the major impetus came from the
25 passage of the Toxic Substances Control Act,

1 which specifically mentioned PCBs and as I
2 remember they had a date of 1979, but Monsanto
3 beat that by a couple of years.

4 Q. Well, was Monsanto kept abreast of the TSCA
5 legislation as it was developed?

6 A. Yes, very much so.

7 Q. Did you have any personal involvement with
8 Monsanto's dealings with the government as it
9 related to TSCA?

10 A. No, not at that point where the passage was
11 imminent.

12 Q. Let me ask you if you know if Monsanto had
13 anticipated TSCA listing PCBs as a regulated
14 substance in the legislation?

15 MR. DiMURO: Objection to the form.

16 A. Yes.

17 Q. Have you heard the term dibenzyl furans?

18 A. Yes.

19 Q. What do you know about dibenzyl furans?

20 A. It's a hydrocarbon chemical. It's got some
21 oxygen in it. It's got that double benzene ring
22 configuration like PCBs do. What else can I say
23 about them -- they are not commercial products.
24 They are contaminants in other hydrocarbon
25 mixtures.

1 Q. Are they frequently found with PCBs?

2 MR. DiMURO: Object.

3 A. I don't know how to define frequently. They
4 have been reported.

5 Q. To be found with PCBs?

6 A. Yes.

7 Q. Have you ever seen any literature, any
8 documentation related to the presence of
9 dibenzyl furans in Aroclor 1254 manufactured by
10 Monsanto?

11 MR. DiMURO: Could I have that read
12 back?

13 (Question read.)

14 A. No, not from Monsanto material.

15 Q. You haven't seen any in Monsanto material. Has
16 anyone ever shown you a material safety data
17 sheet from General Electric?

18 MR. DiMURO: For any materials?

19 Q. With reference to dibenzyl furans and its
20 presence in Aroclor 1254?

21 A. I don't remember such a document.

22 Q. Earlier you had made reference to you had gone
23 to Europe between February of 1970 and June of
24 1970; is that correct?

25 A. Yes, sir.

1 Q. And you met with various individuals in Sweden?

2 A. Yes.

3 Q. And also in the Netherlands?

4 A. Yes.

5 Q. What did you do in the Netherlands?

6 A. We had a discussion with the researchers who
7 were finding these dibenzyl furans in PCBs. And
8 they, as I remember, had not found any in
9 Monsanto's material. But they had found it in
10 the French, the German, Spanish, Italian and at
11 that time the Czechoslovakian, Polish and
12 Russian samples.

13 Q. Well, did you discuss at all the health effects
14 on humans of dibenzyl furans with those people?

15 A. Yes, they did point out that these materials
16 were highly toxic. I don't recall that they
17 gave us any specific numbers in terms of levels
18 of exposure and all. Their primary interest was
19 the fact that they couldn't find it in Monsanto
20 material and were asking us why that was so.
21 That was the thrust of the discussion.

22 Q. Is it your understanding that PCBs manufactured
23 by Monsanto don't contain dibenzyl furans?

24 MR. DiMURO: Object to the form. You
25 can answer.

1 A. I think as best I remember, the more recent
2 sophisticated analytical methodology was able to
3 finally detect extremely low levels of dibenzyl
4 furans. That occurred in about 1975 as I
5 recall.

6 Q. In 1970 when you discussed PCBs and dibenzyl
7 furans with these gentlemen in the Netherlands,
8 did you discuss dibenzyl furans and their
9 relationship to the causation of cancer?

10 MR. DiMURO: Object to the form.

11 A. I don't recall cancer being a part of the
12 discussion.

13 Q. When did you first become aware that PCBs were
14 being related to cancer or as a cancer causing
15 agent?

16 MR. DiMURO: Objection to form.

17 A. I have a hard time picking any specific date.
18 It seems most of the allegations I heard came
19 from individuals associated with Environmental
20 Defense Fund, Natural Resources Council, even
21 the individual who was with Ralph Nader, doctor
22 -- I can't remember his name now. He's still
23 active. They kept bringing up the word
24 "cancer," but when I asked them about who's
25 studying it, can I go visit with them, I never

1 got any specific leads.

2 Q. How about Dr. Kimbrough?

3 A. Dr. Kimbrough conducted a study on rats.

4 Incidentally, she was on that NIOSH committee
5 with me that we talked about earlier back in
6 '76. Her study initially was interpreted by
7 her pathologist as indicating evidences of
8 cancer in her rats. By coincidence, the sample
9 of Aroclor 1260 she used was the very same lot
10 number Monsanto used in its studies with rats.
11 Now, Monsanto studies did not reveal this
12 evidence of cancer whereas Renate Kimbrough's
13 initial report indicated they found it.

14 Q. Let me stop you for one second. When you're
15 saying Monsanto studies, are you referring to
16 the studies performed by IBT?

17 A. Yes.

18 Q. You refer to those as Monsanto studies?

19 A. Yes.

20 Q. Let me ask you something: Prior to Dr.
21 Kimbrough's studies, and I believe it was in the
22 mid '70s, 1974 or so, had you ever seen any
23 studies that linked PCBs with cancer?

24 MR. DiMURO: Object to the form.

25 A. Prior to '74 studies -- not to my knowledge.

1 Q. Prior to 1974 it's fair to say that Monsanto
2 knew that certain levels of exposure to Aroclor
3 1254 or 1260 could cause chloracne or the
4 problems we discussed with the liver; correct?

5 A. Yes.

6 Q. And when Dr. Kimbrough's studies came out in
7 1974 Monsanto hired IBT to look at the slides?

8 MR. DiMURO: Object to the form. You
9 can answer.

10 A. Yes, there was some -- yes, there was an attempt
11 made to get a cooperative review with Dr.
12 Kimbrough's slides, yes. Dr. Kimbrough visited
13 with Monsanto and IBT people came by. Yes, we
14 did arrange for that.

15 Q. Now, the studies that Dr. Kimbrough did you made
16 reference to her pathologist, was that Dr.
17 Squire?

18 A. Yes.

19 Q. After the Kimbrough studies, did Monsanto do
20 anything to contact customers about PCBs in
21 1974?

22 A. Not that I know of.

23 Q. The labels that we had discussed earlier that
24 went onto the Aroclor containing products, you
25 were actually responsible for coming up with the

1 supplement to the label that we discussed, I
2 believe it was 19-A and B, Papageorge?

3 A. Yes.

4 Q. Why is it at that time that you decided to
5 supplement what the prior Aroclor label had
6 been? Why did you feel it necessary to put on
7 some supplementary information?

8 A. At that point in 1970 Monsanto scientists,
9 analytical chemists and all were convinced that
10 PCBs were out there in the environment and we
11 should do everything we could to prevent misuses
12 and what have you that lead to presence in the
13 environment. We had already told our customers
14 by letters to control their activities to
15 prevent loss to the environment. And we decided
16 that it would also be beneficial to put it on
17 the label of the material which would not only
18 inform our customer and his employees but would
19 also be available to the shipping entities in
20 case of any accidents en route, for example, or
21 warehousing entities that, you know, stopping
22 points where the loads are transferred from one
23 truck to another kind of activities. This is
24 just another way to communicate. That same
25 paragraph appeared on our invoices, our bills of

1 lading and so forth.

2 Q. Do you recall a bulletin that was sent out to
3 users of various Aroclors, specifically the
4 higher Aroclors in March of 1970?

5 A. March of 1970, a bulletin. I'm having a hard
6 time remembering March of '70.

7 Q. Do you remember if you added or contributed any
8 information for a bulletin on Aroclors that was
9 significantly different in describing the
10 products than had existed prior to March of
11 1970?

12 A. My memory totally fails me because in March of
13 '70 we were so busy getting ready to go to
14 Europe, talking to our managers, I can't imagine
15 anything got into a bulletin.

16 Q. Can you tell me whether or not in March of 1970
17 whether Monsanto had a very serious concern
18 about PCBs getting into any food sources or any
19 food storage facilities?

