

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
BEAUMONT DIVISION

CECIL SCOTT, ET AL

VS.

MONSANTO COMPANY

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CIVIL ACTION
NO. B-84-1103-CA

VIDEO DEPOSITION OF

JACK T. GARRETT

3:24 p.m. to 7:56 p.m.
May 28, 1987
Ramada Airport Inn
St. Louis, Missouri

Reported by:

Linda C. Baker
Texas CSR No. 505/Notary Public
Nell McCallum & Associates
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Houston, Texas 77006
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Taxable Cost: \$ _____
Charged to: DAVID M. LACEY, ESQ.
State Bar No:
Attorney for: Plaintiffs

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14 AND

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19 Videotechnician:

20 James Heironimus
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22 *****

23 Video Deposition of JACK T. GARRETT, taken
24 on May 28, 1987, at Ramada Airport Inn, St. Louis,
25 Missouri, between the hours of 3:24 p.m. and 7:56 p.m.,
before Linda C. Baker, CSR No. 505 and Notary Public in
and for the State of Texas, at the instance of the
Plaintiff, pursuant to Notice and the Federal Rules of
Civil Procedure.

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PROCEEDINGS

THE VIDEOTECHNICIAN: Okay. This videotape deposition is being taken in Cause No. B-84-1103-CA and is filed in the United States District Court for the Eastern District of Texas, Beaumont Division.

The style of the case is Cecil Scott versus Monsanto Company.

For the record, the video recorder today is James Heironimus of the firm Executive Service Groups; and the Certified Court Reporter present today is Linda Baker of the firm Nell McCallum & Associates.

We are here today to take the oral and video deposition of the witness, Mr. Jack T. Garrett; and we are located at the Ramada Airport Inn in St. Louis, Missouri.

Today's date is May 28th, 1987, and the time is approximately 3:24 p.m.

Will Counsel now please state their appearances for the record.

1 MR. LACEY: David Lacey, representing
2 the plaintiffs.

3 MR. JONES: My name is Robert Jones,
4 and I represent Monsanto Company.

5 THE VIDEOTECHNICIAN: Would the court
6 reporter please swear in the witness.

7

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12

13 JACK T. GARRETT,
having been first duly sworn, testified as follows:

14

15

EXAMINATION

16

17 QUESTIONS BY MR. LACEY:

18 Q Would you state your full name for the record,
19 please, sir?

20 A Jack T. Garrett.

21 Q Where do you live, Mr. Garrett?

22 A In Kirkwood, Missouri.

23 Q How are you employed?

24 A I am retired.

25 Q From what company are you retired?

1 A Monsanto.

2 Q When did you start your employment with them?

3 A In January 1950.

4 Q And when did you retire?

5 A In November 1985.

6 Q Did you retire at the regular retirement age?

7 A Yes.

8 Q Tell me briefly about your educational
9 background following high school.

10 A I have a B.S. Degree in Chemistry from Oklahoma
11 State University at Stillwater, Oklahoma.

12 Q Any subsequent education?

13 A And a Master's Degree in Chemistry from the
14 University of Tennessee at Knoxville.

15 Q Any education, formal education?

16 A Formally, no.

17 Q Have you taken any specialized courses of any
18 type?

19 A Many, many.

20 Q In what areas?

21 A Industrial hygiene, pollution control,
22 management, management style.

23 Q When did you receive your Bachelor's Degree?

24 A 1948, August.

25 Q And your Master's Degree?

1 A December of 1949.

2 Q Your entire employment career, then, after you
3 completed your education was with Monsanto?

4 A That is correct.

5 Q When you started to work for Monsanto, what
6 type of employment did you have with them?

7 A I was a research chemist.

8 Q And how long were you a research chemist?

9 A A little over three years.

10 Q Sometime in 1953 you changed to something else?

11 A That is correct.

12 Q What did you change to?

13 A I was transferred from the Texas City plant to
14 St. Louis to the Central Medical Department.

15 Q And what was your assignment within the Central
16 Medical Department?

17 A As an industrial hygienist --

18 Q Did you --

19 A -- and stream pollution control advisor.

20 Q Industrial hygienist and --

21 A And.

22 Q And what was the last? Extreme?

23 A Stream --

24 Q Stream.

25 A -- pollution control advisor.

1 Q Had you, at the point you took that job in the
2 Medical Department in 1953, had any experience in
3 industrial hygiene?

4 A Experience at Texas City in studying the
5 products and processes of that plant, and preparing a
6 report showing the handling hazards of the products and
7 major raw materials of the plant.

8 MR. LACEY: As an aside, Bob, I feel
9 like I should ask about styrene tar, but
10 I'll pass.

11 BY MR. LACEY:

12 Q With regard to your work for stream pollution
13 control, what type of assignments did you have and what
14 did you do for Monsanto?

15 A I went to the individual plants of the company,
16 advising them to -- if they had not done so, to study
17 their stream pollution problems and begin to do things
18 about them -- about it if they had not done so. And
19 many of them had.

20 Q And you were going here to Monsanto plants?

21 A Yes.

22 Q Did you continue to work with stream pollution
23 control throughout your career with Monsanto?

24 A No.

25 Q With regard to the industrial hygiene, what

1 type of assignment did you have?

2 A To study the Monsanto manufacturing plants
3 worldwide, and to study the handling techniques and
4 procedures within the plants to protect the workers.

5 Q And did you retain those types of duties
6 throughout your career with Monsanto?

7 A Yes.

8 Q When did you cease to have responsibilities for
9 stream pollution control?

10 A I am not completely sure, but '74 or '75.

11 Q What titles did you hold from the time that you
12 joined the Medical Department until your retirement?

13 A Manager -- Industrial Hygienist; Manager,
14 Pollution Control; Manager, Industrial Hygiene; Manager,
15 Industrial Hygiene and Pollution Control; Industrial
16 Hygiene Director; and Industrial Hygiene and Information
17 Services Director.

18 Q At some point in time, did you start
19 supervising people?

20 A Yes.

21 Q When did you begin supervising people?

22 A In the early '70's.

23 Q So up to the early '70's, you were an employee
24 who was responsible for actually carrying out work and
25 reported to someone else --

1 A Yes.

2 Q -- as opposed to supervising someone. Correct?

3 A Yes.

4 MR. JONES: Jack, let him finish
5 his --

6 THE WITNESS: Excuse me.

7 MR. JONES: -- his -- his question
8 before you answer it. It will just make
9 it a lot cleaner.

10 BY MR. LACEY:

11 Q In the early 1970s, you began to take on
12 management responsibilities?

13 A Yes.

14 Q And it was also at that time, I assume, that
15 you started your management training courses?

16 A Yes.

17 Q How many people did you supervise from 1970
18 forward?

19 A I started out with one. And when I retired, I
20 was supervising 28.

21 Q And was that a result of your increasing the
22 levels that you supervised, or just increasing the
23 number of people that reported to the position you
24 initially held?

25 A That would be difficult to answer.

1 Q Okay. What title did you hold when you started
2 supervising people?

3 A Manager, Industrial Hygiene.

4 Q And did you make any move up in the corporate
5 structure after that point?

6 A Yes.

7 Q And did those upward moves result in your
8 supervising more people as a result of taking on more
9 responsibility?

10 A And more functions.

11 Q Okay. And the additional functions that you
12 took on related to at some point taking on the pollution
13 control function?

14 A Yes.

15 Q And that meant there was an additional line of
16 people reporting to you that had not previously reported
17 as industrial hygienist?

18 A Yes.

19 Q When you took on the position or title of
20 Industrial Hygiene Director, did you still have
21 pollution control people reporting to you?

22 A No.

23 Q Did that result in a decrease in the number of
24 people reporting to you?

25 A No.

1 Q And when you took on the title of Industrial
2 Hygiene and Information Service, did that add additional
3 people reporting back to you, or was that --

4 A Yes.

5 Q Okay. So there were groups both of industrial
6 hygienists and information people, as well, reporting?

7 A Yes.

8 Q I want to focus my questions primarily on the
9 area of industrial hygiene, if we could. Tell me what
10 industrial hygiene is.

11 A It's the interdisciplinary science of
12 investigating and correcting workplace hazards.

13 Q Are there specific programs that one can study
14 this discipline?

15 A There are now.

16 Q I take it from the answer there at one time did
17 not exist such programs.

18 A No. There were no such programs specifically
19 issuing a degree or matriculation in industrial hygiene.

20 Q When did that first become available?

21 A In the -- probably in the '60's and early
22 '70's.

23 Q Is there any type of group that tests
24 industrial hygienists, certifies industrial hygienists,
25 registers industrial hygienists --

1 A Yes.

2 Q -- or the like?

3 A Yes.

4 Q What group is that?

5 A That's the American Board of Industrial
6 Hygiene.

7 Q And are you a member of that group?

8 A No. I am a member of the American Academy of
9 Industrial Hygiene.

10 Q Does the American Academy of Industrial Hygiene
11 test --

12 A Well, it would take some explanation.

13 The American Board establishes the criteria and
14 the questions and the circumstances and the times for
15 testing or for running the certification tests, of which
16 there are two.

17 When you -- if you pass, you are automatically
18 a member of the American Academy of Industrial Hygiene.

19 Q Is that the only way you can become a member of
20 that Academy?

21 A That is correct.

22 Q And you took the test and passed?

23 A I did.

24 Q When did you become a member of that Academy,
25 approximately?

1 A Early '60's, when it was organized.

2 Q Did you take the test, or were you
3 grandfathered in?

4 A I took the test.

5 Q When you came to the Monsanto Medical--
6 Department in 1950, who were the professionals then in
7 the department?

8 MR. JONES: I don't -- I object to
9 that question as a mischaracterization of
10 his prior testimony.

11 BY MR. LACEY:

12 Q I'm sorry. Did you come to the Monsanto
13 Medical Department -- I'm sorry. 1953.

14 A The other what? Excuse me. Restate the
15 question.

16 Q When you came to the Monsanto Medical
17 Department in 1953, who were the other professional
18 members in the department?

19 A The Director was Dr. R. Emmet Kelly. The
20 Assistant Director and my immediate superior was
21 Mr. Elmer P. Wheeler. There was a one-half time
22 physician, Dr. R. E. Mezera, M-e-z-e-r-a; a technician,
23 medical technician; and one secretary.

24 Q Did Mr. Wheeler have any particular area of
25 specialization?

1 A Industrial hygiene.

2 Q So he was already there as an industrial
3 hygienist when you arrived?

4 A Yes.

5 Q Who was the next industrial hygienist to join
6 the department, and when did he join?

7 A Dr. Carl D. Bohl, B-o-h-l. And he joined in
8 1970 or '71. I can't recall exactly.

9 Q So until 1970, the only industrial hygienists
10 that Monsanto had were you and Mr. Wheeler. Correct?

11 A In the main office.

12 Q What other areas had industrial hygienists in
13 Monsanto?

14 A The industrial hygiene responsibility lie with
15 the Safety Departments of the individual plants.

16 Q Did they have industrial hygienists on their
17 staff?

18 A Some of them had people doing that
19 particular -- particular parts of that particular
20 professional job, who later became Certified Industrial
21 Hygienists.

22 Q Okay. So there were some people who got
23 on-the-job training, so to speak, like yourself?

24 A That is correct.

25 Q What was the function of the industrial

1 hygienists who were assigned to the Corporate Medical
2 Department?

3 A It was to maintain liaison with the corporate
4 medical structure with the plants, and to check the
5 plants thoroughly and make recommendations for change in
6 connection with hazards noted.

7 Q Did that mean that you spent a fair amount of
8 time visiting Monsanto plants?

9 A Yes, indeed.

10 Q About what percent of your time in the 1950's
11 was spent in actually visiting Monsanto plants?

12 A 50, 60 percent.

13 Q In the 1960's, what percent of your time was
14 spent visiting Monsanto plants?

15 A Probably about the same.

16 Q Did that percentage go down in the 1970's, when
17 there were other industrial hygienists on staff and you
18 began to take on administrative responsibilities?

19 A Yes.

20 Q In the first half of the 1970's, what percent
21 of your time was spent visiting Monsanto facilities?

22 A 30 to 40 percent.

23 Q And in the second half of the '70's, what
24 percent was spent visiting Monsanto facilities?

25 A Probably 20 to 25.

1 Q Did you ever have responsibility for visiting
2 facilities other than those owned by Monsanto?

3 A Only when I was asked and allowed to by the
4 system.

5 Q The system?

6 A Subsidiary companies, that sort of thing.

7 Q Monsanto was organized, as I understand it, at
8 least the main company, into different divisions that at
9 one point in time were called operating companies,
10 although they were all part of the main Monsanto. Is
11 that correct?

12 A That is correct.

13 Q And those are plants that you would visit on a
14 regular basis. Correct?

15 A That's correct.

16 Q And when you talk about subsidiaries, are you
17 talking about a different type of facility?

18 A Yes.

19 Q What do you mean when you talk about a
20 subsidiary?

21 A We had a subsidiary in Mexico, for example,
22 that we owned a portion of. And -- and we would visit
23 at that plant.

24 We had subsidiary companies other than the --
25 we had some in the U. S. and some elsewhere that we

1 visited if we were told to visit them, if we owned
2 50 percent or more of the company.

3 Q You would not visit subsidiary companies unless
4 Monsanto owned at least 50 percent of it?

5 A Not necessarily. If we were inviteed-in and
6 agreements were made by Monsanto with the company, we
7 did; or if we had contractual obligations to do so, we
8 did.

9 Q Did you ever have assigned to you the
10 responsibility of visiting plants of companies in which
11 Monsanto did not own an interest?

12 A Yes.

13 Q Explain that to me.

14 A In the handling of parathion and methyl
15 parathion, we visited all blending plants, or they did
16 not receive our product.

17 Q When you say "blending plants," are you talking
18 about companies to whom Monsanto sold the chemicals?

19 A That is correct.

20 Q How many companies or customers, I guess is --
21 is how I will refer to it -- how many customers of
22 Monsanto did you visit in connection with that
23 assignment?

24 A Probably well over 100.

25 Q Did you visit each customer only once?

1 A Not necessarily.

2 Q What was the difference between those that were
3 visited once and those that were visited more than once?

4 A If they changed their process from handling
5 solid parathion applied to a -- an inert carrier, a dust
6 carrier, to handling that product as well as the
7 emulsified liquid product, we revisited them then to
8 make sure that the product handling was safe or we would
9 not sell it to them.

10 Q Is that the only occasion where you were ever
11 assigned as a part of your job duties with Monsanto the
12 responsibility to visit a plant belonging to a Monsanto
13 customer?

14 A That's a difficult question to answer, because
15 you leave the word out "if you were not requested to do
16 so." And you must put that word in to get it answered.

17 Q Well, I'm not sure I understand. Were you
18 requested to visit these parathion customers?

19 A No.

20 Q Were there any other customers' plants who you
21 were assigned to visit where Monsanto would not sell
22 them the chemical unless you visited the plant?

23 A Yes.

24 Q What else?

25 A There were two incidences where we visited a

1 processing operation and discussed the use of one of our
2 products.

3 Q What was that?

4 A PCB, or Aroclor in this case.

5 Q And who was that that you visited to discuss
6 the use of Aroclor or PCB?

7 A I -- I can't recall the name of the companies.
8 I -- I even remember the -- the town one of them was in.
9 It was in Newark, Ohio.

10 Q Newark --

11 A -- Ohio.

12 Q -- Ohio.

13 A And it was one of the fiberglass companies.

14 Q Do you remember anything about the other one?

15 A It was a floor tile company.

16 Q Do you remember where it was located?

17 A No. I have just don't recall.

18 Q In the floor tile, the PCBs were used as a
19 plasticizer?

20 A That was the request. We turned them down.

21 Q So they sought to become a customer of Monsanto
22 for PCBs to put into floor tile?

23 A That is correct.

24 Q And before you would sell it to them, you went
25 and you inspected their facility?

1 A Yes.

2 Q And after inspection, you concluded it would be
3 wisest not to sell it to them?

4 A That is correct.

5 Q About when did that visit take place?

6 A I have -- I don't even believe I could decade
7 it.

8 Q Okay.

9 A I probably -- well, that's conjecture.

10 Q Give me what you were going to tell me about
11 what you think would be the most probable time frame.

12 MR. JONES: If you can, Mr. Garrett.

13 If you can't, tell him.

14 A '60's.

15 BY MR. LACEY:

16 Q What about the fiberglass company? What were
17 they going to use the PCBs for?

18 A As a component of an adhesive to make preformed
19 insulation, pipe insulation.

20 Q They were going to make an insulation for pipe?

21 A Preformed pipe insulation.

22 Q This went around a particular type of pipe?

23 A That's right. You could buy it now. You could
24 buy it 40 years ago.

25 Q Who made that prod- -- that type of product?

1 Who were the companies that were in that business?

2 A The insulation companies, primarily.

3 Q Were people like Owens-Corning and folks like
4 that in that business?

5 A Yes.

6 Q And you don't recall whether that plant was the
7 Owens- -- Owens-Corning plant?

8 A No.

9 Q Did you sell them the PCBs for that use?

10 A No.

11 Q Do you recall when that was?

12 A No.

13 Q Can you even decade it?

14 A Probably the '60's.

15 Q Why was it that you chose -- Monsanto, I
16 mean -- chose to inspect this fiberglass company plant
17 in Newark, Ohio, before considering selling them PCBs?

18 A It was a new use.

19 Q And what did that have to do with the issue of
20 inspecting it?

21 A In a new use of a product that required special
22 handling, we wanted the manufacturer to show us how he
23 would handle it.

24 Q Monsanto considered PCBs a product that
25 required special handling?

1 A Indeed, they did.

2 Q What was the proposed handling method at this
3 fiberglass company plant?

4 A The material was a liquid adhesive applied to
5 fiberglass baths. The baths were then put on molds or
6 frames and baked.

7 It was our opinion that the baking process
8 produced, for the oven operators, excessive fumes.

9 Q So your conclusion was that the way in which it
10 would be used would present an occupational health
11 hazard to the employees of the proposed customer?

12 A That was the only reason I was there.

13 Q Did you recommend to this company ways in which
14 you thought that this problem could be resolved so that
15 they could become a customer?

16 A I told them if they wished -- they made no
17 comments at the time. I told them if they wished, to
18 call me; and they did not.

19 Q Do -- you indicated to them you would make some
20 suggestions that might make it acceptable to be a
21 customer?

22 A No. I told them I would discuss it further
23 with them if they wished. I was in no position to make
24 recommendations to how they modified their mechanical
25 system of handling it. That's for consulting engineers

1 and engineers that do that kind of design.

2 Q In the case of Monsanto itself and the plants
3 you visited, would you give recommendations on how to
4 modify a process in order to reduce the dangers from
5 exposure to PCBs?