20 MR. DiMURO: Objection to form. To
21 the extent you have any documentation, he's
22 having been trouble remembering that.

23 MR. O'CONNOR: If you recall, I told
24 you I didn't have documents. It was referenced
25 in one of the transcripts. I don't have any.

- 1 If I had it, I would show it to him.
- 2 A. March of '70, I can associate nothing with that
3 month.
- 4 Q. Okay. Not a problem. But with regard to the
5 silo cases that were discussed earlier with Mr.
6 Turet, do you know when the first claim was made
7 that perhaps PCBs had gotten into grain or feed
8 that was given to cows and that PCBs had been
9 passed onto livestock?
- 10 A. As best I recall it was the summer of 1970.
- 11 Q. When the first claim was made?
- 12 A. When I first heard of it?
- 13 Q. How many silo cases were you involved in?
- 14 A. Oh, a couple in Ohio and maybe a couple in
15 Indiana.
- 16 Q. Do you know when those claims first arose?
- 17 A. I don't remember anymore.
- 18 Q. How about the case in Michigan where you went to
19 court and testified in Michigan, do you know
20 when that case was?
- 21 A. That was later than the others.
- 22 Q. It was later than the others, that's okay. How
23 about Georgia or Tennessee, do you recall any
24 silo cases in Georgia or Tennessee?
- 25 A. There weren't cases, but there were inquiries

1 made by the authorities to Monsanto. I don't
2 recall any cases per se.

3 Q. Do you recall a situation in North Carolina with
4 a chicken farmer?

5 A. Yes.

6 Q. Did you get involved in that particular
7 situation?

8 A. Yes, I did.

9 Q. Did litigation develop out of that?

10 A. I don't recall a court trial; deposition, yes.

11 Q. Would you agree with me that at some point in
12 time Monsanto developed a serious concern for
13 PCBs being present in buildings where food was
14 being stored or served to humans or animals?

15 MR. DiMURO: Object to the form.

16 A. Yes. The presence of PCBs in animal food and
17 human food was of deep concern to Monsanto. In
18 fact, this led to the program for changing out
19 heat transfer systems, particularly those
20 involved with food processing.

21 Q. Why was it of particular concern to Monsanto?

22 A. Because we didn't want an industrial chemical
23 present in people's food.

24 Q. Why is that?

25 A. It's hard to describe, but since it adds nothing

1 to the food value, can be avoided, we know
2 nothing about its final effects after long
3 exposures, it's just not considered prudent.

4 Q. Well, was it a concern of Monsanto -- was a
5 concern of Monsanto potential health risks to an
6 industrial chemical being introduced to a human
7 being or livestock?

8 A. Yes, it's a potential unknown health risk.

9 Q. Let me ask you, were any studies done on the
10 livestock that were alleged to have ingested
11 PCBs by Monsanto?

12 A. No.

13 Q. Do you have any information or any literature at
14 all as to any health effects with regard to
15 those particular -- with that particular
16 livestock that was involved in the silo cases?

17 A. No, I heard nothing.

18 (Brief recess.)

19 Q. Mr. Papageorge, earlier you told me that when
20 you were in the Netherlands you had a discussion
21 with certain individuals related to dibenzyl
22 furans, and you also told me that you
23 subsequently learned the dibenzyl furans are
24 very toxic; correct?

25 A. Yes.

1 Q. You are aware that with regard to housekeeping
2 recommendations and instructions for employees
3 at Monsanto in handling Aroclor 1254 and 1260
4 there is literature that references that Aroclor
5 1254 is toxic; correct?

6 MR. DiMURO: Could you read that
7 back, please?

8 (Question read.)

9 A. I believe the literature you're referring to
10 refers to the potential effect of the
11 overexposure of Aroclor 1254 and 1260 to the
12 point as we have discussed earlier where the
13 liver could be seriously harmed. But when you
14 refer to the housekeeping reference, I don't
15 think you mean the sweeping of the floor or
16 things like that. Are you talking about the --

17 Q. I'm talking about specific literature that
18 references the handling of Aroclor 1254 and
19 Aroclor 1260 that simply states this product is
20 toxic.

21 MR. DiMURO: Object to the form.

22 A. I don't know that it simply states that. It
23 does suggest it should not be on your skin, you
24 should not breathe the fumes, avoid these
25 things, take corrective action. That's the kind

1 of message that was conveyed.

2 Q. And the same question with regard to a
3 description of Aroclor 1254 or 1260 as noxious?

4 MR. DiMURO: Object to the form
5 again.

6 A. Noxious, I have a hard time remembering that
7 reference. It could be. I just don't recall
8 it.

9 Q. Okay.

10 MR. DiMURO: Brian, to the extent you
11 have a document you want to show him to refresh
12 his recollection.

13 MR. O'CONNOR: I don't have the
14 documents. They were exhibits that were marked
15 at a previous trial and I've reviewed
16 transcripts. And I haven't had an opportunity
17 to request those documents from you. It's only
18 in the last couple days I've gone over those
19 transcripts. We can go back over the trial
20 testimony if you want. To the extent I had a
21 document, I would certainly show it to him.

22 MR. DiMURO: Okay.

23 Q. Getting back to Dr. Kimbrough's studies, Mr.
24 Papageorge, that was in the early '70s about
25 1974; correct?

1 A. Yes.

2 Q. Had you seen any other studies that had data
3 which predated that report by Dr. Kimbrough with
4 regard to PCBs and adverse health effects on
5 humans?

6 A. No.

7 Q. Now, you told me earlier that after Dr.
8 Kimbrough did her studies a pathologist named
9 Dr. Squire interpreted the slides taken from the
10 rats and concluded that there is some evidence
11 of carcinoma; correct?

12 A. Correct.

13 Q. And I believe you told me that you then went out
14 or Monsanto then went out and did their own
15 studies through IBT; correct?

16 A. The Monsanto studies were completed before Dr.
17 Kimbrough's studies.

18 Q. The studies by IBT, when were they done prior to
19 Dr. Kimbrough's?

20 A. As I remember, they were completed late '71,
21 early 1972.

22 Q. Did you see a trip report from a DE Gordon at
23 IBT addressed to Dr. Levinskas from March of
24 1975?

25 A. I remember Dr. Gordon, and of course I know Dr.

1 Levinskas. I don't associate a trip report with
2 those two. It doesn't mean it didn't exist.

3 Q. Let's see, we've had marked at Dr. Levinskas'
4 deposition as Levinskas 6 previously marked at
5 his deposition as Levinskas 15, a trip report
6 dated March 24 of 1975?

7 MR. TURET: You want in me to pull it
8 out?

9 Q. Mr. Papageorge, let me give you that. Take a
10 minute to look at the document. And let me ask
11 you first, do you recall having seen that
12 document before?

13 A. I have no recollection of this document. I'm
14 aware of the activity it seems to be describing.

15 Q. Take a look at the conclusion.

16 A. Can you help me find the conclusion section?

17 Q. Well, let me show you specifically what's been
18 attached. And I'll bring your attention to the
19 last two pages which is Ward R. Richter, Doctor
20 of Veterinary Medicine, appears to be board
21 certified as a veterinary pathologist. Do you
22 recall having seen that document at all prior to
23 today?

24 A. I do not recall it.

25 Q. Do you recall being cross examined by the

1 plaintiff's attorney in the Bechtel versus
2 Monsanto case in August of 1994?

3 MR. DiMURO: Deposition or at trial?

4 MR. O'CONNOR: At trial.

5 Q. Do you recall the plaintiff's attorney showing
6 you that document?

7 A. Boy, I'm having a hard time -- doesn't look
8 familiar at all. The format -- my memory fails
9 me.

10 Q. Okay. Do you recall telling me earlier that Dr.
11 Squire who worked for Dr. Kimbrough had
12 concluded that the slides revealed carcinoma?

13 A. Yes.

14 Q. Do you recall being cross examined on Dr.
15 Richter's findings with this document in the
16 trial of Bechtel versus Monsanto matter?

17 A. No, that doesn't ring any bell. Dr. Richter --
18 I just can't associate Dr. Richter with that
19 trial or with this.

20 Q. Why don't you read out loud the paragraph
21 enumerated No. 5?

22 A. "However, the lesions in Dr. Kimbrough's studies
23 were more severe than those in the Bio-Test
24 studies. The lesions that she and Dr. Squire
25 are calling carcinoma are also carcinomas by my

1 criteria. I would conclude from an examination
2 of their material that Dr. Kimbrough's study
3 demonstrated carcinogenicity."

4 Q. Let me ask you again, Mr. Papageorge, does that
5 refresh your recollection as to the cross
6 examination at the Bechtel versus Monsanto
7 trial?

8 A. I just can't recall that.

9 Q. Do you recall working at all with Dr. Richter?

10 A. Well, I met the man in my visit to Industrial
11 Bio-Test Laboratories. He did make some
12 presentations and that's about as close as we
13 got professionally.

14 Q. But he's an employee of IBT obviously, correct,
15 or was back in '75?

16 A. He was performing some studies for Industrial
17 Bio-Tech. I do not know if he was an employee
18 or a contract consultant.

19 Q. Do you know how long he worked there?

20 A. I don't know that.

21 Q. Do you know if he had done any other type of
22 laboratory testing on behalf of Monsanto?

23 A. Not to my knowledge.

24 Q. Now, Dr. Calandra was the president of IBT;
25 correct?

1 A. Correct.

2 Q. Did you, or rather I should say Monsanto, after
3 Dr. Kimbrough's studies, did Monsanto hire IBT
4 to do anything else other than review these
5 particular slides with IBT?

6 MR. DiMURO: When you say these
7 particular slides --

8 MR. O'CONNOR: The rat liver slides
9 taken by Dr. Kimbrough and reexamined by Dr.
10 Richter as contained in this trip report.

11 A. I don't know of any other studies that Monsanto
12 had asked of IBT.

13 Q. You told me that IBT did their own studies late
14 '71, '72?

15 A. Yes.

16 Q. And what did those studies reveal with regard to
17 cancer and PCBs?

18 A. They revealed no carcinogenic effects.

19 Q. And is that the basis for your opinion or your
20 belief, those particular studies, that PCBs do
21 not cause cancer?

22 MR. DiMURO: That one study?

23 MR. O'CONNOR: Not the one study, if
24 that's a part of his basis for his opinion or
25 belief.

1 MR. DiMURO: Object to the form.

2 A. That supports my previously held understanding
3 that nothing was available that would say with
4 certainty that PCBs cause carcinogenesis.

5 Q. Does Dr. Kimbrough's report change your opinion
6 in any way or your belief?

7 A. At the time, I along with others were
8 questioning Dr. Kimbrough. Following that
9 period, and I think it happened in about 1977 or
10 so, Dr. Kimbrough withdrew her conclusions.

11 Q. What about Dr. Richter?

12 A. I don't know how he felt.

13 Q. So you don't believe you ever saw this document
14 back in 1975?

15 A. I just don't recall seeing it. That doesn't
16 mean I didn't see it. I just don't remember.

17 Q. Back in the early '70s, can you describe the
18 relationship between Monsanto and IBT.

19 A. Well, I'll try. IBT was probably the most
20 professional contract animal testing laboratory
21 in the country. It was used not only by
22 Monsanto but other large companies. It was
23 considered probably the best contract laboratory
24 available. Even those companies that had their
25 own laboratories would contract their work to

1 IBT when their laboratories just couldn't handle
2 the workload. My personal exposure to the IBT
3 labs where I visited several times, I found them
4 to be highly professional. They had the latest
5 in equipment, and I've been in laboratories, so
6 I had a feel for the atmosphere and the people
7 and the way they conducted their businesses and
8 all. The visit back in the animal cages and
9 areas I found impressive, frankly. They were
10 immaculate. I was thoroughly impressed
11 personally as a nontoxicologist. The
12 presentations made by the staff to a
13 nontoxicologist I also found impressive in that
14 they were able to communicate in language I
15 thought I understood. So to conclude, it was a
16 darn good laboratory in my opinion.

17 Q. How long had IBT been doing work for Monsanto
18 prior to the early '70s?

19 A. It started about 1954, I think was their first
20 bit of business.

21 Q. Isn't it true that IBT's primary business was
22 servicing the chemical industry?

23 A. I don't know how to measure that. I know that
24 many chemical companies used their services. I
25 have no way of knowing if that was the major

1 part or whether they had enough other kinds of
2 businesses.

3 Q. Well, IBT was aware of Monsanto's philosophy
4 with regard to allegations of PCBs and harm to
5 human beings back in the late '60s, weren't
6 they?

7 MR. DiMURO: Object to the form.

8 MR. LIPSHUTZ: Objection to the
9 form.

10 A. I have no way of knowing what IBT was aware of
11 in Monsanto.

12 Q. Do you think that IBT was objective when they
13 performed their studies in '71 and '72?

14 A. I have no reason to believe otherwise.

15 Q. Well, Dr. Calandra, was he ever employed at
16 Monsanto?

17 A. No, not to my knowledge.

18 Q. Earlier we had a document marked Papageorge No.
19 3. Who is Joe Calandra?

20 A. That's him, that's Dr. Calandra.

21 Q. Do you remember Mr. Turet was asking you about
22 this March 10, 1969, meeting and it's marked
23 Papageorge No. 3, and if we turn to the third
24 page, Bates No. MAE 053279, there is a reference
25 to "defense seems to have these elements" and

1 there are five Roman numerals; correct?

2 A. Yes.

3 Q. Doesn't this establish what Monsanto's position
4 was with regard to the allegations of Aroclor
5 1254 back in March of 1969?

6 MR. DiMURO: Object to the form. You
7 can answer it.

8 MR. LIPSHUTZ: Would you read back
9 that question?

10 (Question read).

11 MR. LIPSHUTZ: I want to object to
12 the form of the question.

13 MR. DiMURO: Objection noted.

14 A. The items listed here by Dr. Richard cover some
15 of the elements that Monsanto felt were
16 appropriate to the PCB environmental issue. It
17 does not cover all of them.

18 Q. Sure. Do you recall this meeting yourself?

19 A. I wasn't there.

20 Q. Okay. Do you know whether or not there was any
21 discussion at this meeting about Monsanto's
22 position that Aroclor 1254 was not necessarily
23 harmful to human beings?

24 MR. DAVIDSON: At that meeting? He
25 just told you he wasn't at that meeting.

1 MR. O'CONNOR: I just asked him if he
2 knew.

3 MR. DiMURO: Objection to the form.

4 MR. TURET: I'll object to the form.

5 A. Not having been there and that type of subject
6 was not discussed in my tutorial, I'm left with
7 the impression this meeting was the contact with
8 the laboratory to begin more extensive studies
9 on PCBs than is normally done for industrial
10 chemicals. That was the intent of such
11 meeting. And I also am left with the impression
12 at the time that we discussed this with Mr.
13 Wheeler is that this is the first time that Dr.
14 Calandra and his lieutenants there, his staff,
15 really knew about such things as PCBs.

16 Q. Well, it's true, isn't it, that Dr. Calandra was
17 the president of IBT at this time?

18 A. Yes, sir.

19 Q. In 1969?

20 A. Yes, sir.

21 Q. And he was the president of the lab that was
22 going to perform objective tests and studies as
23 to whether or not PCBs were related to cancer;
24 correct?

25 MR. DiMURO: I'll object to the

1 form.

2 A. No, that was not his assignment. He was to
3 study PCBs, the three types that were offered to
4 him as materials to be studied, to determine the
5 long-term effects on test animals and hopefully
6 extrapolate from that the possible human
7 effects. And these tests were the kind of tests
8 that are used to approve materials for food and
9 cosmetic use, which was unique for industrial
10 chemicals.