6 MR. JONES: We're talking about these
7 two plants?

8 MR. LACEY: No. I'm talking about
9 Monsanto plants.

10 MR. JONES: Oh.

11 A In Monsanto plants?

12 BY MR. LACEY:

13 Q Yes, in Monsanto plants. Let me make the
14 question clear.

15 In Monsanto plants, would you make
16 recommendations about how to change your process in
17 order to reduce the hazards to Monsanto employees?

18 A Yes.

19 Q But since this was not a Monsanto plant, you
20 were not prepared to make those recommendations to this
21 customer?

22 A No.

23 Q No, that's correct; or yes --

24 A Yes, that is correct.

25 Q Okay. You could have, in fact, made such

1 recommendations. You would have been qualified to, in
2 other words. Is that correct?

3 A The recommendations that would have been -- had
4 had to have been made there would have been engineering,
5 and that is not my forte.

6 Q I see.

7 A I am not an engineer.

8 Q Did Monsanto have on its staff industrial
9 hygienists who did have expertise in engineering?

10 A No.

11 Q Okay.

12 A We had them, but not at that time.

13 Q All right. When did Monsanto first get on its
14 staff industrial hygienists who had expertise in
15 engineering?

16 A In the '70's.

17 Q Do you recall who the first industrial
18 hygienist was that Monsanto hired who had expertise in
19 engineering?

20 A Dr. Carl Bohl.

21 Q Now, what was the proposed use at the floor
22 tile company?

23 A I don't recall that fully. That was -- it just
24 is one of the those things that I don't recall well. I
25 don't recall that one.

1 Q Whatever it was, it was one that you decided
2 should not result in a sale of PCBs to that customer.
3 Correct?

4 A That is correct.

5 Q And was the reason for that that you were
6 concerned that the way in which the customer proposed to
7 use it might present a hazard to its own workers as they
8 worked with the product?

9 A That is correct.

10 Q Do you recall the nature of the hazard that you
11 thought would exist for the employees of the floor tile
12 company in the way they proposed to use PCBs?

13 A No, I really don't.

14 Q Do you recall whether it involved elevated
15 temperatures or not?

16 A No.

17 Q Who assigned you to go and inspect these two
18 proposed customers?

19 A I was told by my immediate superior -- in this
20 case, E. P. Wheeler -- to do it.

21 Q That's Elmer Wheeler?

22 A That's right.

23 Q Do you know who -- strike that.

24 Did Monsanto have an expressed policy which
25 required that an industrial hygienist examine the plant

1 of any proposed customer prior to selling them PCBs?

2 A On a policy base for new uses, apparently they
3 did. But I am not privy to that information.

4 Q And at no point in your career did you ever
5 learn what the policy of company might be, except by
6 making some assumptions from what happened?

7 A I knew the policy of department I worked in;
8 and the policies connected with -- with association with
9 customers was not my forte, and it varied.

10 Q What was the policy of the department in which
11 you worked about visiting a facility of a proposed PCB
12 customer before authorizing the sale to them?

13 A I really don't know, other than the fact that
14 if I were told to do that by my superior and who I was
15 to accompany, I went.

16 Q Okay. Who went with you on this visit to the
17 Newark, Ohio, plant, if anyone?

18 A Somebody was with me, yes. It was Paul
19 Benignus.

20 Q Why did Mr. Benignus go with you?

21 A I haven't the vaguest.

22 Q Did he have any expertise to lend with regard
23 to industrial hygiene?

24 A No.

25 Q What did he do while you were examining the

1 proposed customer's facility there in Newark, Ohio?

2 A I really don't recall.

3 Q Did you observe anything he did on the trip?

4 A Yes.

5 Q What did you observe him do?

6 A We went to the office of the company, the two
7 of us together; and they took us out to the -- this
8 purchasing area and showed us their pilot operation.
9 And -- and to the best of my -- I can't remember
10 exactly; but to the best of my knowledge, Paul was
11 there.

12 Q Did he have any input in your decision not to
13 sell the PCBs to them?

14 A I would assume so, but I do not know from my
15 own personal opinion -- recollection.

16 Q Did somebody go with you on the visit to the
17 floor tile company?

18 A I don't recall.

19 Q With the exception of the parathion and the
20 PCBs, were you ever assigned by Monsanto to visit any
21 other customers' facilities where they had not requested
22 that you come in and inspect them?

23 A Not to my recollection.

24 Q So the only chemicals that you are aware of
25 that Monsanto required that a company industrial

1 hygienist perform an inspection of a proposed new plant
2 use were PCBs and parathion. Correct?

3 A That I knew about, yes.

4 Q Was your area of practice as an industrial
5 hygienist restricted in any to particular chemical
6 products that Monsanto made, or did it cover all the
7 chemical products that Monsanto made?

8 A It covered the Monsanto plants, all Monsanto
9 plants.

10 Q And --

11 A Consequently, all Monsanto products.

12 Q Okay. So you weren't limited to just working
13 with chemicals like parathion and PCBs?

14 A No.

15 Q You had some experience through going to the
16 different plants and observing the processes with all
17 the chemicals --

18 A Yes.

19 Q -- that Monsanto made. What plants of Monsanto
20 made PCBs?

21 A The Anniston, Alabama, plant and the plant in
22 Sauget, Illinois.

23 Q Is that the Krummrich plant?

24 A That is the W. G. Krummrich plant.

25 Q And is Sauget, Illinois, directly across the

1 river from St. Louis?

2 A From the St. Louis waterfront, yes.

3 Q Did you have anything to do with the Monsanto
4 plant, joint venture plant, in Japan that made PCBs for
5 a period of time?

6 A No.

7 Q Did you have anything to do with the Monsanto
8 plant in the United Kingdom that made PCBs?

9 A Yes.

10 Q Did you ever visit that plant?

11 A Yes.

12 Q Could we add that one, then, to the list of
13 plants that made PCBs --

14 A Oh, excuse me. You're right. I'm sorry. Yes,
15 it was made in Europe.

16 Q And what was that plant, if you recall?

17 A I -- we have two plants that manufactured
18 organic chemicals there, and I can't tell you which one
19 it was. I think it was Newport, but I'm not sure.

20 Q Okay.

21 Now, are you aware of the fact that through a
22 joint venture -- and I guess it would be what you
23 referred to as a subsidiary -- Monsanto manufactured
24 PCBs in Japan?

25 A To be perfectly honest, no, I wasn't aware of

1 it.

2 Q Okay. That's fine. I won't bother to go into
3 it, then. You never visited any -- any Monsanto
4 facilities or joint venture or subsidiary facilities in
5 Japan?

6 A No.

7 Q Okay. Now, when did you first visit the
8 Anniston, Alabama, facility where PCBs were made?

9 A Probably in an early part of my career in
10 St. Louis, but I can't conjecture beyond that.

11 Q When did you first visit the Krummrich plant?

12 A I was taken by my superior, Elmer Wheeler, to
13 both the St. Louis plants -- in fact, all three of the
14 St. Louis plants -- the first week I was here.

15 Q Okay. So you would have visited the
16 Krummrich -- the Krummrich plant right off the bat?

17 A Yes.

18 Q Did you go to the Krummrich plant from time to
19 time in carrying out your duties as an industrial
20 hygienist for Monsanto?

21 A Yes.

22 Q Did you go to the Anniston, Alabama, plant from
23 time to time the carrying out your duties as an
24 industrial hygienist for Monsanto?

25 A Yes.

1 Q When did you first visit the European plant
2 that produced PCBs for Monsanto?

3 A In the '60's.

4 Q How frequently did you visit that European
5 plant?

6 A Three times.

7 Q When was the last visit?

8 A In the '70's.

9 Q How frequently did you -- did you visit the
10 Krummrich plant in connection with your duties as an
11 industrial hygienist for Monsanto?

12 A Frequently. And -- and I would be conjecturing
13 if I gave you a number.

14 Q Okay. Would it be on the order of once a year,
15 or once a month, or once a decade? What would
16 "frequently" be, just by general order of magnitude?

17 A Four to five times a month, probably.

18 Q Would you go to the same section of the plant
19 each time?

20 A Not necessarily.

21 Q I mean, would that be a -- a -- a plant visit
22 where you might show up anywhere? Is that the type
23 of --

24 A Yes.

25 Q Okay.

1 How frequently would you visit the Anniston,
2 Alabama, plant?

3 A Again, it would be conjecture. Three times a
4 year, maybe; four.

5 Q Why was the Anniston, Alabama, plant visited
6 less frequently than the Krummrich plant?

7 A It has less processing units and less problems
8 connected with those units and those processes.

9 Q Would you -- strike that.

10 Was there some mechanism of assignment within
11 the Medical Department whereby within a particular
12 plant, like the Krummrich plant or the Anniston plant,
13 you were responsible for certain processes going on
14 there and someone else in the department was responsible
15 for other processes in that same plant?

16 A No.

17 Q Did you frequently inspect the PCB-producing --
18 and I guess Aroclor would be maybe what it was called in
19 the plant -- the Aroclor Department at the Krummrich
20 plant?

21 A You'd have to define "frequently." No, not --
22 it was not a target processing unit, necessarily.

23 Q What were the target processing units at the
24 Krummrich plant?

25 A Those manufacturing very hazardous materials

1 such as the sulfur chloride compounds and those sort of
2 things.

3 Q How frequently did you visit these sections of
4 the Krummrich plant that manufactured these sulfur
5 chloride compounds?

6 A Probably every time I was there. I can't
7 absolutely guarantee that.

8 Q How frequently did you visit the section of the
9 plant that produced Aroclor?

10 A That would be difficult, and it would be
11 conjecture. A lot of it would occur if they asked for
12 some specific reason, and they very infrequently asked.

13 Q Well, would it get a visit every once in a
14 while, even uninvited?

15 A Yes.

16 Q How often would you make uninvited visits?

17 A At least once a year.

18 Q Okay. Was it a -- a rule that every section of
19 every plant get a -- an inspection by an industrial
20 hygienist at least once a year?

21 A The rule changed through the -- you're talking
22 history of 35 years. The rules changed. As we grew in
23 staff, we shortened those -- those requirements.

24 Q What was the rule initially when you came on
25 board?

1 A We set up the procedure to do it every year on
2 the larger plants. And here again, this was based on
3 the number of processing units.

4 Q Was the Krummrich plant in the once-a-year
5 category?

6 A Yes.

7 Q What category did the Anniston, Alabama, plant
8 fall into?

9 A It would probably be a kind of an interim
10 between the one-a-year and once every two years.

11 But, again, looking at 35 years, the change
12 that took place and the processing units that were added
13 there made it a target for one-a-year operations.

14 Q Okay. As the plant grew larger?

15 A As the plant produced -- began to produce the
16 parathions.

17 Q The Krumm- -- I'm sorry. The Anniston,
18 Alabama, plant?

19 A The Anniston, Alabama, plant; yes.

20 Q Were there already in place in both the
21 Krummrich plant and the Anniston plant PCB units when
22 you started your employment as an industrial hygienist
23 for Monsanto?

24 A To the best of my knowledge, yes.

25 Q When you first visited the European plant, were

1 the PCB-producing units already in place?

2 A I do not recall.

3 Q Do you recall whether there were any
4 substantial changes to the PCB processes at the
5 Krummrich plant after you started being industrial
6 hygienist for Monsanto?

7 A You'd have to rephrase the question. What kind
8 of changes are you talking about?

9
10 (At this point in the deposition,
11 Mr. Crawford entered the deposition room)

12
13 BY MR. LACEY:

14 Q Well, anything that would affect the potential
15 hazard to the workers at the plant. I don't mean an
16 expansion in the unit size, for example, that wouldn't
17 affect whether or not workers might be exposed in the
18 line.

19 A Not to my knowledge.

20 Q Were there any changes in the plant operations
21 at the Anniston, Alabama, plant after you started your
22 career as an industrial hygienist for Monsanto that
23 changed the potential hazards to workmen in any way?

24 A No, not that I recall.

25 Q When you made your first inspections of the PCB

1 or Aroclor Departments at the Krummrich plant, did you
2 find the precautions provided there for the Monsanto
3 workmen to be acceptable?

4 A Yes. I may have tuned their attention
5 slightly; but yes, it was principally against the
6 exposure to chlorine.

7 Q And you found the practices to be acceptable?

8 A Yes.

9 Q What tuning of the practices did you make at
10 the Krummrich plant?

11 A Through the years, we studied proper protective
12 clothing, the penetration tests for gloves and aprons
13 and special clothing.

14 We studied the process operations, individual
15 operations, later and made recommendations for
16 individual operators based on their operating
17 classification. In other words, if it was a Class A
18 Operator, we made a specific requirement that a Class A
19 Operator who operated the chlorinators did certain
20 things.

21 Q So you broke it down into an evaluation of
22 individual jobs within the unit?

23 A Individual jobs.

24 Q Had that previously been the case when you
25 started as an industrial hygienist for Monsanto?

1 A It had been started by Mr. Wheeler.

2 Q But had not been carried to conclusion, I take
3 it?

4 A No.

5 Q When you first visited the Anniston, Alabama,
6 plant, did you find the worker protections there to be
7 acceptable to protect the Monsanto employees working in
8 the Aroclor or PCB unit?

9 A Yes. I found them -- them -- them adequate.
10 Again, we tuned those, as well, later when we had better
11 facilities; some of the rapid analytical equipment, the
12 squeeze-bulk-type equipment and so forth, but -- but
13 basically the same.

14 And in both plants they also manufactured
15 chlorine, and those handling rou- -- procedures were
16 pretty much routine for chlorine-handling operators.

17 Q So in both plants, what you and Mr. Wheeler did
18 from the time that you started in the Medical Department
19 basically constituted fine tuning?

20 A In -- yes, and in studying all changes of an
21 engineering nature that took place in the plant, in the
22 process unit itself, through the years; and making
23 recommendations in the design stage of those processes.

24 Q Were there any process or design process
25 changes in the Aroclor units at the Krummrich plant?

1 A They -- it -- it would be impossible to sort
2 that out. I went to two or three of these type of
3 meetings, frequently, a week.

4 Q You just don't recall?

5 A No, I do not recall.

6 Q What about in the Anniston plant? Would that
7 be --

8 A Same deal.

9 Q Okay.

10 A If a whole new process was being built, it
11 would be different, and I might remember it. But in --
12 in additions and changes, no.

13 Q Can you describe for me what protections were
14 provided to the workmen in the Aroclor unit at the
15 Krummrich plant when you joined the Medical Department?

16 A The Krummrich plant had procedures in place
17 that represented plantwide procedures that were
18 occasioned by the other products manufactured in that
19 plant and handled in joint facilities for storage and so
20 forth. So their procedures represented a basic plant
21 procedure, with the overlies of the procedures to handle
22 chlorine and the finished products.

23 This was different at Anniston.

24 At Krummrich they were provided company
25 clothing. They were given rubber boots on call wherever

1 it was needed. They were provided respirators.
2 Self-contained breathing apparatus was available in the
3 process units, and they were trained to use them. They
4 were provided gloves, and the operators who handled
5 drums were provided with aprons. They were provided
6 with the usual coffee pot.

7 MR. JONES: Just so that I understand
8 what you're saying, are you saying that
9 that is plantwide, or are you saying -- is
10 that just Aroclors?

11 THE WITNESS: The total bundle of
12 protection at the processing plant at
13 Krummrich represented the requirements for
14 the chlorine and the PCB exposures in that
15 processing unit, plus what was required by
16 the plant; because the plant manufactured
17 a number of highly toxic substances other
18 than what was manufactured in that
19 processing unit. This was not true at
20 Anniston.

21 BY MR. LACEY:

22 Q So at -- at Krummrich you had some things that
23 everybody in the plant got?

24 A That is correct; everybody in that area of the
25 plant. Now, these were areawide, and the plant was

1 large enough so that it was managed on an area basis.

2 Q Okay. Were there any of the protections that
3 were provided to Monsanto workers in the Aroclor
4 Department at the Krummrich plant that everybody in the
5 plant got?

6 A You're talking 35 years now. What portion of
7 the 35 years?

8 Q Well, I'm --

9 A The early part?

10 Q We can break it down. Let's just take the
11 1950's to start with.

12 A In the 1950's, a number of departments in the
13 Krummrich plant got company-owned clothing.

14 Q Did all departments in the plant --

15 A No.

16 Q -- get that?

17 A No.

18 Q Okay.

19 A In the 1970's, all departments got it.

20 Q Okay. Now, in the 1950's, did the Aroclor
21 Department get companywide clothing?

22 A Yes.

23 Q So they -- the Aroclor Department had the
24 companywide or -- I'm -- strike that.

25 So the Aroclor Department had the company

1 clothing before that became a plantwide provision?

2 A That's correct.

3 Q In the 1950's, were there any worker
4 protections provided to the employees in the Aroclor
5 Department at the Krummrich plant that everybody in the
6 plant got, other than the coffee pot, I guess?

7 A The -- the program required that they be --
8 that they be provided with and trained in the use of the
9 protective clothing needed for the their job.

10 Now, keep in mind that the pro- -- that the
11 largest industrial hygiene hazard in that process was
12 chlorine. They were provided with the necessary
13 short-term masks; and the unit was provided with the
14 necessary self-contained breathing apparatus, so-called
15 SCBAs. They were contained in compartments alongside
16 the processing vessels themselves. And --

17 Q Did everybody in the plant have that?

18 A No.

19 Q Okay. Well, I'm trying to find out right now
20 what, if anything, was provided to the workers in the
21 1950's in the Aroclor Department at the Krummrich plant
22 that everybody in the plant got, I guess except for the
23 coffee pot, if everybody in the plant got the coffee
24 pot.

25 A And the physical exam, which we absolutely

1 insisted on.

2 Q Okay. And what was the frequency of that
3 physical exam?

4 A It -- it varied, and you'd have to check on the
5 individual plants. It was presumed to be on the basis
6 of every one to two years.

7 Q So in the '50's, the only thing that was
8 companywide at the Krummrich -- I'm sorry -- that was
9 plantwide at the Krummrich plant was the physical.

10 A And -- oh, the -- the -- I'm sorry. The hard
11 hats --

12 Q Okay.

13 A -- and the -- the glasses and cover goggles
14 were available to all employees, as were certain types
15 of gloves, ad -- ad lib. They could go get them from
16 the supply place. They must wear the glasses, the --
17 the helmets; and in certain areas, they must wear the
18 cover goggles over the glasses.

19 Q Okay. And those things were available at some
20 type of dispensary there in the plant to everybody
21 who --

22 A Yes.

23 Q -- wanted them?

24 A And, in fact, it was a firing offense -- it was
25 a disciplinary offense not to have the gog- -- the

1 safety glasses, the helmets, and hard- --hard-toed
2 shoes.