11 Q. When was it that, specifically that IBT was
12 asked to do studies or tests related to PCBs and
13 cancer?

14 MR. DiMURO: Objection to form.

15 A. The only studies with that specific connection
16 to cancer was the review of the Renate Kimbrough
17 slides.

18 Q. Well, what did IBT do for Monsanto in '70, '71?

19 A. They exposed test rats to various levels of PCBs
20 over their lifetime. And every six months or so
21 they would take samples, and of course they
22 would do the other testing, blood testing and
23 weight and food intake and all these other
24 parameters to determine what effect, if any, the
25 PCBs were having on the test animals.

1 Q. Did you have any contact directly with Dr.
2 Calandra about those particular studies?

3 A. Yes.

4 MR. DiMURO: You're talking the first
5 studies or review of the slides?

6 MR. O'CONNOR: The first studies.

7 A. I am referring to the lifetime studies on the
8 rats conducted at Industrial Bio-Test, late '69,
9 1970, completed in '71.

10 Q. At some point in time IBT ran into some criminal
11 problems; correct?

12 A. I'm sorry?

13 Q. The principals of IBT ran into some criminal
14 problems?

15 A. I read that in a local newspaper. That's the
16 only information I have.

17 Q. What was your understanding?

18 A. That some of the studies they conducted were
19 flawed, and I don't know the details of this,
20 and these are not studies conducted for Monsanto
21 to my knowledge.

22 Q. What were they studies in reference to, do you
23 have any idea?

24 A. No, I don't recall anymore. It was studies or
25 materials from other chemical companies. I

1 don't know the details anymore.

2 Q. What time frame was that?

3 A. About 19 -- late '70s is as close as I can come.

4 Q. Do you know what the outcome was? Were any of
5 those gentlemen convicted of a crime?

6 A. All I remember is that Dr. Calandra had a health
7 problem and he was somehow excused from any --
8 what's the word I'm looking for -- he was not
9 sent to prison or anything because of this
10 health problem. That's all I remember.

11 Q. Do you know if any of the employees of IBT were
12 sent to prison?

13 A. I don't know that.

14 Q. Were you at all involved in or investigated with
15 any dealings that you had with IBT?

16 A. No.

17 Q. In 1975, IBT was working on two-year rat feeding
18 studies on behalf of Monsanto; correct?

19 MR. DiMURO: When was that?

20 MR. O'CONNOR I guess we can have this
21 marked as -- or it already was marked as
22 Levinskas 9.

23 MR. DiMURO: What was the question?

24 Q. If he had any knowledge of work that IBT was
25 doing with regard to -- and I just read the

1 reference line that Dr. Levinskas' letter refers
2 to.

3 A. I understood your question to infer that studies
4 were underway in 1975.

5 Q. Right.

6 A. This is a letter to Dr. Calandra from Dr.
7 Levinskas in which he is referring to the report
8 of the studies that were completed in 1972 or
9 so. The study was completed back then.

10 Q. Right.

11 A. This is an attempt to summarize the findings and
12 Dr. Levinskas was asked to comment.

13 Q. Well, have you ever seen this document before?

14 A. I believe I have a recollection of seeing this.
15 Yes, I have seen it, but I don't remember under
16 what circumstances.

17 Q. Hold onto that. Do you see a reference in there
18 where Dr. Levinskas asks Dr. Calandra to amend
19 part of the report on Aroclor 1254 so that it
20 reads, "does not appear to be carcinogenic" in
21 place of "slightly tumorigenic"?

22 A. Yes, I remember the discussion that was held at
23 that time.

24 Q. In 1975?

25 A. Or thereabouts.

1 Q. Why would Dr. Levinskas go back and ask Dr.
2 Calandra to change a report that had been
3 completed approximately three years earlier?

4 MR. DiMURO: I'll object to the form,
5 and I don't know if that recharacterizes it
6 correctly, a report that had been done three
7 years ago, but subject to that you can answer
8 it.

9 A. As I recall, Dr. Levinskas didn't join Monsanto
10 when these early versions were put together.
11 It's later when he was asked to review them that
12 he came across what he perceived to be different
13 terminology for the same kind of data and he was
14 trying to be consistent. And this is why he
15 made this comment about the difference in the
16 two conclusions.

17 Q. Well, did you have any discussions with him as
18 to why he felt that it was more preferable to
19 have, does not appear to be carcinogenic versus
20 slightly tumorigenic?

21 A. I had discussions and as I recall his comments
22 really had to do with this is the conclusion the
23 toxicologists normally would reach, and he was
24 trying to reflect that professional approach
25 that he was accustomed to than he was really

1 disagreeing with what the original authors of
2 the reports had done.

3 Q. Dr. Levinskas was?

4 A. Yes. It was my understanding also that
5 different people wrote each of the three reports
6 and this is why you ended up with a case where
7 different terminology was used in one of them.

8 Q. Did Dr. Calandra make the changes as suggested?

9 A. Yes, they did.

10 Q. Now, you've appeared in trial before and
11 discussed those particular studies; correct?

12 A. Yes.

13 Q. Have you appeared at any hearings and discussed
14 those particular studies?

15 A. Any hearings?

16 Q. Sure, in front of any Federal or governmental
17 agency?

18 A. I don't recall if I mentioned these studies in
19 my presentation to the congressional committee.
20 I would be very surprised if I didn't.

21 Q. When was your presentation to the congressional
22 committee?

23 A. About '74 or so. I believe I mentioned these
24 studies. It's in the writeup.

25 Q. At any time after these changes were made, did

1 you testify as to these particular studies and
2 what they found?

3 MR. DiMURO: Before testifying at a
4 hearing, trial?

5 Q. At a hearing, trial any place?

6 A. I don't remember any discussion of that type.

7 Q. When you say discussion of that type, what are
8 you making reference to?

9 A. I recall that with this NIOSH committee meeting
10 in '76 we discussed these studies, but that was
11 not, in my opinion, a hearing, it was a
12 committee trying to pull all these various
13 thoughts together and come up with a document.

14 Q. At that NIOSH meeting, did you mention to anyone
15 that Dr. Levinskas had requested that Dr.
16 Calandra change the language of the report from
17 slightly tumorigenic to not appearing to be
18 carcinogenic?

19 A. No, no more than I did any other suggested
20 changes.

21 Q. I believe that's all I have for you. Let me
22 just look through my notes if Mr. Turet would
23 like to proceed.

24 MR. TURET: I think probably Mr.
25 Lipshutz who's been waiting patiently for a few

1 hours.

2 MR. LIPSHUTZ: Mr. Papageorge, you
3 need a break?

4 THE WITNESS: No, I'm all right.

5

6 EXAMINATION

7 QUESTIONS BY MR. LIPSHUTZ:

8 Q. Good afternoon, Mr. Papageorge. I've been
9 waiting patiently to ask you a few questions.
10 My name is Gary Lipshutz. I'm an attorney in
11 New Jersey. Can you hear me okay, sir?

12 A. Yes, I can.

13 Q. I'm participating in this deposition via
14 telephone. I have a number of questions I would
15 like to ask you, and I'm going to ask you about
16 some documents as well. But first I would like
17 to go back to your employment history you
18 testified to earlier. In the late '60s you were
19 plant manager at the Anniston, Alabama, plant?

20 A. Yes.

21 Q. Do they manufacture PCBs at that plant or did
22 they at that time?

23 A. Yes.

24 Q. Did they manufacture Aroclor 1254 at that plant?

25 A. Yes.

1 Q. Were there other plants where they manufactured
2 Aroclor 1254 or was that the sole plant?

3 A. There were other plants.

4 Q. You also testified that everything crossed your
5 desk when you were the plant manager, you were
6 responsible for everything; is that correct?

7 A. I was responsible, but I don't know that
8 everything crossed my desk.

9 Q. Okay. That's more of a euphemism there. But as
10 plant manager you were responsible for a number
11 of items including shipping, handling,
12 packaging, hiring, training and a few other
13 things you talked about; is that right?

14 A. That is correct.

15 Q. Can you tell me what sort of responsibilities
16 you had in the shipping area, the overview of
17 the shipping area?

18 A. Well, I'll try. Of course --

19 Q. I'm referring to this time frame when you were
20 the plant manager in Anniston, Alabama?

21 A. I understand. My responsibility there was to
22 make certain that the shipping orders were
23 followed to the letter by the personnel in my
24 shipping department, that the proper documents
25 were prepared and accompanied the shipment, that

1 the material that was being shipped was in the
2 proper container and properly labeled, and
3 documented in terms of what it was and its, what
4 we called lot number, which fixed when the
5 particular material was manufactured.

6 Q. Let me ask you a couple questions about the lot
7 numbers. Where did that number come from? Was
8 there some sort of a -- let me just ask you
9 where did the lot number specifically come from?

10 A. The lot number is selected by the supervisor of
11 the producing unit and it can take any one of
12 several forms. Many of them are just
13 consecutive numbers starting with one and ending
14 up with thousands. There are others that use an
15 alphabetical code to designate the year. For
16 example, A might be year 1970 and B 1971 and so
17 on. And the letters then followed by a number
18 designating which lot was made first and second
19 and third and so on. So that's just an example
20 of the kinds of numbers that can be selected.

21 Q. Were there also -- did the lot numbers also
22 signify the product? Were they product specific
23 is my question to you.

24 A. Well, sometimes. This also depended on the
25 supervisor of the operation. He could have

1 selected certain numbers or alphabetical codes
2 to specify what materials.

3 Q. What about if a product was being manufactured
4 in two different plants, how would you signify
5 what plant it came from?

6 A. The lot numbers would be different.

7 Q. So each plant will have a specific lot number?

8 A. Yes.

9 Q. Or a specific style of lot number?

10 A. Yes. There was a lot of diversity here.

11 Q. Do you know back in 19 -- let me rephrase that.
12 Do you know back at the time you were plant
13 manager how many plants manufactured Aroclor
14 1254?

15 A. In this country or worldwide?

16 Q. In this country.

17 A. It was the Anniston, Alabama, plant and the
18 William G. Krummrich plant located in Sauget,
19 Illinois, S-A-U-G-E-T.

20 Q. So to your knowledge there were only two plants
21 that manufactured Aroclor 1254?

22 A. Yes.

23 Q. If you would take a look at, sir, the documents
24 that have been marked 19-A and B, they would be
25 shipping labels?

1 A. I remember them.

2 Q. Would you tell me when you have them in front of
3 you, sir?

4 A. I have copies in front of me.

5 Q. Specifically let me refer you to 19-A?

6 A. I have it.

7 Q. I believe you testified that this was the label
8 that was used prior to May 1970; is that
9 correct?

10 A. That is correct.

11 Q. Were there any other iterations of this label
12 that were used prior to 1970? Let me rephrase
13 the question. Do you know when this label was
14 adopted by Monsanto?

15 A. I would suggest that from the printing on the
16 label itself in the bottom right-hand corner you
17 will see a zero five slash five three.

18 Q. Yes, I do see that.

19 A. That's May, 1953, is when this particular label
20 was cataloged into the system.

21 Q. Is that based upon your experience of how the
22 labels are created at Monsanto?

23 A. Yes.

24 Q. Let me ask you to look at 19-B, if I may, sir?

25 A. 19-B, yes, sir.

1 Q. And you've indicated you testified this was the
2 label that was used as of May 1970; is that
3 correct?

4 A. That is true.

5 Q. And if you look at the bottom right-hand corner,
6 that label has a designation 11/53?

7 A. I cannot explain that. I don't know what that
8 is telling me.

9 Q. So is it your testimony now that you're not sure
10 when the 19-A, the first label was first started
11 to be used by Monsanto?

12 A. No. What I am saying, sir, is that we are
13 looking at two labels for the same product, but
14 you will notice the format of the two is
15 different.

16 Q. Yes, I do notice that.

17 A. I'm interpreting these dates as meaning in May
18 of 1953 Exhibit 19-A was designed and used.

19 Q. What would you be interpreting --

20 A. The following November, somebody in the label
21 office decided to restructure the format.

22 Q. But the paragraph on the right of 19-B?

23 A. The paragraph on the right was added, but the
24 date was not changed.

25 Q. I see what you're saying. These labels you also

1 testified were the labels which were attached to
2 drum shipments?

3 A. Yes, sir.

4 Q. Were similar type labels attached to pail
5 shipments?

6 A. Yes.

7 Q. What sort of labels or documents -- let me
8 rephrase the question. What other documents
9 would accompany a drum shipment of Aroclor 1254
10 to a customer?

11 A. Well, there would be a normal bill of lading
12 that would go with each truckload.

13 Q. Is there anything else you can think of?

14 A. Nothing that would accompany the shipment
15 itself.

16 Q. Is there some other type of a document that is
17 in your mind that, what might not accompany the
18 shipment but otherwise might be given to a
19 customer?

20 A. Yes. He would receive a copy, for example, of
21 the bill of lading, in addition to what
22 accompanies the load, he would receive it in the
23 mail. He would also receive, of course, the
24 invoice.

25 Q. Is there any other type of literature which

1 would accompany a shipment of Aroclor 1254?

2 A. Literature, no. It would not accompany the
3 shipment.

4 Q. What about, was Aroclor 1254 shipped in tank
5 loads?

6 A. Yes.

7 Q. What sort of documents would accompany a tank
8 shipment of Aroclor 1254?

9 A. Up until 1972 the only document would be the
10 bill of lading.

11 Q. Would this, would there be a label similar to
12 19-A that would accompany the bill of lading?

13 A. Not before 1972.

14 Q. But of course in 1972 Monsanto is not shipping
15 Aroclor 1254; is that correct?

16 A. It's shipping to some uses.

17 Q. Okay, that's correct?

18 A. And a copy of the label we're looking at which
19 is referred to as Exhibit 19-B would be put in a
20 plastic envelope and attached to the dome of the
21 tank car.

22 Q. So is this before or after 1972?

23 A. After '72.

24 Q. Again, focusing your attention to 19-A, the
25 lower right-hand corner above the weight 600

1 pound section, the net legal 600 pound is an
2 area for lot number and packer?

3 A. Yes.

4 Q. Do you see that, sir?

5 A. Yes.

6 Q. You indicated that the supervisor of the
7 producing unit would select the lot number.
8 Once the Aroclor 1254 was placed into the drums,
9 would a lot number then be affixed to this
10 label?

11 A. The lot number normally is affixed to the label
12 before it's placed on the drum.

13 Q. Was that something that was typed in or written
14 in?

15 A. That was stamped in.

16 Q. That was stamped in by the packer?

17 A. Yes, sir. In addition to that, there would be
18 stenciled on top of the drum that same lot
19 number in case the label was damaged or erased
20 or lost.

21 Q. In your experience what sort of quantities, in
22 your experience as the production manager or the
23 plant manager in Anniston, what sort of
24 quantities would be in a typical lot of Aroclor
25 1254?

1 A. Oh, it would vary from -- it could go as much as
2 10,000 gallons.

3 Q. And as little as?

4 A. Little as maybe a thousand gallon tank full or
5 you could accumulate ten of those in a big tank
6 and take a sample and call that the lot.

7 Q. In the -- again, 19-A has been referred to the
8 label that would be attached to drums. Just to
9 be clear, labels which were attached to other
10 containers, what was the term we were using
11 before?

12 A. The pail.

13 Q. Pail, correct, that's correct. Would that also
14 have the lot number designation as well?

15 A. Yes.

16 Q. If I could focus your attention to a document
17 which I provided to your counsel earlier, it's
18 an Armstrong document which was produced by
19 Armstrong in this matter.