3 Q So an effort was made to enforce the rules by,
4 if necessary, terminating the employees.

5 A That is correct.

6 Q Now, let's go to the 1960's. What things --
7 and I assume that we'd still have, of course, the things
8 you just mentioned: the hard hat and the safety goggles
9 and steel-toed shoes -- but what things were supplied --
10 actually, were the steel-toed shoes supplied, or that's
11 just what a person bought to wear?

12 A It -- it varied. At first, you had to have
13 them; and at first, you paid a little for them. And
14 then I don't know when they stopped. When I was in --
15 originally in the first plant I was in, I paid half the
16 price for them. Later they were --

17 Q Free?

18 A --- provided by Monsanto free.

19 Q Okay.

20 A And that occurred in the '50's.

21 Q Okay. In the 1960's, what additional things
22 were supplied the Krummrich plant on a plantwide basis
23 as a part of worker protection?

24 A Well, I -- I can't say specifically the date;
25 but at some point in time, either in the '60's or the

1 very early '70's, the whole plant got company-owned
2 clothing.

3 Q All right. And did this mean that they got a
4 fresh suit of clothes each day?

5 A I don't know. You'd have to ask the Safety
6 Department at the plant. They did in -- in certain
7 areas, yes.

8 Q Did the people in the PCB Department get a
9 fresh suit of clothes each day?

10 A To tell you the truth, I don't know.

11 Q Was that clothing provided to them to use so
12 they could take it home and have it cleaned and bring it
13 back, or was it a fresh suit of clothes that the company
14 took care of for them?

15 A It -- it depended on the department.

16 At first -- and, again, my memory would -- does
17 not serve me well in respect to when the clothing was
18 issued to the man and he could take it home, and when it
19 was picked up and laundered commercially by the company.

20 Certain departments, the clothing was issued
21 each day and was picked up each day and laundered by a
22 commercial laundry. As that expanded, it was one -- an
23 evolutionary affair; ultimately, the entire plant.

24 Q And you do not recall whether the PCB
25 Department was from the outset one of those where the

1 clothing was issued each day and laundered each day by
2 the company?

3 A All I know is that when I first went over
4 there, they had company clothes. Now, what particular
5 scheme they were on, I do not recall.

6 Q All right. Did each employee have his own
7 changing place and locker and the like?

8 A Yes.

9 Q And was that available on a companywide basis
10 when you first went there?

11 A Yes.

12 Q What else was added in the 1960's or that
13 general time frame, if you can recall, on a companywide
14 or a plantwide basis at the Krummrich plant?

15 A In the '60's, I -- a -- a -- a very excellent
16 new change house and handling procedure went into effect
17 with a very new change house; had much, much bigger and
18 more responded facilities for showers, and each operator
19 in many of the departments got double lockers and that
20 sort of thing. But I can't recall exactly when that
21 occurred.

22 Q What do you mean by "double lockers"?

23 A They had a street clothes locker and a -- and a
24 company clothes locker.

25 Q Well, what's the purpose of a double locker?

1 A To keep the -- the company clothes and the
2 street clothes from intermingling.

3 Q And why would that be important?

4 A In some cases, it would be important for the
5 protective clothing if they had aprons and so forth.
6 You don't want to get anything on the clothing.

7 Q You don't want anything that's on the -- the
8 aprons to get off on the street clothes. Is that --

9 A That is true. In many cases and in many
10 departments, that was important.

11 Q Was that double locker system provided in the
12 PCB Department?

13 A I don't recall.

14 Q Were there enough shower facilities when --
15 strike that.

16 Before the new shower facility was built in the
17 1960's, were there enough shower facilities for everyone
18 to take --

19 A Yes.

20 Q -- a shower?

21 A But they were scattered.

22 Q And then they were centralized in this new
23 building later?

24 A That's true.

25 Q Did everybody in the plant get company time to

1 take their shower?

2 A I don't know. That's a plant labor relations
3 issue, not -- certain toxic problems required it.

4 Q Do you know whether or not the PCB or Aroclor
5 Department at the plant was one where that was a part of
6 the safety program?

7 A I don't recall.

8 Q What changes took place in the 1970's where
9 additional things were provided on a company- or a
10 plantwide basis at the Krummrich plant?

11 A I don't know that additional stuff was
12 provided. The -- the only thing is that you had an
13 improvement in the proc- -- in the equipment that was
14 available, improvement in glove construction,
15 improvement in aprons, improvement in respirator
16 cartridges, and so forth. And that was kept up with by
17 the Krummrich plant Safety Department.

18 And by the '70's, the Krummrich plant had an
19 industrial hygienist on their plant staff.

20 Q Do you recall who the industrial hygienist on
21 the Krummrich --

22 A Clarence Buckley was the first one.

23 Q Clarence Buckley?

24 A Clarence Buckley.

25 Q And how long was he the industrial hygienist

1 for the Krummrich plant?

2 A Till he retired. And I can't tell you when
3 that was.

4 Q Did his retirement precede yours?

5 A Yes.

6 Q I -- I take it from what you're saying that in
7 certain respects, the specific details of exactly what
8 precautions were being taken for worker safety in a
9 particular department of the Krummrich plant is
10 something that you don't have a specific recollection
11 on, but would be more within the province of plant
12 people or -- and subsequently even the industrial
13 hygienist at that plant?

14 A Subsequently, yes. Our principal job was
15 training the Safety Department and later, when
16 industrial hygienists became available, them, in respect
17 to their individual plants.

18 Keep in mind that we manufactured 1800 products
19 in some -- at one time, 47 different plants; and it was
20 difficult for me to recall all those plants, although I
21 went through every one of them.

22 Q Were any of the departments at the Krummrich
23 plant identified as being particularly toxic?

24 A You're going to have to define what you mean by
25 "toxic" or "hazardous."

1 Keep in mind that certain things are -- that --
2 that a -- a stone might be toxic if you ground it and
3 dissolved it and fed it it. If it, however, is -- is --
4 has a high vapor pressure and can be released in -- in
5 an -- in an atmosphere or in a circumstance where it can
6 get inside a person's body, either through the
7 respiratory tract, through the digestive tract, or
8 through their intact skin, then it becomes a hazard.

9 And we measured our programs connected with the
10 hazards associated.

11 Q Well, my question really is: Were there
12 specific departments within the Krummrich plant that
13 were associated as being particularly toxic or
14 particular -- particularly hazardous?

15 A There were departments that were more hazardous
16 than other departments, yes.

17 Q And were they so designated at the plant?

18 A They -- the -- the plant Safety, Industrial
19 Hygiene, and the management knew that -- those
20 departments where the potential for hazard was the
21 highest.

22 Q I guess what I'm asking: Was there any
23 particular designation assigned by Monsanto to
24 departments within the Krummrich plant saying, for
25 example, "This department is a department that deals

1 with a toxic chemical"?

2 A That would depend on the product they made, or
3 the raw materials they used, or both.

4 Q Well, okay. But I take it, then, there were
5 some departments that were so designated and others that
6 were not.

7 A Yes.

8 Q Do you know whether or not the Aroclor
9 Department at the Krummrich plant was designated as a
10 toxic department?

11 MR. JONES: I'm going to object to
12 the question again. I believe his earlier
13 testimony was that they measured by
14 hazardous, not by toxic, but -- so --

15 BY MR. LACEY:

16 Q Let me -- let me just clear that up.

17 The designation that was given within the
18 Krummrich plant about toxic departments was to refer to
19 them as a toxic department, was it not?

20 A Uh-huh.

21 Q You need to answer verbally.

22 A Yes.

23 Q And the word "toxic" was the word that was
24 used, wasn't it?

25 A The word they used was "toxic."

1 Q Yes. Now, was the Aroclor Department at
2 Krummrich plant a toxic department?

3 A In the old -- in the old "toxic"
4 differentiation, I'm not sure. It was a
5 chlorine-handling department; and as such, it was a
6 hazardous department. And I could care less what they
7 stamped on the front door.

8 Q You don't recall whether or not the Aroclor
9 Department was --

10 A No, I do not. I do not.

11 Q Okay.

12 Now, let me ask you -- we've been talking about
13 the precautions at the Krummrich plant throughout our
14 discussion here. I want to switch to the Anniston,
15 Alabama, plant. Are you with me on that?

16 A (Witness nods head up and down.) Yes.

17 Q At the Anniston, Alabama, plant, what
18 differences were there in the protections provided by
19 Monsanto to its workers in the Aroclor Department as
20 compared with the protections provided by Monsanto to
21 its workers in the Krummrich Aroclor Department?

22 A I don't recall, of my own recollection,
23 anything.

24 Q Fine. Your recollection at -- at this point is
25 that workers in the Aroclor Department at Anniston,

1 Alabama, would have had exactly the same type of
2 protections that workers in the Aroclor Department at
3 the Krummrich plant had?

4 A They would have had protection, yes.

5 Q Okay. And so everything that we've said about
6 the Krummrich plant would also apply equally to the
7 Anniston, Alabama, plant. Correct?

8 A To the best of my knowledge, yes.

9 Q Do you recall what provisions, if any, were
10 made in the European plant for workers working in the
11 Aroclor Department there?

12 A No.

13 Q So you do not recall whether they would be
14 similar to those provided at the United States plants?

15 A No. I don't recall.

16 Q Were there any other Monsanto plants that you
17 recall handling Aroclor products besides the one in
18 Europe and the Anniston plant and the Krummrich plant?

19 A Yes.

20 Q What other plants handled Aroclor products?

21 A Virtually all of the plants used Aroclor in
22 their transformers by requirement because of the fire
23 problems.

24 Q That was a Monsanto requirement?

25 A It was a requirement of the insurance.

1 carrier's, as I recall.

2 Q So Monsanto's insurance carrier said, "Use
3 transformers having PCBs in them"?

4 A To limit possible fire hazard, yes.

5 Q Separating out having a plant that had a
6 transformer in it with PCBs in it, what plants, if
7 any -- other than the European plant, the Krummrich
8 plant, and the Anniston plant -- actually worked with
9 PCBs as a product that the workers were working with as
10 part of Monsanto's production?

11 A The J. F. Queeney plant in St. Louis.

12 Q And what happened there?

13 A They blended some of the fluids.

14 Q Were the workers at the Queeney plant who
15 worked in the Aroclor Department there provided with
16 like protections to those in the Aroclor Departments at
17 the Krummrich plant and the Anniston, Alabama, plant?

18 A No, because they did not handle chlorine.

19 Q I see. And what precautions were provided to
20 the workers at the Queeney plant?

21 A Necessary clothing, gloves; and a good, tough
22 training program.

23 Q Did they have respirators available?

24 A Yes.

25 MR. JONES: Did any of that vary over

1 a period of time? I -- I just want to try to get a
2 time --

3 MR. LACEY: Now, Bob, if you want to
4 ask questions, why don't you do that when
5 I get through?

6 MR. JONES: Well, then, I object to
7 the question as being vague, because it
8 doesn't establish a time period.

9 MR. LACEY: Fine.

10 BY MR. LACEY:

11 Q In the 1950's, were PCBs being handled at the
12 Queeney plant?

13 A Yes.

14 Q Were the workers there provided with company
15 clothing?

16 A I don't know.

17 Q Were they provided with rubber boots on call?

18 A Yes.

19 Q Were they provided with respirators?

20 A On call, yes.

21 Q Gloves?

22 A Yes.

23 Q Aprons?

24 A Yes.

25 Q A coffee pot?

1 A They had a coffee pot.

2 Q In the 1960's, were the workers at the Queeney
3 plant provided with the company clothing?

4 A Yes.

5 Q Rubber boots?

6 A The whole spread.

7 Q The whole spread?

8 A The whole spread.

9 Q What did the workers at the Queeney plant in
10 the 1950's not have in the Aroclor Department at Queeney
11 that workers at the Krummrich plant had in the Aroclor
12 Department there?

13 A A different set of instructions because of the
14 handling, and they did not have the facilities necessary
15 for chlorine resuscitation and that sort of stuff.
16 Other than that, the same.

17 Q So, with the exception of having a different
18 set of instructions because they were involved in a
19 somewhat different process --

20 A That is precisely correct.

21 Q -- and the exception of not having whatever you
22 use to resuscitate someone from chlorine gas, because
23 there wasn't any chlorine gas there, the precautions
24 were identical?

25 A That's right.

1 Q Was that also true in the 1960's?

2 A Yes.

3 Q Was that true in the 1970's?

4 A Again, you're looking at eras in which they
5 faded out of some of these businesses. They took the
6 old T-Building down that had some of these facilities in
7 them because it was old and -- and was renovated. And
8 this sort of evolutionary thing went by, and I don't
9 recall the exact dates.

10 Q That's fine.

11 A But to the degree that they handled and
12 manufactured the fluids containing Aroclors, yes.

13 Q Okay. That -- I think that answers the
14 question I had.

15 And to summarize, then, if I understand it, the
16 only thing that the workers at the Queeney plant didn't
17 have by way of protection in their Aroclor Department
18 that was available at the Krummrich plant in their
19 Aroclor Department were the things that were totally
20 irrelevant because it wasn't a manufacturing process
21 there.

22 A That's true.

23 Q In fact, the Queeney plant merely blended
24 different Aroclors together. Is that correct?

25 A With other blending agents, yes.

1 Q Was that done at elevated temperatures?

2 A Slightly.

3 Q Were the temperatures in the Aroclor Department
4 at the Queeney plant substantially lower than the
5 temperatures in the Aroclor Department at the Krummrich
6 plant?

7 A In -- I -- I -- we're getting into chemical
8 processing now.

9 The -- in -- the use of heat in the Aroclor
10 Departments at Queeney was to make it easier for them to
11 blend. The heat that resulted in the Aroclor
12 Departments at Krummrich and was heat-exchanged was the
13 heat generated in the process itself in the chlorination
14 of biphenyl.

15 Q But my question simply is: Were the Aroclor
16 workers in the Queeney plant dealing with products at a
17 significantly lower temperature than the workers in the
18 Aroclor Department at the Krummrich plant?

19 MR. JONES: Object to the question on
20 the term "significantly" as being vague.

21 BY MR. LACEY:

22 Q Do you have a problem with that?

23 A The problem is this: The -- the temperatures
24 in handling the finished fluid were the same. The
25 temperatures in -- where they manufactured it were

1 different, because the temperatures were the result of --
2 the manufacturing process --

3 Q I understand.

4 A -- that way.

5 Q And the effect of that was that in the Aroclor
6 Department at the Krummrich plant, one found chlorinated
7 diphenyl as it was coming out of the manufacturing
8 process at a significantly higher temperature than it
9 was ever at in the Queeney plant. Correct?

10 A In the front -- in the manufacturing end of the
11 process. The rest of the process was all the same. It
12 was air-stored.

13 Q I understand.

14 A Yes.

15 Q Once you got it cooled down --

16 A That's right.

17 Q -- it was cooled down to the same temperature?

18 A This is direct.

19 Q But when the PCBs actually came out of the
20 manufacturing column where --

21 A They were hot.

22 Q -- the diphenyl was chlorinated, they were
23 considerably hotter than they ever were at the Queeney
24 plant. Correct?

25 A I don't know how much hotter. They were

1 hotter.

2 Q Okay. And the exact temperature, you don't
3 know?

4 A No, I do not.

5 Q When one was using Aroclor at an elevated
6 temperature, that gave you more cause for concern as an
7 industrial hygienist?

8 A Studying the vapor pressure curves and the
9 operating temperature of its use, yes.

10 Q In fact, that was one of the reasons that you
11 did not approve of permitting this Newark, Ohio,
12 facility to buy PCBs, because they were going to be
13 baking it. Correct?

14 A No, that is not fully correct.

15 Q I see.

16 A They were going to be pyrolyzing it in part.

17 Q I see. And pyrolyzing it implies adding heat,
18 does it not?

19 A To destructive levels, yes.

20 Q What's the problem with pyrolyzing PCBs?

21 A You're back to chlorine.

22 Q Okay.

23 A Actually, in this case chlorine and HCl and a
24 whole host of short-chained fragments, which would be
25 chlorinated organic fragments.

1 Q What do you mean by a "chlorinated organic
2 fragment"?

3 A If you take a product, PCBs or anything else,
4 and ran the temperature up high enough to completely
5 pyrolyze it -- that means to destroy it by heat-
6 oxidation -- you would get CO₂, HCl, and Cl₂. Most
7 likely, that would be -- and probably some water vapor,
8 H₂O. Okay.

9 But if you pyrolyzed it at lesser temperatures
10 or times, you would get the intermediate products of --
11 from the Aroclor itself to all these completely final
12 products. And they could be all kinds of pieces and
13 bits of chlorinated organic compounds.

14 Q Things like chlorinated dibenzofurans?

15 A The -- no, because you're talking about
16 destructive pyrolysis. And the dibenzofurans, if they
17 were there, were in -- were destroyed along with the
18 Aroclor.

19 Q No, I'm talking about this process where you
20 have pyrolysis, but incomplete pyrolysis. Would that
21 lead to the formation of chlorinated dibenzofurans?

22 A That would be conjectural, but it's possible.

23 Q Chlorinated dibenzodioxins?

24 A Probably not.

25 Q I see. So your thought process is that in this

1 incomplete pyrolysis, one might find the formation from
2 PCBs of chlorinated dibenzofurans, but not chlorinated
3 dibenzodioxins. Correct?

4 A I don't know. I've never seen any data that
5 says one way or the other.

6 Q I see.

7 Did you, in your function as an industrial
8 hygienist for Monsanto, concern yourself with
9 by-products that would be made in the manufacturing
10 process?

11 A We looked at the manufacturing process as a
12 producer of a product. That product then was our
13 concern. If the product had some special or specific
14 hazard associated with it, we needed to know it and
15 utilized it to frame proper protective facilities and
16 for additions to our literature covering the handling of
17 that product.

18 Q I don't think I asked my question very well,
19 apparently.

20 In the process of manufacturing a chemical
21 where you set out to make a particular chemical like
22 PCBs, you oftentimes encounter a situation where, even
23 though you don't set out to do it, you wind up making
24 some other chemicals along the way; what I might call
25 contaminants. Isn't that correct?

1 A It -- it's possible, but not very probable in
2 this process.

3 Q I see. Did the Medical Department of Monsanto
4 ever give any consideration to whether or not it needed
5 in its program for protecting its workers to determine
6 whether or not there were any by-products or contaminant
7 or undesired chemicals that were made in the process?

8 A Not to my knowledge.

9 Q Do you know whether or not there were any such
10 chemicals manufactured in the process?

11 A Not to my knowledge.

12 Q To your knowledge, there were not?

13 A There were not.

14 Q Okay. Are you aware of any processes at
15 Monsanto where you did find a problem of these
16 by-products or contaminants being made along with what
17 the process was designed to make?