20 MR. LIPSHUTZ: Mr. DiMuro, could you
21 hand that document to Mr. Papageorge?

22 MR. DiMURO: He's got it in front of
23 him.

24 MR. TURET: What's the Bates number?

25 MR. LIPSHUTZ: Bates No. A 040024.

1 MR. TURET: Thanks.

2 MR. LIPSHUTZ: It might be a good
3 idea, let's mark this document 21.

4 (Lot number list
5 marked as Exhibit No. 21
6 for identification.)

7 MR. DiMURO: Go ahead, Gary.

8 Q. Mr. Papageorge, is the document that's been
9 marked Papageorge 21, is that in front of you,
10 sir?

11 A. Yes, it is.

12 Q. Have you had an opportunity to look at this
13 document?

14 A. I'm looking at it now.

15 Q. This is a document that was produced by
16 Armstrong in this litigation and it's a document
17 from their Lancaster, Pennsylvania, plant
18 laboratory. It's been alleged that this
19 document sets forth 21 shipments of Aroclor 1254
20 received by Armstrong and also the document
21 shows -- let me rephrase that. Armstrong has
22 also alleged that it received Aroclor 1254 from
23 either Monsanto or American Mineral Spirits or
24 both. With that in mind, sir, would you look at
25 the second column that says lot number?

1 A. I see it.

2 Q. In your experience as plant manager at Anniston,
3 one of the two facilities where Aroclor 1254 was
4 manufactured, are these lot numbers consistent
5 with lot numbers Monsanto would use for its
6 product?

7 A. Yes.

8 MR. DiMURO: Object to form.

9 A. Yes, they are.

10 Q. So the alphabetical and numerical designation is
11 consistent with your earlier -- let me strike
12 that. Do you recognize these lot numbers
13 specifically as lot numbers used by Monsanto for
14 Aroclor 1254?

15 MR. TURET: Objection.

16 A. I can't say that for certain. All I can tell
17 you is that they make sense to me and I see the
18 features that I tried to describe earlier and
19 maybe I didn't do a good job on it.

20 Q. Is that why you're saying they make sense to
21 you?

22 A. Yes, sir. I see the letter A which tells me
23 Anniston. And I see the letter K which is
24 associated with the year 1968. Later on 1969
25 becomes L, and 1970 becomes M.

1 Q. Was that a feature of items which were
2 manufactured at the Anniston facility while you
3 were plant manager?

4 A. Yes, sir.

5 Q. You've testified, sir, that you had no direct
6 dealings with American Mineral Spirits. Let me
7 rephrase that question. You've testified that
8 you didn't speak with any representative of
9 American Mineral Spirits; is that correct?

10 A. That is correct.

11 Q. I want to let you know I represent American
12 Mineral Spirits in this matter. I don't know if
13 I told you.

14 MR. DiMURO: Sandbagging the witness.

15 MR. LIPSHUTZ: I have another area I
16 want to ask you about.

17 Q. You talked about reviewing call reports to
18 customers prior to this deposition?

19 A. Yes.

20 Q. Is there such a thing as a call report for a
21 distributor, to your knowledge?

22 A. I don't know how distributors operate, so I
23 cannot answer that. I don't know.

24 Q. But did you or did you not look at call reports
25 to distributors in preparation of this

1 deposition?

2 MR. DiMURO: I think he just
3 testified he didn't know if there were call
4 reports for distributors.

5 Q. So the only call reports that you looked at was
6 for customers?

7 A. This was Monsanto sales representative
8 describing a visit he made to a customer.

9 Q. And in your experience at Monsanto, it was
10 common for a Monsanto sales representative to
11 fill out a report after he visited a customer?

12 MR. DiMURO: I'll object to the
13 form. He can answer if he knows.

14 Q. It's up to the -- let me ask you a more direct
15 question. I'm sorry to interrupt you.

16 A. Go ahead.

17 Q. Do you know if it was -- do you know if sales
18 representatives would prepare call reports of
19 their meetings with customers?

20 A. It was up to the sales representative to make
21 that determination. Sometimes they would make
22 out a call report, sometimes they would not.

23 Q. But you have no knowledge as to whether salesman
24 would make reports of their meetings with
25 distributors?

1 A. I don't recall seeing any that referred to such
2 a meeting.

3 MR. LIPSHUTZ: I want to go off the
4 record a second.

5 (Discussion off the record)

6 MR. LIPSHUTZ: Back on the record.

7 Q. Sir, I would like to take a look at Papageorge
8 Exhibit No. 8. Do you have that document in
9 front of you?

10 A. I have it.

11 Q. You do have it?

12 A. Yes.

13 Q. Do you know when this document was produced?

14 A. It doesn't have a specific date on it but it
15 does refer to the year 1970 and in its context
16 here it refers to a mailing that was made to
17 direct Monsanto customers which was early 1970.
18 And on Page 2, the last sentence refers to the
19 letters will be mailed from St. Louis about the
20 end of February. This tells me that this
21 particular document was put together sometime
22 January, early February of 1970.

23 Q. And you might have answered this question
24 earlier, I apologize. Did you help prepare this
25 document?

1 A. No.

2 Q. Do you know who prepared this document?

3 A. I would be speculating. I can tell you that,
4 not the person but the Monsanto department that
5 issued it is the plasticizers group in Monsanto.

6 Q. If you would look at Page 3?

7 A. I have it.

8 Q. Right about the end of the top paragraph, the
9 letter talks about a visit with distributors
10 Central Solvent and American Mineral Spirits?

11 A. I see that.

12 Q. Do you know -- strike that. You were not the
13 individual who went to American Mineral Spirits;
14 is that correct?

15 A. I was not.

16 Q. Do you know who on behalf of Monsanto went to
17 American Mineral Spirits?

18 A. I do not.

19 Q. Do you know what was discussed -- strike that.
20 Do you have any firsthand knowledge as to what
21 was discussed at the meeting with American
22 Mineral Spirits?

23 A. I was informed that Central Solvents and
24 American Mineral Spirits were brought up-to-date
25 regarding that letter that Monsanto sent out in

1 February or will send out at this point in time,
2 will send out in February informing its
3 customers about the presence of PCBs in the
4 environment.

5 Q. Is that what you mean by when you say
6 up-to-date?

7 A. I'm sorry?

8 Q. You just said the distributors were brought
9 up-to-date. Is that what you mean, they were
10 informed of the letter?

11 A. I'm sorry, the distributor was told that, yes,
12 they were brought up-to-date regarding
13 Monsanto's plans for sending out a letter
14 informing it's customers of the discovery of
15 PCBs in the environment, which kind of PCBs
16 these were and the need to handle them in such a
17 way that it would not enter the environment.

18 Q. Now, do you recall who told you this
19 information?

20 A. Mr. Schalk.

21 Q. And did Mr. Schalk present to you in a manner in
22 which he was the gentleman who went to the
23 distributors' offices or was it that someone
24 else from Monsanto went?

25 A. I got the impression that someone else went.

1 Q. Do you have any knowledge as to whether American
2 Mineral Spirits -- let me rephrase that
3 question. To your knowledge, the purpose of the
4 meeting was solely to address the information
5 contained in the February letter; is that
6 correct?

7 A. That is correct.

8 Q. At this time, what I mean, at the time the
9 letter was going out, February of 1970, had
10 Monsanto decided to withdraw Aroclor 1254 from
11 the market?

12 A. Not yet.

13 Q. So to your knowledge no one at American Mineral
14 Spirits knew -- let me rephrase that. To your
15 knowledge Monsanto would not have informed
16 American Mineral Spirits that it was withdrawing
17 Aroclor 1254 at the time of this meeting; is
18 that correct?

19 MR. DiMURO: Objection to the form.

20 MR. TURET: Objection.

21 A. That knowledge was not known even to the
22 Monsanto representative that visited American
23 Mineral Spirits; therefore, it would not have
24 been conveyed.

25 Q. Did you ever have any dealings with any

1 representatives of Central Solvents?

2 A. No.

3 Q. Did you ever have any dealings with any
4 distributors for Monsanto?

5 A. No.

6 Q. Of any product?

7 A. That is true, no.

8 Q. In your experience working for Monsanto in your
9 experience working as a plant manager, would
10 there be a reason for a distributor to modify a
11 lot number?

12 MR. DiMURO: Objection to the form.

13 A. I don't know of any reason for doing so.

14 Q. Have you ever heard of or knew of an example
15 where a manufacturer changed a lot number of a
16 product produced by Monsanto -- I'm sorry. Do
17 you have any knowledge or have any recollection
18 of a specific time when a distributor changed a
19 lot number of a Monsanto product?

20 A. I'm not aware of any such incident.

21 Q. Do you have any firsthand knowledge of whether
22 American Mineral Spirits supplied Armstrong
23 Aroclor 1254 -- strike that. Do you have any
24 firsthand knowledge of whether American Mineral
25 Spirits supplied Aroclor 1254 to Armstrong?

1 MR. DiMURO: Objection to the form.

2 Gary, what do you mean by firsthand knowledge?

3 Q. Do you know whether American Mineral Spirits
4 supplied Aroclor 1254 to Armstrong?

5 A. I know because I saw that reference in some
6 documents here recently.

7 Q. In preparation for this deposition today?

8 A. That is correct.

9 Q. Can I just take you back to Papageorge 21 which
10 is that Armstrong document we marked earlier?

11 A. I have it.

12 Q. Would you look down to -- I would like to say
13 line 55 and there is a lot number there, KL 635?

14 A. I see it.

15 Q. Do you know if that lot number would be
16 indicative of an Anniston -- strike that -- a
17 Krummrich lot number?

18 MR. TURET: Objection.

19 A. It's very likely a Krummrich lot number.

20 Q. Is that what the K would stand for, Krummrich?

21 A. Yes, sir.

22 Q. And is L still consistent with the 1969 marking?

23 A. Yes.

24 Q. Sir, I appreciate your time. I don't think I
25 have any further questions. Thank you?

1 MR. TURET: I have a few more.

2
3 EXAMINATION

4 QUESTIONS BY MR. TURET:

5 Q. Mr. Papageorge, there is a document here that
6 was marked at a previous deposition as Coaker
7 6. It's been referred to as the Plasticizer
8 Blue Book. Is that a book that you've seen
9 before today?

10 A. I've never seen this.

11 Q. Okay. To your knowledge, Mr. Papageorge, when
12 you were employed by Monsanto back in about 1970
13 do you know how many plasticizer products
14 Monsanto manufactured?

15 A. I have no idea.

16 Q. If I were to represent to you that this book
17 marked as Coaker 6 states that there are between
18 80 and 100 plasticizer products being
19 manufactured by Monsanto as of the time of this
20 book, does that number seem within the range you
21 might have expected?

22 MR. DiMURO: Object to the form. You
23 can answer.

24 A. It doesn't surprise me, sir. I knew there were
25 many. I never bothered to catalog them or

1 memorize them.

2 Q. Let me show you briefly the contents page from
3 the book. Do you recognize the products listed
4 on that page? The Bates number page A 061501.

5 A. Well, I recognize some of the trade name
6 designations as an example, some of the
7 Santicizers. I do not at this point in time
8 recall what the number that follows Santicizer
9 is describing.

10 Q. Fair enough. I'm not going to ask you specific
11 properties of any of them. You'll notice for
12 example, the Aroclor plasticizers were listed as
13 one entry here under miscellaneous, and there
14 are multiple Aroclor plasticizers being
15 manufactured at the same time; correct?

16 A. That is correct.

17 Q. And based on your experience at the Anniston
18 plant and even before that would you agree that
19 each plasticizer has its own chemical
20 properties?

21 MR. DiMURO: Object to the form.

22 A. Yes.

23 Q. And each has its own viscosity; correct?

24 A. Yes.

25 Q. And its own flame retardance?

1 A. Yes.

2 Q. And appearance?

3 A. Some appearances may be alike. They may all
4 look like baby oil, for example, just looking at
5 them you can't tell.

6 Q. But not all plasticizers look alike; correct?

7 A. That's true.

8 Q. And plasticizers have their own acidity?

9 A. Yes.

10 Q. In your experience can a customer just swap one
11 plasticizer for another?

12 MR. DiMURO: Objection to form.

13 A. It all depends on what his application
14 requires. He has to conduct some laboratory
15 tests to see if the end result is what he's
16 searching for.

17 Q. In fact, sometimes customers even use more than
18 one plasticizer in combination; correct?

19 A. Many times, yes.

20 Q. So the fact that there were other plasticizer
21 products manufactured doesn't necessarily mean
22 that one can just switch from one plasticizer to
23 another plasticizer; is that correct?

24 MR. DiMURO: Objection to form.

25 A. That is true.

1 MR. TURET: I have no further
2 questions.

3 MR. O'CONNOR: Mr. Papageorge, I have
4 very briefly.

5

6 EXAMINATION

7 QUESTIONS BY MR. O'CONNOR:

8 Q. If you remember, I made reference to a bulletin
9 back in March of 1970 and you didn't recall your
10 involvement with the bulletin?

11 A. Yes.

12 Q. I want to show you some transcripts from
13 testimony taken from the Haley versus Monsanto
14 case, May 17 of 1984. This was in the state of
15 Michigan and dealt with a silo case?

16 A. Yes.

17 Q. And the attorney was asking you about your
18 conversations with Dr. Hill from Ohio?

19 A. Yes.

20 Q. Do you recall that?

21 A. Yes.

22 Q. And he showed you a bulletin or brochure that
23 you had made a change to. And let me bring your
24 attention to Page 5-305 of this transcript at
25 the bottom and the question and answer, would

1 you read that, please?

2 A. Do you want me to read it out loud?

3 Q. No, you don't have to read it out loud. Read it
4 to yourself. Did that refresh your recollection
5 at all, Mr. Papageorge?

6 A. It did refresh my recollection with Dr. Hill and
7 the incident that created this. I'm having
8 difficulty recalling which brochure was in print
9 at that time.

10 Q. Well, my reading of your testimony is that in
11 March of 1970 it was brought to your attention
12 that there was PCBs occurring in, found in cows'
13 milk and it dawned on you that PCBs could also
14 end up in other food applications.

15 A. That's right, sir.

16 Q. Do you recall that you made a change to a
17 bulletin or brochure that accompanied Aroclor
18 1254 which states specifically some specific
19 applications where the use of PCBs should
20 definitely be avoided are in paints and sealants
21 for swimming pools, paints and waterproofing
22 agents in silos and other buildings where food
23 products for humans or animals are stored and as
24 a component of any container or wrapping used in
25 the packaging of food products?

1 A. I remember that.

2 Q. You recall that now?

3 A. What fooled me is the reference to publishing a
4 new bulletin.

5 Q. Okay. So it was a supplement to an existing
6 bulletin; correct?

7 A. Yes.

8 Q. And you did that in or around March, 1970?

9 A. Yes.

10 Q. With regard basically to Aroclor 1254?

11 A. Correct.

12 MR. O'CONNOR: I have nothing
13 further.

14 MR. TURET: Gary?

15 MR. LIPSHUTZ: I'm done.

16 MR. DiMURO: We're going to take a
17 two-minute break. We may have some questions
18 for Mr. Papageorge.

19 (Brief recess.)

20 MR. DiMURO: We have a couple of
21 questions for Mr. Papageorge.

22 MR. LIPSHUTZ: Do you mind if I go
23 first?

24 MR. DiMURO: Sure, go ahead. We
25 thought you were finished.

EXAMINATION

QUESTIONS BY MR. LIPSHUTZ:

Q. Mr. Papageorge, can you hear me, sir?

A. Yes.

Q. Do you recall who the supervisor of the producing unit at the Anniston plant was in the unit that manufactured Aroclor 1254 during the time that you were the plant manager?