18 A Yes.

19 Q And was it as important -- was it important to
20 you as an industrial hygienist to be knowledgeable of
21 what those contaminants or by-products were and how
22 their presence might affect the hazards posed by the end
23 product which contained those?

24 A Yes.

25 Q By-products like that can, even in small

1 quantities, render the mixture with which they're in
2 more toxic than it would otherwise be.

3 MR. JONES: I'll object to the
4 question, unless you get a little bit more
5 specific as to what you mean by
6 "contaminants."

7 BY MR. LACEY:

8 Q Well, by "contaminant," Mr. Garrett, I mean any
9 chemical that is made while you're trying to produce a
10 particular chemical.

11 To give a good example, Monsanto made a
12 chemical known as 2,4,5-T, did it not?

13 A They did.

14 Q And one of the contaminants that can be made in
15 the process of making 2,4,5-T was dioxin, was it not?

16 A No. Specifically, no.

17 Q I see.

18 A Chlorodioxins, yes.

19 Q Okay. Well, that's fine. I -- I'll accept
20 your definition.

21 The chlorodioxins that were made while you were
22 trying to make 2,4,5-T were not a product you were
23 seeking to make. Correct?

24 A No. That is correct.

25 Q And, therefore, we could refer to those

1 chlorodioxins as a contaminant, could we not?

2 A That's correct.

3 Q Okay. Now, my question, in having gotten
4 "contaminant" defined so we can understand it: With a
5 process where, in addition to making what you want to
6 make, you make something else along with way that's a
7 contaminant, the contaminant may, depending on its own
8 toxicity, make the entire product that contains the
9 contaminant considerably more toxic than it would
10 otherwise be. Isn't that correct?

11 A It's a concentration issue. It's a -- it's
12 a -- it's a factor of concentration, yes.

13 Q But if, for example -- and let me see; I don't
14 know -- I -- I'm sure I can't come up with any example
15 that's a real chemical example, but -- I guess I'll use
16 one that's real silly. But if we were making water --
17 and I know you wouldn't do that, but let's just assume
18 I'm making water in a chemical plant; that's what I'm
19 setting out to do -- and along the way in the process of
20 doing it, I make 100 parts per million of some very,
21 very toxic chemical, that might make the whole thing
22 very hazardous, even though water by itself would be no
23 problem. Correct?

24 A Probably true.

25 Q Okay. And that type of problem can exist and

1 does exist in the chemical manufacturing business in
2 numerous processes, does it not?

3 A Yes.

4 Q And that's something that's of importance to
5 the industrial hygienist who's trying to protect workers
6 from health problems in dealing with or being exposed to
7 chemicals. Correct?

8 A That is something that would influence all of
9 the production facilities and the company itself,
10 because the company has no desire nor any wish to harm
11 any of its employees --

12 Q All right.

13 A -- or its customer's employees.

14 Q Now, let me ask you about other types of visits
15 that you made to plants. You mentioned earlier that in
16 some cases, or you alluded earlier to the fact that in
17 some cases you were invited into customers' facilities.
18 Is that correct?

19 A That is correct.

20 Q Under what circumstances would you be invited
21 into a Monsanto customer's facility?

22 A Where they wanted information from us
23 concerning programs, where they wanted information from
24 us on how to handle products that we already handled.

25 Q And was that a service that Monsanto provided

1 to its customers as the manufacturer and seller of
2 chemicals to them?

3 A Ordinarily not. It -- I went into very few
4 customer plants in respect to looking at anything. I've
5 been in many of them to talk to them and talk to their
6 people, but -- you -- I -- it's surprising how few
7 customer plants I've actually inspected.

8 I've talked to their people and they've
9 explained to me some of their processing and operations,
10 and I've explained to them some of ours. But as far as
11 viewing them is concerned, very few.

12 Q Well, did you turn down requests from customers
13 to come in and look at their plants and help them?

14 A I didn't turn them down, no.

15 Q Are you aware of any such requests --

16 A No.

17 Q -- being turned down?

18 A No.

19 Q So my question still is, then: Was that a
20 service that Monsanto provided to its customers on their
21 request?

22 A A regular service provided, no. Did we do it?
23 I assume we would have and could have.

24 Q And, in fact, did?

25 A Well, we may have and -- at very, very few

1 times.

2 Q Well, you did that on a few occasions, did you
3 not?

4 A That would be hard to say. I don't -- unless
5 they were Monsanto companies or Monsanto subsidiaries,
6 or we had contractual obligations with them, two
7 reasons: One, we probably would not have been invited,
8 had they been a competitor in any way; and, No. 2, that
9 our time was so -- stretched so thin on our own
10 processing operations and the safety of our own people
11 that it would have been very difficult to do it.

12 Q Well --

13 A I don't recall being in a customer's plant.

14 Q Okay. Well, let me just ask that very -- a
15 very clear question: Do you recall visiting any
16 customer -- Monday customer's plant while you were an
17 industrial hygienist for Monsanto?

18 A I don't recall.

19 Q And let me be very specific: Did you ever
20 visit any facilities of the TVA?

21 A No. I visited their offices on a number of
22 occasions.

23 Q But not in their facility?

24 A Not in their facility.

25 Q Did you ever visit any Westinghouse facility?

1 And, again, I'm not talking about the offices; I'm
2 talking about in the plants.

3 A No.

4 Q Did you ever visit any Ford facility? And,
5 again, I'm talking about in the plants; not in the
6 offices.

7 A No, but I've been in Dearborn in the offices,
8 as you might imagine.

9 Q I'm sorry?

10 A I've been in Dearborn in the offices of Ford.

11 Q So you have no firsthand knowledge about what
12 conditions existed in any facility operated by
13 Westinghouse? Is that correct?

14 A That is correct.

15 Q You have no firsthand knowledge about the
16 conditions that existed in any facility operated by
17 Ford? Is that correct?

18 A That is correct.

19 Q And you have no firsthand knowledge about the
20 conditions that existed in any facility operated by the
21 TVA. Is that correct?

22 A That is correct.

23 Q Okay. Now --

24 MR. JONES: Let's take a break if
25 that's a good breaking point.

1 MR. LACEY: It's really not. Let me
2 go ahead and finish up this line of
3 questions.

4 BY MR. LACEY:

5 Q With regard to visits to the offices of
6 companies, what visits, if any, did you make to Ford
7 offices?

8 A I -- I was in the Ford office in Dearborn, and
9 I was there to talk to their hygiene people, and I --
10 their Hygiene Director about something, and I can't
11 recall what it was about. And I can't recall who it was
12 at the time.

13 Q Do you recall whether it had anything at all to
14 do with any product sold by Monsanto that contained
15 PCBs?

16 A I don't think so, but I'm not sure.

17 Q If it did, you can't recall the details of it?

18 A I cannot recall the details.

19 Q Did you make any visit to the offices of the
20 TVA?

21 A Yes, in -- in Chattanooga only. That's their
22 technical offices, as you know.

23 Q And what was the purpose of that visit?

24 A Pollution control.

25 Q Specifically what was it that was the pollution

1 problem?

2 A We were trying to put a plant on one of their
3 lakes.

4 Q Put a plant --

5 A We were building a plant on one of the TVA
6 reservoirs.

7 Q And you wanted to use their cooling water?

8 A No. We wanted -- we were going to treat the
9 waste; but we had a discharge that we were going to
10 make, and we had to clear with the State of Alabama
11 Water Improvement Authority and the TVA technical
12 pollution people in Chattanooga.

13 Q So the only discussions you had with the TVA in
14 their offices was about getting their approval for some
15 effluent discharges that a Monsanto plant was going to
16 make?

17 A That is correct.

18 Q Tell me about office visits with Westinghouse,
19 if any.

20 A I don't believe I've ever -- I don't even know
21 where their offices are. I think they're in Pittsburgh,
22 but I'm not even sure of that.

23 Q So it is your recollection you never made an
24 office visit to any Westinghouse facilities.

25 A No.

1 Q Is that correct?

2 A No. That is correct. I -- I have not.

3 Q Okay.

4 MR. LACEY: If you want a take a
5 break right here, we can take a -- a what?
6 A five-minute break?

7 MR. JONES: That's fine.

8

9 (Recess)

10

11 THE VIDEOTECHNICIAN: Okay. We've
12 been off the record for a short break.
13 We're now back on the record. The time is
14 5:13 p.m.

15 BY MR. LACEY:

16 Q Who was Dr. D. S. Weddell, W-e-d-d-e-l-l, if
17 you know?

18 A I don't recall, if I know -- ever knew.

19 Q Mr. F. T. Marshall: Do you know who that was?

20 A Not -- not -- I've -- I know some Marshalls,
21 but that -- don't -- shouldn't -- shouldn't
22 necessarily -- I don't recall.

23 Q Who was E. Mather, M-a-t-h-e-r?

24 A The name --

25 MR. CRAWFORD: Well, you've got a

1 document there. Why don't you show it to
2 him? Maybe it will help him.

3 A The name strikes a chord, but that's all.

4 BY MR. LACEY:

5 Q Well, let me show you a document. I'm really
6 trying to identify names; but since Mr. Crawford wants
7 me to let you look at it, I'll do that.

8 Let me show you a document that's dated
9 December 17th, 1951, written by E. Mather, apparently to
10 P. J. C. Heywood, with copies to a number of people here
11 (tendering). And does that help you identify who
12 Mr. Mather is?

13 MR. CRAWFORD: What's the number on
14 that document at the bottom?

15 THE WITNESS: 048767.

16 A I don't recall. This is before I came to --
17 even came to work at the Medical Department.

18 BY MR. LACEY:

19 Q I see.

20 A Mather -- no. I don't recall.

21 Q Okay.

22 Let me show you a memo dated November 14th,
23 1955, Document 38968 (tendering), and ask if that's a
24 memo that you authored.

25 A Yes. I wrote it.

1 Q Is that your signature on it?

2 A It is, indeed. Yes, it is.

3 Q Was that a memo that you had stamped
4 "Confidential"? I note that one is stamped
5 "Confidential."

6 A I didn't stamp it "Confidential." I have no
7 idea who did.

8 Q Okay.

9 MR. CRAWFORD: Are you going to ask
10 him about it?

11 MR. LACEY: Yeah, I sure am. I'm
12 going to ask him some questions about it.

13 BY MR. LACEY:

14 Q In this memo signed by you, it talks about the
15 opinion of the Medical Department. Is that the way that
16 you customarily wrote memos that had to do with
17 matters of worker safety; to say it was the Medical --

18 A If it was, in fact, the opinion of the Medical
19 Department more than just myself.

20 Q If it were --

21 A If it was just me, I would say, "In my
22 opinion."

23 Q Okay. So this particular memo was more than
24 just your opinion; it was the opinion of others in the
25 Medical Department --

1 A That is correct.

2 Q -- as well?

3 A That is correct.

4 Q Who else shared the opinions set forth in that
5 memo with you?

6 A I would suspect it was Doc- -- it was Elmer
7 Wheeler, but -- because he was my immediate boss. But I
8 can't -- I can't really -- it's too long ago.

9 Q Were memos like that not sent out unless they
10 were first approved by some superior?

11 A No.

12 Q No, they were not sent out; or no, they --

13 A No. Dr. Kelly and his group -- many times I
14 would ask him about them; but in his group, he trusted
15 our testimony judgment and allowed us to choose
16 ourselves.

17 Q Okay.

18 MR. LACEY: May I see it, Walter.

19 MR. CRAWFORD: Oh, yeah; sure

20 (tendering).

21 BY MR. LACEY:

22 Q The recommendation of this memo is that eating
23 of lunches should not be allowed in the Aroclor
24 Department of the Krummrich plant (tendering). Is that
25 correct?

1 A Yes.

2 Q What was the customary practice there at the
3 Krummrich plant with regarding -- with regard to workmen
4 eating their lunches?

5 A Eating in the control room.

6 Q In the plant?

7 A In the processing plant, yes.

8 Q How long did people have for lunch at the
9 plant, if you recall?

10 A I think there was -- that the -- the time was
11 allotted as -- as 30 minutes. But you would have to ask
12 the plant, because there's so many different plants and
13 so many different rules and so many shift break times
14 that it's the plant's own necessity.

15 Q Where were people to eat if they didn't eat in
16 the control room of the unit where they worked?

17 A They had -- the -- the Krummrich plant had a
18 full-size cafeteria.

19 Q And the thrust of this memo, then, is that
20 while it may be okay in certain departments to eat in
21 the control room, and that's not what you recommend
22 prohibiting, you do specifically recommend prohibit
23 eating in the control room of the Aroclor Department?

24 A Yes.

25 Q That --

1 A I also later on said, "It's long been the
2 opinion of the department that eating in process
3 departments is a potentially hazardous procedure that
4 can lead to serious difficulties."

5 My personal opinion is that it was bad
6 practice.

7 Q Generally?

8 A In any processing place, yes.

9 Q This memo, however, specifically addressed
10 itself to the Aroclor Department. Correct?

11 A That's true.

12 Q Now, was this a -- a directive that would be in
13 force, or is this just a recommendation which could be
14 accepted or rejected by the plant people as they saw
15 fit?

16 A We directed this to the Medical -- the Safety
17 Director (indicating), with a copy to the Plant Manager
18 (indicating)

19 Q Well, did you all have the authority to enforce
20 that or not, or did --

21 A Dr. Kelly did --

22 Q Okay.

23 A -- if he wanted to.

24 MR. CRAWFORD: What do you mean by
25 "enforce"?

1 BY MR. LACEY:

2 Q Well, you -- let me -- let me try to clarify
3 it.

4 A We would go through the normal channels.

5 Q Yeah. You simply state here it's the opinion
6 that it shouldn't be done, but --

7 A That's right.

8 Q It doesn't say, "Stop it." It's -- it's sort
9 of a polite way of saying, "We would sort of recommend
10 you don't do this," and wait and see what happens. Is
11 that the normal channel?

12 A Well, what it probably refers to is -- and
13 I'm -- this is conjecture -- it's just a -- there was a
14 letter sent to us about something, or a question
15 answered.

16 A Requesting whether or not --

17 A And this is -- this is an answer to it.

18 Q You -- you would suppose that -- that somebody
19 asked you, "Is it okay to eat in the lunch -- eat lunch
20 in the control room?"

21 A Probably.

22 Q Okay. And you set forth three reasons. You
23 say there are a number of reasons, but you specifically
24 set forth three reasons why you think it would be a good
25 idea not to eat in the control room. Correct?

1 A Uh-huh.

2 Q And if I understand correctly, the first reason
3 is that the food that would be eaten could become
4 contaminated by the Aroclor vapors. Correct?

5 A Could be con- -- become contaminated by Aroclor
6 vapors, yes.

7 Q And what you're talking about there is as
8 the -- as the sack lunch or whatever it is, the lunch
9 bucket, sits there in the control room from the time the
10 fellow comes on the shift until he eats it, the vapors
11 in the process could seep in and actually cause amounts
12 of PCBs to be deposited on the food products that would
13 subsequently been -- be eaten. Correct?

14 A It's -- it -- it -- lunches which normally were
15 brought to the plant were normally brought in the metal
16 boxes --

17 Q Right.

18 A -- the old black box. Individual operators
19 would store them near their work site.

20 Q Right.

21 A There are some work sites in -- in most
22 Purchasing Departments, that would not be an intelligent
23 place to do that. That is what we're really saying.

24 Q But what I'm -- what I'm asking about at this
25 point is that the route of concern you're talking about

1 here is that the vapors would reach the lunch itself, --
2 land on the materials, and then the fellow would eat his
3 sandwich and would have some PCBs on it. Correct?

4 A Could, in some areas. The -- the chlorinator
5 operator could store his lunch box on the chlorinator.

6 Q No problem?

7 A He could do it? Very -- it wouldn't be very
8 intelligent, but he could do it; because if there were
9 an accident that released any chlorine or any vapors, it
10 would certainly not do his lunch any good.

11 Q Okay. The particular concern you're talking
12 about here is the Aroclor vapor, though. Right?

13 A We're talking about vapors in the process. I
14 think you probably would mean Aroclor vapors, yeah --

15 Q Okay.

16 A -- and other process -- Aroclor vapors and
17 other process vapors.

18 Q Okay.

19 A Yes.

20 Q And it would not be a good idea for a workman
21 to eat a lunch that had had some of those vapors deposit
22 some of the Aroclors on it. Correct?

23 A No, it would not.

24 Q And that's one of the reasons, therefore, that
25 you recommend they not be allowed to eat lunches in the

1 department?

2 A That is correct.

3 Q The second reason you point out is that there's
4 also the possibility of contaminating the hands with the
5 PCBs or Aroclor materials, and then contaminating the
6 food. Correct?

7 A That is correct.

8 Q And what you're talking about there is a fellow
9 is working with the PCBs, and they get on his hand, he
10 picks up his sandwich, they get on the sandwich, and he
11 eats it and ingests some of the PCBs. Correct?

12 A It's possible. Not probable; possible.

13 Q Well, actually, you say it's a definite
14 possibility. Isn't that the words you used?

15 A For it to get there. But he's not going to eat
16 much of it.

17 Q Why is that?

18 A Oh, it don't taste good.

19 Q Okay. You didn't want to rely, however, on the
20 fact that he would --

21 A No.

22 Q -- recognize by the bad taste --

23 A No.

24 Q -- that he shouldn't eat any more?

25 A No, we did not want to rely on that.

1 Q Were you concerned that even in the small
2 quantities that might escape his taste buds, it could
3 present a problem?

4 A We were more concerned about the general
5 principle of eating in a process control room--in an area
6 that handled hazardous materials, in our view,
7 throughout the Queeney -- the Krummrich plant. And if
8 you'll read the last paragraph, you will see this is the
9 thin end of a much larger wedge. We finally got the
10 wedge driven through. They do not eat in the process
11 units any more.

12 Q Sure. Now, in the third area -- you've already
13 talked about the fact that you didn't like people eating
14 in the process units at all, which is the third reason
15 you cite.

16 You state in the second sentence, regarding
17 your own experience on the hazards of Aroclor. Correct.
18 And talking about your own experience, you're talking
19 about Monsanto's experience. Is that correct?

20 A It's a potentially hazardous procedure, it says
21 here clearly.

22 In all of my 35 years, I never heard of or saw
23 an Aroclor case, so I don't know.

24 Q Okay. What I'm -- what I'm trying to find out
25 about is in a sentence which says, "While the Aroclors

1 are not particularly hazardous from our own
2 experience" -- that's the first clause in the
3 sentence -- that's talking about Monsanto's experience
4 of not having anybody make any claims about being hurt
5 from Aroclors. Correct?

6 A You're talking about the third paragraph now --

7 Q The third paragraph, that second sentence. It
8 says, "While the Aroclors are not particularly" -- I
9 can't read upside down from this distance very well.