A. Yes, Jack Molloy, M-O-L-L-O-Y.

Q. Would you describe for me what Mr. Molloy's responsibilities would be or were?

A. He was responsible for running that unit in terms of having adequately trained manpower, assurance that he had the right raw materials available, that his operation would produce the quantity of materials scheduled for the period of time, say so many pounds per month or per year, that he was responsible for the quality of the material, whether it met product specifications. That's generally the kind of thing that he was responsible for.

Q. Is Mr. Molloy still alive to your knowledge?

A. Yes.

Q. Do you know where he lives?

1 A. The last I heard he was down in Florida
2 somewhere.

3 Q. If American Mineral Spirits placed an order for
4 Aroclor 1254 would it be shipped directly from
5 the Anniston plant to the AMSCO facility?

6 MR. DiMURO: Object to the form.

7 A. If it came from the Anniston plant, it would be
8 sent to the address that American Mineral
9 Spirits would designate because we did have a
10 system of ship to and bill to.

11 Q. I understand. I guess a better question is was
12 there an -- Anniston production did not ship to
13 another Monsanto location -- let me rephrase the
14 question. The Aroclor 1254 which was produced
15 at the Monsanto plant in Anniston was shipped to
16 customers from that plant; is that correct?

17 A. Generally.

18 Q. What would exceptions be?

19 A. Sometimes it would be shipped to a field
20 warehouse.

21 Q. A Monsanto field warehouse?

22 A. A Monsanto operated warehouse or contract
23 operation and trans shipped from there to the
24 ultimate customer; sometimes, not every time.

25 Q. Can you think of the name of the Monsanto

1 employee who would have knowledge of shipments
2 to American Mineral Spirits during this time
3 frame that you were plant manager?

4 A. His name escapes me. I can see him. I just
5 can't recall his name right now.

6 Q. If you do recall at some point I would
7 appreciate if you would advise your counsel.

8 A. Okay. If I'm lucky I'll remember it in the
9 middle of the night some night.

10 Q. Let me refer you briefly to Papageorge No. 11.

11 A. I have it.

12 Q. I would like you to take a look at the second
13 page, the paragraph beginning marketing?

14 A. I see it.

15 Q. Okay. Second sentence, only a couple of
16 companies have called claiming that they have
17 not heard of our withdrawal. To your knowledge
18 was Armstrong one of those companies?

19 A. No.

20 Q. Let me ask you, did you write that section?

21 A. No. This was written by a marketing individual.

22 Q. I think you might have answered that question.

23 A. I believe I did.

24 Q. Do you recall the name of the individual who
25 wrote that section?

1 A. It's one of two; it's either Mr. Schalk or Mr.
2 Walt Waychoff, his assistant.

3 Q. Do you know the source of their information for
4 the sentence, our distributors are well on their
5 way to zero inventory of the Aroclors having
6 pretty well matched their purchases from
7 Monsanto with firm orders from their customers.
8 Do you know the source of that information?

9 A. It would have to come from the field. I do not
10 know if it came from the specific sales
11 representative or from the district office
12 manager.

13 MR. LIPSHUTZ: Thank you, sir. I
14 have no further questions.

15 MR. DiMURO: I have a couple for you,
16 Mr. Papageorge.

17

18 EXAMINATION

19 QUESTIONS BY MR. DiMURO:

20 Q. Were you familiar with the Monsanto product
21 Therminol FR-1?

22 A. Yes.

23 Q. Did Therminol FR-1 contain PCBs?

24 A. Yes.

25 MR. LIPSHUTZ: I'm sorry to

1 interrupt. I'm having trouble hearing.

2 MR. DiMURO: Do you want us to read
3 back the question and answer?

4 MR. LIPSHUTZ: I think I was just
5 having trouble hearing you. You can go ahead
6 now.

7 Q. Are you familiar with the Monsanto product
8 Therminol FR-2?

9 A. Yes.

10 Q. Did that product contain PCBs?

11 A. Yes.

12 Q. Do you remember what Therminol FR-1 and
13 Therminol FR-2 were used for?

14 A. They were used as the fluid in systems that
15 conveyed heat from one source to the point of
16 use at another, heat transfer systems.

17 Q. To your knowledge, did Armstrong purchase
18 Therminol fluids from Monsanto?

19 A. I saw references to Therminol shipments,
20 purchases to Armstrong, yes.

21 Q. PCB containing Therminol fluids?

22 A. Yes.

23 Q. Are you familiar with a Monsanto product called
24 Pydraul F-9?

25 A. Yes.

1 Q. Is that a PCB containing product?

2 A. Yes.

3 Q. What was that used for?

4 A. Pydraul F-9 is a fluid used in hydraulic systems
5 to lubricate and be fire resistant. And such
6 uses include common things such as air
7 compressors.

8 Q. Long time ago in this deposition Mr. Turet asked
9 you some questions about PCBs for use for
10 certain uses as plasticizers. Are you aware
11 that PCBs were being used as a plasticizer for
12 vinyl asbestos floor tile?

13 A. Yes.

14 Q. And back in the late 1960s early 1970s were you
15 familiar with Armstrong Cork Company?

16 A. I had heard of Armstrong, yes.

17 Q. Do you know what type of products Armstrong Cork
18 Company made in the late '60s and early '70s?

19 A. I associate them with floor tile.

20 Q. What kind of floor tile?

21 A. Cork.

22 Q. Do you know what those floor tiles were made of?

23 A. Not in detail, no.

24 Q. Do you know of any other products made by
25 Armstrong in that time period late '60s early

1 '70s?

2 A. I associate them also with the sheet floor
3 covering instead of the tile. Sometimes I also
4 associate them with carpeting, rugs.

5 MR. DiMURO: I don't have any further
6 questions.

7 MR. TURET: No further questions.

8 MR. O'CONNOR: No further questions.

9 (Witness excused)

10

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1 STATE OF _____)

2 COUNTY OF _____)

3 I, WILLIAM B. PAPAGEORGE, do hereby certify:

4 That I have read the foregoing deposition;

5 That I have made such changes in form
6 and/or substance to the within deposition as
7 might be necessary to render the same true and
8 correct;

9 That having made such changes thereon, I
10 hereby subscribe my name to the deposition.

11 I declare under penalty of perjury that
12 the foregoing is true and correct.

13 Executed this _____ day of

14 _____, 1997,

15 at _____.

16
17 _____
18 NOTARY PUBLIC

19
20 My Commission expires: _____

21
22
23 _____
24 WILLIAM B. PAPAGEORGE

25 nk 111297

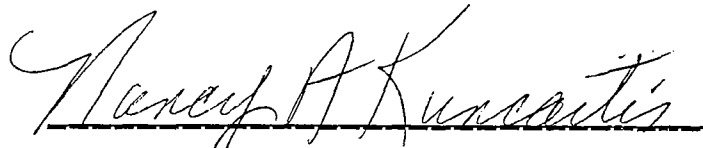
1 CERTIFICATE OF REPORTER

2 STATE OF MISSOURI)

3) SS

4 COUNTY OF ST. LOUIS)

5 I, NANCY A. KUNCAITIS, a Registered
6 Professional Reporter and Notary Public in and
7 for the State of Missouri, the officer before
8 whom the foregoing deposition was taken, do
9 hereby certify that the witness whose testimony
10 appears in the foregoing deposition was duly
11 sworn by me; that the testimony of said witness
12 was taken by me to the best of my ability and
13 thereafter reduced to typewriting under my
14 direction; that I am neither counsel for,
15 related to, nor employed by any of the parties
16 to the action in which this deposition was
17 taken, and further that I am not a relative or
18 employee of any attorney or counsel employed by
19 the parties thereto, nor financially or
20 otherwise interested in the outcome of the
21 action.

22 
23 _____

24 NOTARY PUBLIC in and for the
25 State of Missouri

My commission expires 11-22-97