10 A It says, "While the Aroclors are not
11 particularly hazardous from our own experience" --

12 Q Right.

13 A -- "this is a difficult problem to define
14 because early literature work claimed that chlorinated
15 diphenyls are quite toxic materials by ingestion or
16 inhalation."

17 Q Now, what I'm trying to find out about is:
18 When you say, "While" -- I need to look it at it here,
19 so I can read it correctly -- "While the Aroclors are
20 not particularly hazardous from our own experience,"
21 what you're talking about is that Monsanto employees
22 have not made a lot of claims based on exposure to
23 Aroclors. Correct?

24 MR. CRAWFORD: Object to the form of
25 the question.

1 A That is not -- that is -- is really not --
2 that's a piece of it.

3 BY MR. LACEY:

4 Q Okay. Well, what -- what is it -- do you mean
5 by that?

6 A In terms of lost time on workers in the Aroclor
7 Department.

8 Q Okay.

9 A Periods.

10 Q And does that mean that you have had people who
11 have been exposed to a significant amount of Aroclors
12 without ill effects? Or does that mean that because of
13 your protective procedures, you've been able to
14 substantially minimize any exposure to Aroclor?

15 A I would hope that it was the latter, but I
16 can't say that.

17 But keep in mind, this memo is written with
18 a -- you can easily see the hook in it. It isn't
19 very -- very well hidden. We wanted them to quit
20 allowing people to eat in the processing departments in
21 the Krummrich plant. It was a plant that handled a
22 great number of hazardous materials. We did not want
23 them eating there. We wanted them to eat -- either eat
24 in the -- in the provided facilities or in provided
25 eating rooms.

1 Q Did you write a similar memo to this on -- to
2 every other section of the plant at the same time you
3 wrote this one?

4 A If you looked at enough memos, you probably saw
5 int- -- intimations to every plant, every processing
6 department in the plant.

7 Q Well, I haven't seen any other memos --

8 A No?

9 Q -- like this. This is the only one I've seen.

10 A It was -- it was a part of one of the pressures
11 we exerted on the plants to prevent -- to -- to -- to
12 stop a potentially hazardous procedure, in our view. It
13 was one of our jobs.

14 Q Okay. And one of the things that you thought
15 was appropriate from the industrial hygiene standpoint
16 was to separate the eating of food from the area in the
17 plant where Aroclors were being manufactured?

18 A And many other products, yes.

19 MR. LACEY: Can I see this again?

20 MR. CRAWFORD: Are you going to ask
21 some more questions (tendering)?

22 MR. LACEY: Yes.

23 MR. CRAWFORD: All right.

24 BY MR. LACEY:

25 Q In -- at the last part of this second sentence

1 talking about, "While Aroclors are not particular
2 hazardous from our experience," you go on to say that
3 "This is a difficult problem to define because early
4 literature work claimed that chlorinated diphenyls were
5 quite toxic materials by ingestion and inhalation."

6 What literature are you referring to there?

7 A Oh, I haven't the vaguest. It's late.

8 Q Was that a reference to specific literature, or
9 was that something you just threw in to make your
10 argument stronger?

11 A A ploy, you mean?

12 Q Yes. Was it true or not?

13 A They could trace it. It probably was true.

14 But this -- you're asking me to remember a memo from 32
15 years ago.

16 Q Well, I understand. I don't expect you to --

17 A And I don't remember the details, no.

18 Q Sure. I don't expect you to remember the
19 cites. But in view of what you told me earlier, I'm
20 trying to find out whether or not, when you said that,
21 you were telling the truth or you were throwing that in
22 with --

23 A I think -- I -- I don't think I would carry a
24 ploy that far. It was probably the truth. I probably
25 the seen some data or some literature, but I do not

1 recall it.

2 Q Okay. Was it part of your job to from time to
3 time review literature on chemicals that Monsanto made?

4 A It was my job as an industrial hygienist to
5 virtually continuously preview the literature connected
6 with the handling of chemical materials. And when you
7 hit one that we handled, we -- those were priority
8 items.

9 Q When you came into the Medical Department in
10 1953, was part of your training to go back and look at
11 existing literature on chemicals that you already made?

12 A In most cases then, the -- the -- the -- a lot
13 of the literature was already available in the files in
14 the Medical Department.

15 Q I guess what I'm asking is: Did you go back
16 and look at the files on literature predating 1953 after
17 you came on board in the Medical Department?

18 A Yes.

19 Q And that's how you would know about what
20 literature before 1953 had to say about the hazards of
21 Aroclors?

22 A I would presume that.

23 Q Okay.

24 The last sentence says, "In any case where
25 workmen claim physical harm from any contaminated

1 food" -- and you're talking there about food
2 contaminated with Aroclors. Correct?

3 A Considering the previous sentence, yes.

4 Q You said that "In any case where workmen
5 claimed physical harm from any contaminated food, it
6 would be extremely difficult on the basis of past
7 literature reports to counter such claims." Uh-huh.

8 Q Was that a true statement when you made it?

9 A Probably so.

10 Q Okay. And you believe --

11 A To the best of my knowledge, it's true; yes.

12 Q Okay.

13 Let me show you a Document No. 018731 through
14 018737, entitled "Toxicology and Safe Handling of
15 Monsanto Aroclor" (tendering), and ask if you've seen
16 that document before.

17 A Yes.

18 Q When did you first see that document?

19 A It or its predecessor or successor, throughout
20 my experience in Monsanto during the period in which we
21 manufactured Aroclors.

22 Q Okay. Who put out that document?

23 A Originally?

24 Q Yes. I -- who -- who put it together?

25 A I do not know. I'd have to see the dates on

1 this specific document to tell.

2 Q Well, feel free to look for the dates and tell
3 me about it. I've been asking everybody I've talked to
4 when it was dated.

5 A (Reviews document.)

6 I don't know. But there were -- the -- this
7 particular bulletins were available when I went to work
8 at the Medical Department, or a form of that bulletin
9 was always available in some form, with corrections,
10 through the years; additions, subtractions, and so
11 forth.

12 Q Well, let me make sure I understand your
13 testimony. Are you telling me that a document like
14 this, Document 18731 through 18737 (tendering), was
15 available in the Medical Department of Monsanto at about
16 the time you started to work there in 1953?

17 A The document or a similar document was
18 available to us from the people who prepared it. We did
19 not.

20 Q What role did the Medical Department have in
21 supplying information to other people within the
22 Monsanto organization about the toxicology and safe
23 handling of Monsanto Aroclor?

24 A Dr. Kelly's responsibility covered the problems
25 connected with medical -- that's symptomatology,

1 treatment, first aid -- toxicology, industrial hygiene.
2 And those sections that reflected on those functions,
3 the Medical Department reviewed or were allowed to
4 review for all bulletins, this one as well as others.

5 Q Well, now, this bulletin is a little bit
6 unique, isn't it? Because all it deals with is
7 toxicology and safe handling.

8 A No, it is not unique.

9 Q I see. How many documents were there at
10 Monsanto, how many different documents were there, that
11 dealt with -- solely with toxicology and safe handling
12 of Monsanto Aroclor?

13 A As far as I know, this document and its
14 predecessor and update versions dealt with that
15 subject --

16 Q And there were --

17 A -- toxicology of Aroclor and safe handling of
18 Aroclor.

19 Q And there were documents like this within
20 Monsanto from the time you arrived in the medical
21 department the 1953 at least through 1977?

22 A A similar document, yes.

23 Q That dealt exclusively with the safe handling
24 and toxicology of the product?

25 A Yes. We had many, many others covering many,

1 many other products.

2 MR. LACEY: I'm going to say on the
3 record I have haven't seen them. I've
4 been asking about them since December
5 26th, and I'd like to know where they are.

6 MR. JONES: Well, they may not exist,
7 David.

8 MR. LACEY: Well, this witness has
9 just said they do.

10 MR. JONES: Well, they may have at
11 one time. They may not exist now.

12 MR. LACEY: I see.

13 BY MR. LACEY:

14 Q There were other types of documents at
15 Monsanto, were there not, that dealt with products
16 generally and had small excerpts in them about
17 toxicology and safe handling. Correct?

18 A Summaries, yes.

19 Q Okay.

20 A Yes.

21 Q But you're telling me that in addition to those
22 types of documents, there were also documents like this
23 one we've just looked at devoted solely to the
24 toxicology and safe handling of Aroclor?

25 A There were documents like that devoted to the

1 toxicology and safe handling of a number of other
2 Monsanto products, as well.

3 Q And there were also versions devoted solely to
4 Aroclor?

5 A That's true.

6 Q And those documents were kept within the
7 Medical Department of Monsanto?

8 A No.

9 Q Where were they kept?

10 A In the Marketing Department.

11 Q They were kept within the Marketing Department
12 of Monsanto --

13 A Uh-huh.

14 Q -- there in St. Louis, Missouri?

15 A Uh-huh.

16 Q Actually, we're here in St. Louis, Missouri --

17 A Uh-huh.

18 Q -- I guess, right now, aren't we?

19 A That's true.

20 Q And throughout the time you were there, these
21 types of documents existed?

22 A That is my recollection.

23 Q And those documents contained only the
24 information about toxicology and safe handling, and
25 therefore were documents that were approved by the

1 Medical Department before they were published. Correct?

2 A That is correct; those portions specifically
3 attributed to the Medical Department's responsibility,
4 yes.

5 Q Well, and if it dealt solely with toxicology
6 and safe handling, that was all within the Medical
7 Department?

8 A That is true, if it did -- truly dealt that
9 way.

10 Q Well, let me hand you this document and ask you
11 to review it briefly and tell me if there's any part of
12 that document that didn't fall within the province of
13 the Medical Department (tendering).

14 A Description. The introduction and description
15 is not our responsibility. Toxicology was. Skin
16 contact, first aid was. The -- the information here,
17 which is standard to these documents, is -- is -- is
18 somebody else's responsibility (indicating).

19 Q Okay. So the only portions of this document
20 that were not the Medical Department's responsibility
21 were the lead-in section called "Introduction." Correct
22 (tendering)?

23 A <(Reviews document.) And "Description."

24 Q And what we have in the -- may I see it just a
25 second?

1 A (Tendering.)

2 Q We have the introduction, which is a section
3 that says, "Aroclors, the registered trademark for a
4 range of chlorinated polyphenyls manufactured by
5 Monsanto. Manufactured in this country and have been
6 used in this industry throughout the world for over 30
7 years."

8 Did Mon- -- did the Medical Department have
9 anything to do with --

10 A No.

11 Q -- that type of statement?

12 A No.

13 Q And said that they were synthetic chemicals,
14 and that the publication was intended to describe the
15 toxicity and provide guidance on the correct handling.
16 That -- those sentences were somebody else's?

17 A That's correct.

18 Q Then the description that specifically said
19 what the colors of them were, whether they were oils or
20 whatever: That wasn't yours?

21 A No.

22 Q But when you start with the section on safe
23 use, from there on everything is yours. Correct?

24 A That is correct.

25 Q Until you get to the very last section, which

1 says --

2 A About five or six paragraphs. The -- the
3 document has an awful lot of blank pages in it, but
4 that's essentially correct.

5 Q Yeah.

6 A We did the safe-handling information, the
7 toxicology information, the medical in- -- information
8 was our responsibility, wherever it appeared, whether it
9 was in that document or any other document.

10 Q Did you ever work on revisions or updates of
11 this particular document dealing with the toxicology and
12 safe handling of Monsanto Aroclor?

13 A We -- I worked on the revision of many, many,
14 many documents connected with the toxicity and safe
15 handling. I have no reason to believe I did not, nor do
16 I have any specific recollection of doing it.

17 Q Okay. What was the purpose of this document on
18 the toxicology and safe handling of Monsanto Aroclor?
19 What was it intended for?

20 A It was intended for the salespeople to use --
21 and we used it, as well -- to send to people who queried
22 us connected -- in connection with handling of -- of the
23 material.

24 Q It was intended to go to customers?

25 A Principally.

1 Q And one of the things that was important about
2 this type of literature was to not only give a customer
3 the information, but also to ensure that he put the
4 principles there into practice to protect his own
5 workmen. Isn't that correct?

6 MR. JONES: I'd -- I'd object the
7 question. Again, you're mischaracterizing
8 his testimony. He said not only to
9 customers, but it was also used by the
10 Monsanto people.

11 MR. LACEY: That's fine. I'm not
12 worried about the Monsanto people; I'm
13 talking about the customers.

14 MR. JONES: Well, to the extent that
15 you're being unfair with the witness,
16 then --

17 MR. LACEY: Well, let's -- let's --

18 MR. JONES: -- I want to make that
19 point.

20 MR. LACEY: Well, fine. I'll try to
21 not be unfair to the witness.

22 BY MR. LACEY:

23 Q Mr. -- Mr. Garrett, the purpose this was put
24 together in the first place was to provide to customers,
25 wasn't it?

1 A It -- it was to provide users. And -- and that
2 would mean Monsanto and customers, yes.

3 Q The actual Monsanto employees got the bulk of
4 their information about the actual toxicology and safe
5 handling of -- of Aroclor products from the process
6 manuals and the like that were used in the actual units
7 where PCBs were made, didn't they?

8 A In -- in training courses, training the
9 operators themselves, and their monthly safety meetings
10 at which we participated many times.

11 Q This was put together in its nice finished form
12 with the nice covers and everything else because it was
13 designed to go to customers, wasn't it?

14 A I -- it -- it -- that would be difficult to
15 say. It was designed to go to users, and customers were
16 the primary users, plus the Monsanto internal.

17 We gave out many of these to other companies,
18 yes, and other companies' professional departments:
19 Technical -- this is -- and medical, industrial hygiene,
20 and so forth.

21 Q Within Monsanto, who did you give these to?

22 A Copies of this would go to the plant if there
23 was any information in there that was new. It would be
24 given to the plant for their use. I suspect they handed
25 them out, as well.

1 Q To whom?

2 A Well, most plants kept copies -- kept records
3 and -- and information to give to fire departments or
4 emergency equipment or vehicles that connected with
5 operations that -- and accidents within the plant,
6 particularly fire -- so that the fire crews -- because
7 we almost always had a mutual agreement with the local
8 fire department as a backup, and we didn't want the
9 firemen to get hurt, either. And this information was
10 available to them.

11 In fact, a great deal of it was provided also
12 to fire departments all over the country at their
13 request.

14 Q Now, in the Precautions section that shows up
15 on Page 18734 -- you see this section right here
16 (indicating)?

17 A Yeah.

18 Q -- that very clearly is written with the
19 intention of going to someone who is responsible for the
20 way in which workmen are handling the materials, but
21 who's not himself a workmen, isn't it?

22 A I don't know. I don't know whether the
23 work- -- I think the workmen could pretty well
24 understand that. I mean, it's blunt and across the
25 board.

1 Q Do you see down at the bottom there in all
2 caps --

3 A Uh-huh.

4 Q -- after the last listed precaution?

5 A Yes.

6 Q It says, "YOU HAVE READ THIS."

7 A I don't see where --

8 Q Right here (indicating). "YOU HAVE READ THIS.
9 DOES THE MAN ON THE JOB KNOW HOW TO HANDLE THESE
10 PRODUCTS?"

11 A I presume they -- the -- if -- if the -- the
12 ma- -- ma- -- if the material was available in -- in a
13 customer's plant, for example, that the customer plant
14 people could read it as well, if they were literate.

15 Q Well --

16 A The -- the -- the -- it probably was directed
17 at their management and their -- their -- probably their
18 foreman and/or their unit supervisor.

19 Q That's my point. This was written for
20 management-type people; and the reason that's in there
21 in all caps is to cause them to think about making sure
22 that that information gets to the people who actually
23 work with the product, isn't it?

24 A I would assume that's true.

25 Q And that's important in providing warnings or

1 information or precautions on how to handle chemicals,
2 isn't it?

3 A Yes.

4 MR. JONES: Object to the question.
5 What -- what is important?

6 MR. LACEY: Making sure that the
7 information gets down to the guy working
8 with it.

9 A That is correct.

10 BY MR. LACEY:

11 Q No warning, no information is of any value
12 unless it gets down to the guy that's working with the
13 chemicals, is it?

14 A That's correct.

15 THE VIDEOTECHNICIAN: Let's go off
16 the record to change the tape.

17

18 (Recess)

19

20 THE VIDEOTECHNICIAN: Okay. We're
21 back on the record after a tape change.
22 The time is 5:45 p.m.

23 BY MR. LACEY:

24 Q The section that starts on Document No. 18734
25 headed "Toxicology" contains some pretty detailed

1 information on specific studies that had been done about
2 what can happen from exposure to PCBs, does it not?

3 A Yes.

4 Q That type of detail is the sort of information
5 that would be very valuable to people who were in the
6 industrial hygiene or occupational safety business,
7 doesn't it?

8 A If they understood toxicology, and the majority
9 of those that were educated did.

10 Q My point is: That type of information there
11 wouldn't be particularly useful to a person who is not
12 trained in toxicology or industrial hygiene, would it?

13 A Or medicine.

14 Q It would or would not be important to a
15 person --

16 A It would be important to a person trained in
17 medicine or toxicology.

18 Q Yes. And so to make it clear, the information
19 under "Toxicology" in that bulletin -- which consists
20 of, I guess, about a page and a half or -- what is it?
21 Maybe a little bit less than that?

22 A Yeah, I think so. I think --

23 Q A page and a half of information. -- is the
24 type of material that's meaningful to people who are
25 industrial hygienists, who are toxicologists, or who

1 have medical training. Correct?

2 A It is correct. And it states after
3 "Toxicology" on a small line, it says, "The following
4 medical data is given for your Health Department
5 records."

6 Q Again, this -- that information is designed to
7 get to somebody at the management level who can make use
8 of it. Correct?

9 A It depends on what you mean by "management
10 level."

11 Q Well, a Health Department.

12 A Yes --

13 Q Is that a management --

14 A Yes.

15 Q -- level function?

16 A By professionals within their Health
17 Department.

18 Q Okay. Now, let me direct your attention to the
19 last page of the document, 18737, where it has the
20 Mon- -- the big "M" for Monsanto and the -- and the
21 registered notation of the trademark. Next to that is a
22 public-- some publication information. Can you read
23 that address?

24 A It's a British publication. It's London
25 Southwest 1. That's our Monsanto house in London in

1 those days.

2 Q Did the people in London do a lot of printing
3 for documents you used in the United States?

4 A No. We provided them with the data. They
5 printed their own.

6 Q So this document that was printed in England
7 was designed what; for use in England?

8 A Yes, and Europe --

9 Q And --

10 A -- where they shipped it.

11 Q Okay. So this document would go to customers
12 of the English plant that manufactured Aroclors --

13 A That's right.

14 Q -- whether they be in the United Kingdom or
15 whether they be in Sweden or France or wherever.
16 Correct?

17 A Or in the Commonwealth countries.

18 Q And the information that's contained in this
19 document was provided to them to print on their own
20 document by the Medical Department in St. Louis.
21 Correct?

22 A I -- I -- of my own free knowledge, I do not
23 know that; but it probably was.

24 Q Is that the way the -- the system was set up to
25 work?

1 A They would ask us for information. They would
2 gain their own from their own literature. If they found
3 any, they usually would send us copies of the same
4 literature so we could both have a full set of any
5 medical or toxicological data that reflected on the
6 hazard of the product.

7 Q Okay. So the document we've actually been
8 looking at here is one that the United Kingdom group
9 actually put out for use in Europe?

10 A That is correct. It is their assessment of the
11 literature and the necessity for their customer use.

12 Q Is there any reason that they would be
13 assessing the literature any differently than the people
14 in St. Louis would be assessing the literature?

15 A I don't think it is a -- necessarily an
16 assessment different than that.

17 Q No, I -- I didn't suggest there was. But --

18 A No.

19 Q -- there shouldn't be any difference in the
20 assessment of the literature, should there?

21 A I couldn't say that, because I don't know what
22 they had available to them.

23 Q Well, Monsanto generally had available to it
24 literature worldwide, did it not?

25 A Well, again, it depends on the dates and the --

1 and the handling of literature.

2 I'm not sure -- we, for example, did not get
3 copies of some -- of many of the British medical
4 journals. They did not get copies of some of ours.
5 They're extremely expensive when you get them outside of
6 their own country.

7 So we took a -- a sampling of their medical
8 literature; and anything they picked up, we would expect
9 them to ship it to us con- -- in connection with this --
10 their Medical Director -- in this specific area, because
11 we manufactured it both places.

12 Q And you would do likewise?

13 A That would -- we would do likewise.

14 Q So they would have available to them all of the
15 United States publications on PCBs. Correct?

16 A I would assume so, but I certainly cannot --

17 Q And --

18 A -- swear to it, no.

19 Q -- if the system worked correct, you would have
20 in St. Louis all the British publications on PCBs.
21 Correct?

22 A I would hope so.

23 Q And that's the way it was supposed to work?

24 A That's right.

25 Q And is there any reason that the precautions

1 that would need to be taken with Aroclors produced in
2 the U. K. plant should be any different than the
3 precautions to be taken with Aroclors produced in the
4 United States plants?

5 MR. CRAWFORD: Be sure you know the
6 answer before you answer is something that
7 you know.

8 A I really don't know. Is there any reason --
9 restate it, please.

10 BY MR. LACEY:

11 Q Yes. Is there any reason to have different
12 precautions or warnings for PCBs produced by Monsanto in
13 the United Kingdom than for PCBs produced by Monsanto in
14 the United States?

15 A Different people wrote them, and the different
16 people have different views and different feelings in
17 connection with that. They're differently trained. I
18 think they used --

19 MR. JONES: Different circumstances.

20 THE WITNESS: What?

21 MR. JONES: Different circumstances.

22 MR. LACEY: Why -- why don't you let
23 him testify, Robert? I -- I'm asking him.
24 If you want to testify, we'll swear you in
25 sometime and ask you some questions.

1 MR. JONES: I'll do the same for you.

2 A I really think if you -- if you would -- I
3 think the -- the -- the basic toxicity and handling
4 information, the basic handling, is on the label.

5 And I think the labels, our labels and their
6 labels were somewhat different because the labeling
7 authorities were different. What they put out in their
8 support documents and what we put out in our support
9 documents had a lot to do with the agencies. But in no
10 case and no time would we ever, ever risk a person's
11 life or their job in this respect; no.

12 BY MR. LACEY:

13 Q Okay. My --

14 A Absolutely not.

15 Q My question, so it's clear: There wasn't any
16 difference between, however people viewed it, the
17 hazards of handling Aroclor made --

18 A That's correct.

19 Q -- by the United Kingdom plant versus the
20 hazards of Aroclors made by the United States plants?

21 A That is correct.

22 Q It's the same chemical, the same hazards --

23 A That is correct.

24 Q -- the same safe handling is required?

25 A That is right.

1 Q And the differences that exist between what
2 would have been said in the United Kingdom and what
3 would have been said in the United States, then, would
4 depend upon the fact that different people wrote them
5 and may have had different views on how to express that.
6 Correct?

7 A And different support, based on the countries
8 in which they're marketed. It may have been required by
9 somebody's law. It may have been required that it be
10 viewed this way.

11 They may have viewed it this way from their
12 training, their formal training. If they had shipped
13 their Aroclor to this country, we would have marketed it
14 with our documents.

15 Q Okay. And what you're telling me is: To the
16 extent that this is written differently than whatever
17 was used in the United States, that difference may be
18 accounted in part by the fact that there were different
19 regulations applicable in the United Kingdom?

20 A Different customs, primarily.

21 Q Different customs?

22 A Yes.

23 Q What sort of customs are you talking about?

24 A Different basis in their training than ours,
25 different basis in their medical training than ours;

1 the fact that they did not have industrial hygienists on
2 their staff over there, and the fact that very
3 frequently they would go to one of the universities to
4 get information, and that information was different than
5 ours.

6 It just was a different way of presenting it.
7 It's a different emphasis.

8 Q I see.

9 A It's true today.

10 Q I see. Are they more oriented toward giving
11 very thorough, lengthy discussions of what precautions
12 ought to be taken than we are in the United States?

13 A Oh, my stars, yes.

14 Q They just are more cautiously oriented than
15 here. Correct?

16 A It would be unfair -- because I have very many
17 fine colleagues in Europe, but they're very -- they --
18 they are much more scientifically inclined toward the
19 actual data itself, and that -- and where the data came
20 from, and whether the chicken had a left eye that was
21 black or white.

22 We were interested in -- in -- in boiling it
23 down for useful information for people who were handling
24 it.

25 So, in my opinion, the data that was -- that

1 was given by the British to their customers and by us to
2 our customers was the custom of the countries involved.
3 It covered the waterfront; but it was different coverage
4 because of the differences in their background, the
5 differences in the training of their physicians, the
6 differences in the training of their toxicologists, and
7 so forth.

8 Q Was that --

9 A That's my only point.

10 Q Was that also true with regard to the way in
11 which they gave precautionary information; that they
12 tended to be more complete in what they said?

13 A I -- I -- in my personal work with the Brussels
14 office, we had to provide information that was required
15 by a consortium of countries in the European economic
16 community.

17 And their labeling was different than ours, and
18 their -- they used -- they used symbols that were
19 different than ours because it was typically European.
20 For example, if we had put the data out first, they
21 would obviously have changed it just to say that it was
22 European.

23 Q Well, this document's written in good old
24 everyday English, isn't it (indicating)?

25 A Yes.

1 Q The first precaution, "Always wash well with
2 soap and water before eating, drinking or smoking and --
3 and at the end of work": There's nothing particularly
4 European about that directive, is there?

5 A Yes, there is. It's an unnecessary directive
6 in that kind of document; because the document says the
7 damn stuff is toxic, and if you get it in you, on you,
8 or in your snoot, you're going to get a toxic response.

9 Q Okay.

10 A What do -- if you tell a person -- it's like
11 the guy that says, "The john is over there," or gives a
12 long explanation of how you open the door and unzip your
13 pants. I mean, it is -- the -- the same thing's going
14 to be done in that room, anyway.

15 And they just have a different way of
16 presenting it. I wouldn't change their way, because
17 their people are used to that procedure.

18 Q We in the United States are accustomed not to
19 getting those sort of detailed instructions, like
20 "Always wash well with soap and water before eating,
21 drinking or smoking and at the end of work." Is that --

22 A We have --

23 Q -- what you're saying?

24 A -- often given those -- those -- those
25 precautions to people preparing for use in handling

1 hazardous materials. It is not written in our mat- --
2 material because it is assumed that if one says a
3 product is toxic by ingestion, by absorption through the
4 skin, by inhalation of the vapors, that it would be
5 assumed that you would -- should wash it off of your
6 hands before you got it in your mouth.

7 Now, you just -- just talked about a document
8 where we were talking about, "Let's get the damn thing
9 out of the -- the eating joint so we can stop that
10 foolishness."

11 Q Yeah. Well, apparently in your very own plant,
12 some people had some trouble with the understanding that
13 you shouldn't eat food around it -- is that correct? --
14 to the extent you had to write the memo that we've
15 talked about, Document 38968.

16 A If we had an operator who could have saved ten
17 minutes of the day or got paid ten minutes more, it is
18 likely that he would have tried to save the time to
19 make -- and I don't blame him for that.

20 Now, it is our responsibility, therefore, to
21 short-circuit that effort if it has anything to do with
22 the potential that he might get hurt.

23 Q The second --

24 A And, by golly, he -- they didn't get hurt.

25 Q The second precaution, "Should Aroclor come

1 into contact with the skin, it should be washed off
2 immediately": Is that the British or European way of
3 saying precautions like that?

4 A That precaution would have been given to anyone
5 who would have asked the professionals in the
6 department.

7 If you go look in that document, it says, "Tell
8 your Medical Department" certain things. That's the
9 typical way the British put it.

10 In the United States, it was usually provided
11 to their professional people in their setup. If we, for
12 example, decided to sell a product -- and Aroclor would
13 be an example -- suddenly we were going to -- to
14 provide -- we're going to sell it a -- as a new product
15 for some use, let's say to another company. We would
16 provide that other company's professional staff with
17 detailed information and anything they asked about.

18 Q How would you --

19 A But to say to them, "Wash your hands," when
20 it -- when it's toxic by ingestion is -- is presumptive
21 of their ignorance, in my opinion.

22 Q What about the third precaution, "Clothing,
23 hand tools and similar equipment which have been in
24 contact with Aroclors should be cleaned. Aroclors
25 spilled on the bench or floor should also be cleared up

1 immediately, and cloth or rags used for this purpose
2 should be destroyed."

3 Is that the European way of saying it?

4 A That is a -- that is -- is -- is minute detail.
5 That is the responsibility of the individual Safety
6 Departments. If -- if it is toxic by mouth, if it is
7 toxic by skin absorption, I can't imagine why you'd want
8 it laying around on the floor --

9 Q Okay.

10 A -- or on rags.

11 Q So what you're telling me is if Monsanto told
12 people Aroclor is toxic by mouth, then the rest of this
13 stuff they should have figured out on their own?

14 A. No. We told them more than that. We told
15 them that "this is a product that is a polychlorinated
16 aro- -- aromatic chlorinated hydrocarbon; and, as such,
17 it is toxic. You should not inhale the vapors, you
18 should not put it in contact with the skin, and you
19 should not get it in contact with the mouth so that it
20 is ingested."

21 Now --

22 Q That's what you told people in the United
23 States?

24 A That is right. That is right.

25 Now, if -- if a person that received this

1 information in setting up a safety or health program
2 didn't have -- didn't know how to carry that out in
3 detail, it would be unnecessary to have that detailed
4 section is what I'm really saying. I'm not criticizing
5 the British.

6 Q Did you ever encounter any experiences where
7 you had some people who didn't appear to be able to
8 follow the simple instruction, "It's toxic by mouth, by
9 skin, and by inhalation," sufficiently to take the
10 appropriate detailed steps?

11 A Not after we got through with them.

12 Q I see. Well, how would you find out about
13 that?

14 A The supervisor to the foreman, we knew.

15 Q Well, no. I'm sorry. I'm talking about
16 customers. I'm talking about the people that you gave
17 these warnings to.

18 A The customer has the same responsibility we
19 had. We can't reach into his plant and say, "This man
20 is illiterate. We must take him out and give him a
21 Braille lesson," or something like that. We can't do
22 that.

23 We expect that any prudent person that is
24 trained in the field of -- of occupational medicine,
25 hygiene, toxicology, would do that. We did it in your

1 plants.

2 We -- and if they asked us, "Do you have an" --
3 and we were asked at times -- "Do you have detailed
4 instructions?"

5 Well, our argument -- our -- we went back
6 through essentially that laundry list that's on the
7 British document. That laundry list goes -- it's in
8 every document. It's on every product that's handled
9 that is hazardous. It -- it is the standard handling
10 procedure for a material that is toxic by inhalation, by
11 absorption, and by ingestion.

12 Q Let me see if I understand your testimony
13 correctly.

14 If someone asked you for more detailed
15 information, you would then go through the detailed type
16 of precautions that are set forth in this British
17 document at Page 18734 (tendering). Correct?

18 A Or we would have told them -- and we did many
19 times -- to contact their professional people at -- in
20 their own plant.

21 Q I see. So sometimes people would ask you for
22 detailed information --

23 A No. To my knowledge, as -- as far as I am
24 concerned, I was never asked a question by a company or
25 individual that would have been answered by that laundry

1 list.

2 Q Okay.

3 A Okay.

4 Q So your testimony is you never recall giving
5 instructions on the safe handling of Aroclor with as
6 much detail as is given in this British document?

7 A That is not what I said.

8 Q All right. Well, why don't --

9 A I certainly have -- recall doing it.

10 Q And under what circumstances would you give
11 that type of detailed --

12 A In a plant safety meeting with the plant Safety
13 Director with the pro- -- the units, the unit operators,
14 and/or the new trainees that are coming into the
15 department because of rotational problems within the
16 plant.

17 Q You're talking about within Monsanto?

18 A Precisely.

19 Q You never gave any customer of Monsanto or any
20 employee of any customer of Monsanto as much detail
21 about the precautions for safe handling of Aroclors as
22 are contained in this British document at Page 18734
23 (tendering). Is that correct?

24 A That is not correct. That is a -- an
25 assumption that -- that -- that simply isn't correct.

1 The fact is, that set of -- of instructions is
2 available on the handling of anything. It is in the --
3 it is a standard saw. The people that handle this
4 material, this is a standard affair. They didn't do
5 that for Aroclor. That damn statement come out of every
6 product that has ever been manufactured that is
7 hazardous.

8 They put the hands statement in if it's -- if
9 it's toxic by ingestion. Okay? You know, stick the
10 potato in there about hands. It's like the old joke
11 about the bedbug; send the nut the bedbug letter.

12 Put the stuff in there about hands, stuff
13 that's toxic by ingestion. Put the stuff in there about
14 not breathing it -- using breathing protection if it --
15 if it is toxic by in- -- by inhalation. And keep it off
16 the skin, make sure you change clothes, and don't leave
17 stuff laying around that has slop on it if it is toxic
18 by absorption through the skin.

19 It -- it is improper to place that statement
20 in -- in importance, because it was a common known
21 system. I don't think I ever talked to anyone within
22 our company or anybody else connected with this business
23 that had any problems connected with it. You -- what
24 we're talking about's a nonproblem.

25 Q I see. Everybody knew all of these things

1 already, and you didn't need to tell them that?

2 A Everybody got a copy of the label if they got
3 the material in their prop- -- in their province.

4 Q I see.

5 A Everybody got copies of any toxicological
6 information we handed out, and we handed out on
7 hundred -- hundreds of thousand of copies of it.

8 It is our personal opinion and my professional
9 opinion that that information is information provided by
10 the -- the -- the Safety Department to the individual
11 operators if it would not offend them -- if it would not
12 offend them by telling them to wash their hands.

13 Q So I -- if I understand your testimony, then,
14 it's your opinion that this type of precautions would be
15 supplied by the customer to its own employees at its
16 discretion?

17 A That is correct.

18 Q Okay. And for that reason, Monsanto did not
19 supply it to its customers itself?

20 A That is correct.

21 Q It relied on the customer's --

22 A That's right.

23 Q -- own people to put out --

24 A The customer's own --

25 Q -- detailed instructions.

1 A -- technical people and instructions; that's
2 right.

3 Q And did not make any effort on its own to
4 provide any information that could be given en masse to
5 the employees of the customers that used the product.
6 Correct?

7 A What were you going to give the employees?

8 Q Did you make any effort to give the employees
9 of the customers anything?

10 A We gave them the information. They have
11 their -- I don't know what their safety programs
12 represent. You know, I don't know how they make the
13 mechanism run.

14 We gave little cards out in our -- in our
15 plants. We have provided copies of those to the -- to
16 cust- -- customers when they asked.

17 Q What did -- what did Monsanto do, if anything,
18 in order to determine whether or not customers were, in
19 fact, providing the necessary information to their
20 workmen to protect their workmen?

21 A I don't -- I -- I really don't know how that --
22 what -- we have demonstrated that for uses that are
23 improperly done, we would not sell the product. Okay?

24 Q How was that demonstrated?

25 A We do not presume -- we would presume that any

1 company that handled it or purchased it would have
2 enough intelligence and common ordinary prudence to
3 follow the simple instructions connected with the
4 toxicities that we provided to them.

5 Q That was just an assumption that was a given in
6 the way the Monsanto Medical Department worked.
7 Correct?

8 A And it worked beautifully, because we didn't --
9 I never heard of a case in all my years.

10 Q You never, in all of your years with Monsanto,
11 heard of a single customer that misused PCB products.
12 Correct?

13 A That had a -- that -- that resulted -- that
14 resulted in a toxicological manifestation that was
15 demonstrated.

16 Q Okay. So if I understand your testimony
17 correctly, you never heard of a single customer of
18 Monsanto for Aroclors that ever had a --

19 A Ah-ah-ah. We're talking about polychlorinated
20 biphenyls. Right?

21 Q We certainly are.

22 A All right, then.

23 Q Is there some problem with that?

24 A No.

25 Q You never heard of a single customer of

1 Monsanto --

2 A To my recollection.

3 Q -- that used Monsanto's Aroclors --

4 A Or --

5 Q -- that had a single --

6 A Or in Monsanto.

7 Q I'm -- I'm asking about customers. Let me ask
8 my question, because I want to make sure I'm clear on
9 what your testimony is.

10 A Uh-huh.

11 Q In your years of experience as an industrial
12 hygienist with Monsanto, you don't know of a single
13 situation where a single customer of Monsanto's Aroclor
14 products had even one employee that demonstrated any
15 toxicological problems from exposure to Aroclors.
16 Correct?

17 A That were verified as from these materials.

18 Q I see. Well, did you have some where the
19 customer thought they related to the materials, but you
20 couldn't verify it to your satisfaction?

21 A Maybe one --

22 Q What was --

23 A -- in 35 years --

24 Q What --

25 A -- maybe two.

1 Q What were those?

2 A I don't recall.

3 Q Did you all in the Medical Department discuss
4 with each another any information you got about customer
5 problems with --

6 A If we felt it was germane, yes.

7 Q In your experience with the Medical Department,
8 did you ever hear of a circumstance where a customer was
9 not using PCBs with the precautions that you thought
10 were necessary, but it had not yet resulted in what you
11 considered a verifiable injury to a workman?

12 A I don't know -- how far do you want to stretch
13 the rubber band? I -- we heard of what we considered
14 misuse, and we stopped it.

15 Q What did you do about it? That's my --

16 A We stopped it.

17 Q How did you stop it?

18 A We stopped selling it to them.

19 Q Okay. So if Monsanto heard of a customer
20 misusing PCBs in a way that could be hazardous to the
21 customer's workmen, it was Monsanto's policy to stop
22 selling PCBs to that customer?

23 A That is correct.

24 MR. CRAWFORD: Be -- be sure you're
25 talking about something that you know

1 about, and don't speculate.

2 THE WITNESS: In the -- I am talking
3 about a -- a -- an incident I know about.

4 MR. CRAWFORD: One incident, though?

5 THE WITNESS: That's true.

6 MR. CRAWFORD: Well, that's one
7 incident --

8 A I can't say that as a general -- in my opinion
9 and in my own -- of my own free knowledge, that's --

10 MR. CRAWFORD: Well, then, don't give
11 him a general answer like --

12 THE WITNESS: Well, I'm sorry. If it
13 was too general, it -- it is too general.
14 It is my own view.

15 A You realize that you're asking me for my own
16 view, and my own knowledge, and that's -- I'm giving you
17 an answer. And to my knowledge --

18 MR. CRAWFORD: Well, let's listen to
19 the --

20 THE WITNESS: Okay.

21 MR. CRAWFORD: -- questioning --

22 THE WITNESS: Okay.

23 MR. CRAWFORD: -- and answer it
24 specifically, and we'll -- we'll move
25 right along.

1 BY MR. LACEY:

2 Q Tell me about the circumstance where Monsanto
3 learned of a customer misusing its PCB products and
4 stopped selling them to them.

5 A I don't know the -- the details of them.
6 These -- these things occurred so many years ago. I
7 can't recall those details.

8 Q You just remember there was such a customer?

9 A Yes, I do.

10 Q And Monsanto stopped selling to them?

11 A That is correct.

12 Q Were they a big customer or a small customer?

13 A I don't know.

14 Q Would it have made any difference from your
15 standpoint how big a customer they were?

16 A No.

17 Q If it was the biggest customer you had, the
18 appropriate course would still be to stop selling to
19 them if they were using it in such a way that their
20 workmen could be hurt. Correct?

21 A That is right.

22 MR. CRAWFORD: Something that you
23 know about, now. Are you talking about
24 forever? I mean, don't get too -- it's a
25 very general, broad question; and I'd

1 suggest that you limit your answer to what
2 you know about.

3 THE WITNESS: I -- I assume that my
4 answer is limited to what I know.

5 MR. LACEY: I'm asking this
6 witness -- it's your wit- -- it's your --

7 BY MR. LACEY:

8 Q Are you having any problems with the -- the
9 questions or the answers?

10 A So long as they are predicated with -- that
11 it's within the limit of my individual knowledge and
12 recall --

13 Q Sure.

14 A -- yes.

15 Q Sure. Well, that's fine. I'm not asking you
16 to testify for somebody else. I'm asking for your
17 opinions here.

18 A My opinion doesn't mean -- isn't worth a
19 nickel. But what my recall and -- and so forth is has
20 to do with what I know of my own true -- own recall
21 and -- and my own knowledge.

22 Q Well, you were the Manager for Industrial
23 Hygiene for Monsanto for a number of years.

24 A That's correct.

25 Q And that is a matter of some importance,

1 probably, to the Jury in this case --

2 A All right.

3 Q -- what your opinion on Mon- -- what Monsanto
4 should have done.

5 MR. JONES: David, just ask the
6 questions. Don't make statements for the
7 record.

8 MR. LACEY: Well, I'm not making any
9 statements for the record.

10 MR. JONES: Well, it sure did appear
11 to be to me.

12 MR. LACEY: I see.

13 BY MR. LACEY:

14 Q Were you ever involved in any discussions
15 regarding the research that was being done in the 1960's
16 and 1970's on the toxicology of PCBs?

17 A I knew of it. I knew of it. And in man- -- in
18 some cases, I may have handled the -- the -- the --
19 the -- the transmission of the inf- -- of the -- of the
20 information from the laboratory back to the general
21 department. But everyone in the department did that on
22 screening results.

23 Q Now, you may have received or written
24 transmittal letters that went to or from Industrial
25 Bio-Test Laboratories?

1 A No. I did not handle that. They did the --
2 the chronic. I limited my comments to acute data.

3 Q I see. You didn't have anything to do with the
4 chronic studies of the toxicity of PCBs?

5 A No.

6 Q Industrial Bio-Test was the company that did
7 all of the chronic studies for --

8 A I don't know.

9 Q You do not know?

10 A I do not know.

11 Q What -- what groups did you work with on the
12 acute studies?

13 A The only one I worked with is Younger
14 Laboratory.

15 Q And all of their work was acute?

16 A That is correct.

17 Q Do you remember having a discussion with a
18 Wilbur Speicher of Westinghouse Electric Company with
19 regard to the toxicity of chlorinated naphthalenes?

20 A No.

21 Q Let me show you a letter dated February 23rd,
22 1973, from Elmer Wheeler to Mr. Wilbur Speicher,
23 Document 25134 through 25136 (tendering). Let me ask
24 you to review that letter.

25 A (Reviews document.)

1 What do you want to know about it?

2 Q That letter --

3 MR. LACEY: Bob, you might leave it
4 over here so he can look at it while I'm
5 asking him about it, if you would, please.

6 MR. JONES: If you would just let me
7 look at it before you ask the question,
8 I'd appreciate it.

9 BY MR. LACEY:

10 Q That letter was written by Mr. Wheeler to
11 Mr. Speicher to summarize a conversation that you,
12 Mr. Wheeler, and Mr. Speicher had. Correct?

13 A I don't know.

14 Q I see.

15 A I don't recall what the occasion was at all. I
16 really don't.

17 Q You have no recollection at all.

18 Mr. Wheeler says in his first two sentences,
19 first paragraph, "Jack Garrett and I" -- is that -- are
20 you the Jack Garrett he's talking about?

21 A Yes. I am, indeed.

22 Q "Jack Garrett and I have discussed his
23 conversation with you some time ago concerning the
24 toxicity of chlorinated naphthalenes. I thought I would
25 confirm his comments to you by this letter"

1 (tendering).

2 And if I understand correctly, that means that
3 you talked to Mr. Speicher about chlorinated
4 naphthalenes and discussed the contents of this letter.
5 You have no recollection of that?

6 A None.

7 Q I see.

8 A None at all.

9 Q Did you ever tell anyone that Askarel-type
10 fluids were under continuing surveillance and study by a
11 number of U. S. agencies, including the Food and Drug
12 Administration, the Council of Environmental Quality,
13 the Office of Science and Technology of the President,
14 the National Bureau of Standards, and several
15 subagencies of the Environmental Protection Agency?

16 A I don't know that I ever did. I don't think I
17 was given that laundry list of agencies, but I -- it --
18 it -- it's true in the day, but I don't recall that. I
19 don't recall that letter, and I don't recall that
20 specific comment.

21 Q I see. Would you have ever told anybody it's
22 no secret that a number of individuals within these
23 agencies have proposed on complete ban on the use of
24 PCBs, including the use in transformers and capacitors?

25 A I knew that was the case through -- but I --

1 but I don't know what year I knew that, and I don't know
2 how to connect it up with that year.

3 Q I see.

4 Would you have ever told anybody the continued
5 use of these applications is currently allowed under
6 restrictions based primarily on action by Monsanto to
7 prove that the current quality PCBs manufactured in the
8 United States could be used with appropriate precautions
9 without serious industrial hazards and with complete
10 protection of the environment?

11 A Most assuredly.

12 Q You would have told people, then.

13 A We did believe that --

14 Q Okay.

15 A -- and still believe it.

16 Q Monsanto was the leader in trying to convince
17 people that PCBs could be used safely for electrical
18 applications, were they not?

19 A We were the only manufacturer in this
20 hemisphere. If anybody led it, it was we and the large
21 users.

22 Q Okay. And this letter was written to a large
23 user, was it not; Westinghouse?

24 A A large user.

25 Q Was it your view that even as between Monsanto

1 and the large users, it was Monsanto that was the person
2 who had the primary position in proving that PCBs could
3 be used safely in transformers and capacitors?

4 A No. And I don't know -- because I don't know
5 whether that had anything to do with that letter or not.

6 Q I see. Well, again, we have Mr. Wheeler's
7 letter, which says it's summarizing what you told
8 Mr. Speicher. You have no recollection of that?

9 A I summarized what I told you about chlorinated
10 naphthalenes.

11 Q I see.

12 A Now, the rest of it may be connected with --
13 with things I discussed with Speicher, but I certainly
14 do not remember.

15 Q I see.

16 A I had many, many conversations with -- with the
17 people involved. Speicher was an industrial hygienist
18 in -- in the field. I knew him personally, as did
19 Elmer. I saw him at the meetings connected with the
20 annual meetings. We talked about many things.

21 Q Was it your opinion that the most important
22 data which has led the Government agencies to permit the
23 continued but restricted use of polychlorinated
24 biphenyls are the extensive animal toxicity studies
25 which have been "completed in the last two years,"

1 saying that those studies have cost Monsanto something
2 more than a half million dollars?

3 A I don't know that that would -- was germane,
4 and I don't even know what it means. I don't know that
5 I would have known the cost, in any case. The letter
6 was written by Mr. Wheeler.

7 Q I see. And it doesn't, to your knowledge,
8 then, really summarize what you told Mr. Speicher?

9 MR. JONES: David, you're --

10 A I don't recall.

11 MR. JONES: -- sitting there going
12 through a letter that he doesn't recall.

13 A I don't recall.

14 MR. JONES: We're spending about five
15 minutes on that.

16 MR. LACEY: Well, I think it's
17 probably worth five minutes.

18 MR. JONES: Seems like one question
19 could have handled it.

20 MR. LACEY: It may seem that way to
21 you. If I'd had the letter when I talked
22 to Mr. Wheeler, maybe some questions with
23 him would have.

24 MR. JONES: Maybe you should have
25 looked.

1 MR. LACEY: Oh, I -- I didn't have it
2 when I took his deposition.

3 MR. JONES: Swear to me you didn't.

4 BY MR. LACEY:

5 Q You mentioned that you had a number of
6 conversations with Mr. Speicher. What did you talk with
7 Mr. Speicher about?

8 A The -- the only conversations I had with
9 Wilbur, in my opinion, were with -- were in connection
10 with the trade at -- at the annual meeting.

11 I -- I'll tell you the truth: If you brought
12 him in here, I would not recognize him. Now --

13 Q Did you --

14 A -- I talked to him. He was a friend of
15 Elmer's. I knew him. We talked together. I just -- I
16 don't recall him.

17 Q Do you remember any discussions with him about
18 Aroclors or PCBs?

19 A We had -- we probably discussed them, because
20 it was the primary problem that -- I think, that
21 Westinghouse had in mind.

22 But, remember, in my case I had 2,000 problems
23 in 50 plants. And -- and -- and the amount of time that
24 I could devote specifically to the Aroclors was minimal,
25 as long as I and my subordinates felt that the plants

1 and their Safety and Hygiene Departments were handling
2 it appropriately.

3 Q When you're talking about "the plants," are you
4 talking about the Monsanto plants?

5 A Monsanto plants.

6 Q Okay.

7 A That is correct.

8 Q So you don't recall any -- the substance of any
9 discussions you had with Mr. Speicher about PCBs, if you
10 had any. Is that correct?

11 A No. I -- I'm sure we did, but I can't recall
12 the substance of them.

13 Q I see.

14 A I knew him for -- I've known him for 35, 40
15 years.

16 Q Do you recall the substance of any discussions
17 you had with anybody at Westinghouse at any time about
18 PCBs?

19 A No.

20 Q Do you recall the substance of the discussions,
21 if any, that you had with anybody at the TVA about PCBs?

22 A Not specifically, no.

23 Q Do you recall generally any discussions you had
24 with anybody at the TVA about PCBs?

25 A You're -- you're asking me almost to --

1 conjecture.

2 Yes, I had dealings with the TVA in connec- --
3 I can't connect them. I had dealings with them on
4 pollution control and -- and dealings with them on
5 handling hazardous materials.

6 Keep in mind, at the time TVA was in
7 manufacturing and a big competitor of ours in the
8 phosphorous and phosphorous chemical business. And yes,
9 we had -- we dealt with them.

10 Q My question was limited. I'm sorry. Let me
11 make it very clear.

12 I'm trying to find out if you remember whether
13 you had any discussions with anybody at the TVA about
14 PCBs.

15 A I -- I can't recall.

16 Q Okay. And, therefore, you certainly couldn't
17 recall the substance of them if you had them?

18 A That is correct. And they would have been many
19 years ago.

20 Q Do you recall whether you had any discussions
21 with anybody at all at Ford about PCBs?

22 A Of my own recollection, no.

23 Q And, therefore, you certainly couldn't recall
24 the substance of any such conversations if you had them.
25 Correct?

1 A In detail, certainly not.

2 Q Even generally.

3 A No, because I don't know.

4 Q Fine.

5 Have you ever given a deposition before?

6 A Yes.

7 Q On how many occasions?

8 A Oh, goodness. Four or five times.

9 Q Can you tell me about those different
10 occasions; what they involved?

11 A An accident that occurred in a railroad train
12 over in central Missouri.

13 Q Is that the case that's been in trial with
14 Monsanto for two or three years?

15 A Yes.

16 Q You gave a deposition in that case?

17 A I gave a deposition in one of the cases.

18 Q I see. Did you testify live at trial in the
19 case, too?

20 A No.

21 Q That involved -- what chemical did that
22 involve?

23 A It involved a waste material from the chloracne
24 chlorophenol units.

25 Q All right. What about the other depositions

1 you've given?

2 A I gave a deposition on -- on a case in -- in
3 the Chocolate Bayou plant in Texas.

4 Q Do you remember what the chemical was?

5 A Alleged benzene exposure.

6 Q You didn't think there was any?

7 A No.

8 Q What other depositions have you given?

9 A I gave a deposition on -- on the -- on the
10 handling -- the -- the manufacturing processes connected
11 with pentachlorophenol.

12 Q And what was that -- where was that case
13 pending? What plant?

14 A I don't have the vaguest. The plant where it
15 was manufactured was Krummrich.

16 Q What else?

17 A I don't recall. I don't -- I don't remember; I
18 just don't.

19 Q The benzene exposure case at Chocolate Bayou:
20 Is that the case that was recently tried in Galveston?

21 A I don't know. I was not --

22 Q The plaintiff's name --

23 A -- involved in the case --

24 Q I see.

25 A -- down there.

1 Q I see.

2 A I don't know where it was tried. It was tried
3 somewhere in Texas, yes.

4 Q Recently tried, within --

5 A Yes.

6 Q I see. Skeen? Does that name ring any --

7 A Yes.

8 Q -- bells?

9 A Yes.

10 Q You gave a deposition in that case?

11 A Yes.

12 Q And that deposition dealt with the
13 safe-handling practices for benzene?

14 A It dealt with benzene in that plant.

15 Q Which is where the plaintiff claimed to have
16 been exposed. Correct?

17 A That's correct.

18 Q Have you ever given a deposition before in a
19 case involving PCBs?

20 A No.

21 Q Have you ever testified live at trial?

22 A No.

23 Q Did you have anything at all to do with the
24 decision-making process by Monsanto with regard to
25 restricting the sale of PCBs to certain uses and

1 ultimately stopping the sale altogether?

2 A Anything to do with it?

3 Q Yes.

4 A The whole company structure in connection with
5 it and its assoc- -- its hazards and the claims had to
6 do with it. I -- I -- what part individuals played is
7 difficult to say.

8 Q Well, can you define any role that you
9 personally played in the decision-making process by the
10 company to get out of the PCB business?

11 A No.

12 Q You weren't asked to comment on that or to give
13 your input?

14 A No.

15 MR. LACEY: Pass the witness.

16 MR. JONES: Let's just take a quick
17 break.

18 THE VIDEOTECHNICIAN: We're off the
19 record.

20

21 (Recess)

22

23 THE VIDEOTECHNICIAN: We've been off
24 the record for a short break. We're back
25 on the record, and the time is 6:48 p.m.

EXAMINATION

QUESTIONS BY MR. JONES:

Q Mr. Garrett, I have just a few questions that I would like to ask you. I'm a little confused by some of the questions that Mr. Lacey asked, and I'd like to clear up some of the things that may have been discussed.

MR. LACEY: I'm going to object to the argumentative nature of the speech on the record.

MR. CRAWFORD: Well, they were confusing.

MR. LACEY: I'm going to object to the argumentative comments of Counsel. The witness and I weren't at all confused.

BY MR. JONES:

Q Mr. Garrett, let me show you the document that was Bates-stamped, or whatever this number is, 038968. And do you remember that document and testifying about it (tendering)?

A Yes, I saw it a few minutes ago.

Q And --

A Mr. Lacey showed it.

Q And what is that document about?

1 A It's about eating in Process Departments.

2 Q Okay. And -- and it particularly talks about
3 the Aroclor process. Is that correct?

4 A Precisely.

5 Q And that's precisely the thing that I want to
6 make clear. That wasn't the type of memo that was just
7 limited to the Aroclor process?

8 A No.

9 Q And that would have been in -- and that would
10 have been in -- true of all the processes there at the
11 Krummrich plant?

12 MR. LACEY: Object; leading.

13 A That is correct. The memo was directed at the
14 practice of eating in the Process Building.

15 BY MR. JONES:

16 Q Now, also you'll see there in the Paragraph
17 No. 3 there -- and let me read it, if I may; Mr. Lacey
18 talked to you a little bit about that -- it says, "While
19 the Aroclors are not particularly hazardous from our own
20 experience."

21 Now, does that mean your own experience in the
22 Monsanto plants, or does that also include the
23 experiences that you may have learned through your
24 customers?

25 A That would include both.

1 Q Okay. It's not limited just --

2 A No.

3 Q -- to the Monsanto plants?

4 A No.

5 Q It's the --

6 A No.

7 Q -- entire body of knowledge that Monsanto may
8 have acquired?

9 A That's correct.

10 Q Now, you also testified to the Toxicology and
11 Safe Handling of Monsanto Aroclor booklet here, which
12 was stamped 1- -- 18731. Is that correct?

13 A That's correct.

14 Q And I believe you said that that was a bulletin
15 that came from London, England, or --

16 A When I first looked at the bulletin, I -- we
17 prov- -- provided Technical Bulletins from time --
18 Technical Bulletin and information for bulletins that
19 Aroclor -- that the Aroclor group used in a -- in the
20 United States. When I first saw it, I mis- -- I -- I
21 misread it as an American document, but it turns out to
22 be the British equivalent of similar-type documents that
23 we produced in the United States.

24 Q And -- and with that in mind, did you have
25 anything to do with the preparation of that document?

1 A The British document? Explicitly, no. The --
2 the -- a lot of the data probably came from the United
3 States, because they used the body of data which
4 included American data and their data to -- to -- to
5 draw their conclusions and write their document.

6 Q Well, did you personally review and critique
7 that particular brochure?

8 A No.

9 Q Now, you also said that from the time that you
10 began working in the Medical Department in 1953, that
11 you had documents which were similar to that available
12 in your department.

13 A That's -- no. We -- we helped prepare
14 documents similar to that for distribution, and the
15 distribution was largely done by the -- the Product
16 group. But we prepared the information, Dr. Kelly and I
17 and Mr. Wheeler, in respect of our own individual parts
18 of it.

19 Q Well, when you said "similar documents,"
20 precisely what did you have in mind?

21 A Tech Bulletins and the documents that went out
22 with the sales literature that carried this kind of
23 information.

24 Keep in mind, this is only three pages. This
25 document has more filler pages in it than that. You

1 see, that is the document I'm talking about right there
2 (indicating). That's all there is to it; three pages.

3 Q All right, sir. Well, I guess what I'm asking,
4 though, is: When you said a "similar bulletin," you
5 didn't mean one that was titled "Toxology" --
6 "Toxicology and Safe Handling of Monsanto Aroclor"?

7 A Not necessarily, no.

8 Q And you -- I believe you said that you were
9 referring to such documents as the Technical Bulletins.

10 A That's true.

11 Q And those Technical Bulletins were given to
12 the customers of Monsanto?

13 A That's true.

14 Q Now, in connection with these documents here
15 that -- that we've been talking about here, the British
16 document -- and I think you compared it to some of
17 the -- at least in the abstract, the Technical
18 Bulletins.

19 A Uh-huh.

20 Q Is that correct?

21 A That's correct.

22 Q Is it safe to say, that, that both of these
23 documents are correct? In other words, both of them
24 will do the job?

25 A Yes.

1 MR. LACEY: Object; leading.

2 A They are correct. They contain the same basic
3 toxicological data and the same basic conclusions.

4 BY MR. JONES:

5 Q So, in other words, both would do the job
6 that --

7 A Yes.

8 Q -- you had -- was --

9 A That's right.

10 Q -- at least attempting to try to accomplish?

11 A That's right.

12 MR. LACEY: Object; leading.

13 MR. JONES: You called him as a
14 witness. This is cross-examination.

15 MR. LACEY: Sure. 35 years with
16 Monsanto, the only job he's held. Right.

17 MR. CRAWFORD: I object to the
18 comments.

19 BY MR. JONES:

20 Q In other words, and I think to make it more
21 clear, that the Tech- -- the Technical Bulletins, which
22 were the American bulletins, those were more geared to
23 the practical use of Aroclors as opposed to the British
24 document that we've been referring to.

25 MR. LACEY: Object; leading.

1 A Well, I would -- I would say that -- that they
2 covered the same ground, and we covered it differently
3 because of the different styles of the different
4 countries. It is not surprising, in my view.

5 BY MR. JONES:

6 Q Is it also true that perhaps there were
7 different circumstances which the British brochure may
8 have been attempting to handle that may not have been
9 present in the American --

10 A Exactly.

11 Q -- situations?

12 MR. LACEY: Ob- -- object; leading.

13 A It is absolutely possible, yes.

14 BY MR. JONES:

15 Q Now, you don't work for Monsanto, do you?

16 A No.

17 Q In fact, you retired in 1985. Is that true?

18 A Right.

19 Q And also in connection with such information as
20 come out on the Technical Bulletin -- Bulletins or the
21 warning labels, do you have any understanding or
22 experience in determining how the message gets across, I
23 guess, to the -- to the person who is reading the
24 document?

25 Do you understand what I'm saying? I may not

1 have worded that very well.

2 MR. LACEY: I'm going to object.

3 It's leading, to the extent it's
4 understandable.

5 BY MR. JONES:

6 Q Let me rephrase it. Okay?

7 A Go ahead.

8 Q What experience have you had in connection with
9 dissemination of -- of information concerning the health
10 and safe-handling aspects of Aroclors concerning maybe
11 the length of the information that you're trying to
12 communicate? In other words, would you -- if a document
13 was too long, what effect would that have on the reader?

14 A It would depend --

15 MR. LACEY: Object; leading.

16 A I think it would depend on who the audience was
17 supposed to be.

18 If the audience was supposed to be professional
19 technical people, the length was dictated by the data
20 that was available and needed. If the -- if the
21 document was placed in the hands -- was -- was for the
22 use of -- of -- of something else, it would be -- it
23 would have to have that as its main affair.

24 In our case, in the case of the Medical
25 Department, our principal aim was to prepare information

1 that could be used by our plants and customer plants.

2 BY MR. JONES:

3 Q So, in other words, it would depend on the --
4 the audience, then, that you were trying to communicate
5 with?

6 A That is absolutely correct.

7 Q And in some instances, if a document was too
8 long, it's your experience, then, that perhaps the
9 reader may not read it?

10 A That's my opinion, yes.

11 Q And in such a case, then, the message wouldn't
12 get across that you were trying to convey?

13 A That's probably correct.

14 Q You also testified, if I understood you
15 earlier -- and correct me if I'm wrong -- that Monsanto,
16 if it learned of any misuse of any of its Aroclor
17 products, that it would automatically stop selling those
18 products to that particular customer.

19 A I did not mean that. If I said it, I'm -- I'm
20 sorry. I'm incorrect.

21 Q All right, sir. Then tell me what you meant to
22 say.

23 A I mean to say that if Monsanto determined that
24 there was a gross misuse of a product that was hazarding
25 the life of workers in their immediate life, then

1 Monsanto would make every effort to stop that
2 circumstance and at -- to the point of removing it from
3 sale.

4 Q Did you ever know of any such situation, then?

5 A One.

6 Q And -- and what did that involve?

7 A It was an occurrence where our -- where a
8 product was used, an Aroclor product was used, misused,
9 as a mold release agent in brass founding because it
10 became -- it was a good mold release agent.

11 Q And was -- and was that the situation that you
12 referred to earlier which -- where you -- was that the
13 Ohio firm, I believe, that you were talking about?

14 A No. It was a Michigan -- it was a Pontiac,
15 Michigan, firm, I think; but I'm not sure. But it was
16 gross misuse of the product.

17 The product that was -- at the time was a
18 hydraulic fluid, and this was being -- was being used as
19 a -- as a mold release agent in brass founding. And it
20 was causing the material to pyrolize and -- and the
21 fumes were -- were -- they were immediately harmful to
22 the workers. And we stopped it.

23 Q So, in other words, that was a use for which
24 the product was not designed?

25 A That is correct. It was simply not designed

1 for that use.

2 Q And that would be gross misuse, in your mind?

3 A That is gross misuse, yes.

4 Q And that's the only instance that you have
5 heard of or have any recollection of --

6 A That is correct.

7 Q -- where Monsanto quit selling the Aroclors?

8 A That is correct.

9 Q So what you're telling us, then, it would
10 certainly depend on the circumstances of the misuse
11 before something like that would take place.

12 MR. LACEY: Object; leading.

13 A If it was grossly misused, it would depend on
14 where would you get the information, how would you know
15 it was true, and how would you verify it.

16 In this case, this was a new use and we
17 could -- we could -- we could study it.

18 But I repeat, in my 35 years I never saw a case
19 resulting from Aroclor exposure. I'm sorry, but I did
20 not.

21 BY MR. JONES:

22 Q Now, during the years that you worked with
23 Monsanto in their Industrial Hygiene area, the Medical
24 Department, did anyone at Monsanto ever tell you or
25 restrict you in any way as to what you could say to

1 Monsanto's customers about what Monsanto knew about the
2 product, the health and safety effects, or the proper
3 handling of the Aroclor product?

4 A Absolutely not.

5 Q So that type of information was freely given by
6 you in connection with your duties as an industrial
7 hygienist?

8 A That --

9 MR. LACEY: Object; leading.

10 A That is correct.

11 BY MR. JONES:

12 Q And how did you convey such information?

13 A By every means that was available. We -- we
14 talked to them by phone; we sent out bulletins to them.
15 We made talks as -- at -- at -- at plants, our
16 own plants. We were rarely invited into a competitor's
17 plant. I mean, let's be -- be -- be perfectly honest
18 with ourselves.

19 We -- we gave speeches at various meetings. We
20 had conferences and -- with -- with -- with people at
21 various meetings. We talked in the halls to people that
22 were associated in the business. We talked to our own
23 salespeople connected with their distribution of the
24 materials.

25 There was never any restriction on what we

1 could say in connection with what we knew about the
2 product, its toxicology, and handling.

3 Q And was that information given not only to the
4 customers, but other groups also?

5 A Gave it to the Government; we gave it to
6 universities; we gave it to -- we gave it to anybody who
7 asked for it.

8 Q What are Material Safety Data Sheets?

9 A Material Safety Data Sheets are data sheets
10 prepared specifically on an individual material. A
11 Material Safety Data Sheet is the safety data connected
12 with the material entitled.

13 Q What would you do with such a Material Safety
14 Data Sheet?

15 A Distribute them.

16 Q Whom would you distribute it to?

17 A We would distribute them to anybody who wanted
18 them, and we would automatically distribute them to all
19 of our plants and our -- and our sales offices for the
20 purpose of answering questions that came to the sale
21 office from local areas, particularly fire departments.

22 Plants -- customers, small customers would call
23 the local sales office, and they had copies of the
24 Material Safety Data Sheets to distribute.

25 Q Did you ever send any of those Material Safety

1 Data Sheets to the customers themselves?

2 A The -- the primary purpose for them was to give
3 them to customers.

4 Q What is a Toxicity Information Sheet?

5 A Because it was difficult to -- to -- to give
6 all the toxicity information out in bits and pieces,
7 the -- the stuff that was published in journals and so
8 forth, a -- a summary of the toxicity of an individual
9 product was made by a professional toxicologist after
10 they joined our staff. And those Toxicity Information
11 Sheets covered a summary by a professional toxicologist
12 on the toxicology that we had or knew about that came
13 from the literature from our own files and reports.

14 Q Now, you had Material Safety Data Sheets on the
15 Aroclors. Is that correct?

16 A From the time there were Material Safety Data
17 Sheets, actually as a -- as an issue. There were many
18 different ways Material Data Sheets were -- were -- were
19 framed and distributed.

20 Q Okay. But that -- they also involved Aroclors?

21 A Yes.

22 Q And is that also true with the Toxicity
23 Information Sheets?

24 A The Toxicity Information Sheets were -- were
25 largely given to professionals, because they were in

1 toxicology language.

2 The -- the -- the Material Safety Data Sheets
3 originally -- the original ones were largely in
4 language -- in common, everyday language.

5 Q Okay. But now my question was, though: Were
6 these Toxicity Information Sheets also prepared in
7 connection with Aroclors?

8 A Yes.

9 Q And I believe you said they were sent to
10 professionals.

11 A That's correct.

12 Q Do you mean the professionals such as yourself,
13 industrial hygienists?

14 A Physicians, toxicologists, epidemiologists in
15 the field.

16 Q And it would be those types of individuals
17 which worked for your customers?

18 A Yes.

19 Q And were those Toxicity Information Sheets
20 concerning Aroclors ever updated?

21 A It -- it -- I am not a toxicologist, and the
22 toxicology people did this. They were -- all of the
23 occup- -- of the -- the health data sheets were
24 periodically updated. Now, I would assume that, but I
25 am a -- not -- do not have direct knowledge of it.

1 Q On how many occasions would you rec- -- have a
2 request for information from your customers concerning
3 Aroclors and how to properly handle them or what the
4 health effects were?

5 A That would be difficult to say. It would -- it
6 would number into the -- I don't know. In -- in my
7 recall, recollection, it had to number well over a
8 hundred. Probably in the hundreds.

9 Q I'd like to show you a couple of documents and
10 just ask if you can identify them for me.

11 The first one is No. 024743, which is a
12 document which you had prepared and sent to a Robert
13 Ransier, dated Nov- -- September 20, 1961 (tendering).
14 Is that correct?

15 A Uh-huh.

16 Q What is that letter? What were you writing
17 about?

18 A This is the -- a letter to a gentleman from the
19 Marquardt Corporation in Van Nuys, California.

20 He says, "In accordance with our telephone
21 conversation" -- I see -- "yesterday, I have enclosed a
22 copy of Monsanto's most recent bulletin on Aroclor
23 1248" -- and that was one of our bulletins -- "as well
24 as our own toxicity information concerning this
25 product."

1 Now, that would -- that would be an ext- --
2 that would be an extension of what was in the bulletin,
3 because this would be the toxicity information in
4 toxicology terms.

5 "Also enclosed is a reprint entitled 'The
6 Toxicity of Vapors of Aroclor 1248 and 1254 Reported to
7 Monsanto-Sponsored Work.'"

8 That's the Kettering work done on the
9 decomposition products of Aroclor 1242 and 1254 done by
10 Dr. Treon at Kettering in 1958.

11 Q So, again, this is an attempt where a customer
12 was requesting information concerning the toxicity or --
13 and -- or health and safety effects concerning Aroclors?

14 A And we gave them everything that we had.

15 Q And you -- and you gave him the information?

16 A Generally, yes.

17 Q I'd like for you to look at Document 029391 and
18 ask you if that (tendering) -- first of all, to identify
19 that, and -- and tell me if that is also a similar
20 instance where that --

21 A Yes.

22 Q -- the same thing happened.

23 A Yes.

24 Q Can you identify the document for me?

25 A The document is March 1st, '63. It's to a

1 Mr. D. N. Griffiths, Purchasing Department, Delco-Remy --
2 Division, General Motors in Anderson, Indiana; and it --
3 it -- it was material we sent to them at their request.

4 Q And what -- what specific material did you send
5 them?

6 A As you -- let me see. "Our bulletin covering
7 this compound will appear in the questions 1232
8 passed -- posed in your mimeograph form, with the
9 exception of the No. 1 question concerning the toxicity
10 rating. As you know, Aroclor 1232 is a chlorinated
11 biphenyl, chlorinated to 32 percent by weight," and so
12 forth.

13 It -- it -- it is a great deal of toxicity
14 information I gave to Mr. Griffiths.

15 Q Okay. I would like for you to identify several
16 other documents here, and then let you tell me if it's a
17 similar instance where you were trying to communicate
18 information concerning the Aroclors that Monsanto
19 manufactured to various customers that it had.

20 Could you please identify Document 025349
21 (tendering)?

22 A It's -- it's to -- to a -- a Mr. Fleming of
23 Industrial Hygiene and Occupational Health Branch,
24 Tennessee Valley Authority, in connection with a
25 specific hydraulic.

1 Q And I'd like to also show you Document 025350
2 and ask you to identify that (tendering).

3 And we'll keep these all in a stack for you.

4 A It's a discussion, obviously, from something
5 Mr. Fleming asked in connection with -- with their
6 problems in -- in compression using Pydraul 625.

7 Q Okay. I'd like to also show you Document
8 016391 (tendering) and ask you to identify. Give me the
9 date and the name of the person that you wrote it --

10 A This is November 1, 1967, and I wrote it to
11 Wilbur Speicher.

12 Q And who does he work for?

13 A He works for -- for Westinghouse Electric
14 Corporation.

15 Q Okay. I'd like to show you Document No. 29460
16 (tendering), and please identify that.

17 A John Hogan, Safety Director, General Tire and
18 Rubber Company, Textileather Division, P. O. Box
19 So-and-So, Toledo, Ohio.

20 Q All right.

21 A We transmitted to him information connected
22 with the handling and toxicity of these products.

23 Q I'd like to show you Document 029461 and ask
24 you to identify that (tendering).

25 A That's to Mr. -- this was a -- this is --

1 Dr. Alexander E. Earle, Plant Physician, FMC, the
2 American Viscose Division, Front Royal, Virginia.

3 This letter was composed for information
4 connected with the material itself, and it was dated May
5 19, 1970 --

6 Q Okay.

7 A -- to FMC.

8 Q Okay. Identify Document No. 026061
9 (tendering).

10 A It's a -- a letter. "I'm enclosing a copy of
11 your filled-out Material Safety Data Sheet covering our
12 product, Thermanol FR Low-Temp. I'm sorry the tardy
13 reply for your letter is" so-and-so. And it is to
14 Mr. C. S. Boettger, Purchasing Agent, Sun Shipbuilding
15 and Drydock Corporation, Chester, PA.

16 Q Okay. Finally, I'd like to show you
17 Document 025317. Please identify the date and who the
18 information was directed to (tendering).

19 A The date is January 18, 1977; Acute Toxicity of
20 Aroclors request from Ford Motor Company. It is to
21 Keith Lee, Industrial Hygiene Section, Central Medical
22 Service at Ford Motor Company.

23 Q Okay.

24 MR. LACEY: May I see that, please.

25 MR. JONES: One second.

1 BY MR. JONES:

2 Q Now, what I've got, I've assembled all of those
3 documents that you've just identified, and I have them
4 in that pile right there that is before you. Are those
5 all inquiries, then, about -- or responses to inquiries
6 of customers concerning the health and safety effects
7 and proper handling of the Aroclor products?

8 A That's true.

9 Q And those are your attempts to convey the
10 information concerning those health and safety effects
11 and proper handling of the Aroclors?

12 A That is correct.

13 Q And did you ensure that those were sent and
14 received by those customers?

15 A Yes.

16 Q How did you do that?

17 A We -- we had them typed. I ultimately signed
18 them, put them in a envelope, and they were mailed.

19 Q And your secretary mailed them?

20 A She mailed them. That is correct.

21 Q Did any of those ever come back?

22 A You mean as nondeliverable, anything like that?

23 Q Yes, sir.

24 A No.

25 Q Now, those are just a sample of -- of the types

1 of inquiries your customers were asking you about?

2 MR. LACEY: I object. You did not
3 lay the predicate for it; you did not
4 establish that he's looked for the files
5 to determine whether there are any more
6 than that at all.

7 BY MR. JONES:

8 Q Please answer the question.

9 A There were many hundreds of calls and
10 correspondence to customers who used the product, asking
11 for information or further information.

12 Q And so --

13 A And we gave it to them.

14 Q And so based upon your -- your knowledge and
15 experience, then, that pile of documents that I have in
16 front of you is just not --

17 MR. JONES: Just a second, David.

18 MR. LACEY: I'm sorry.

19 A Is not the only ones?

20 BY MR. JONES:

21 Q -- is not the only ones?

22 A No.

23 Q Would there be several hundred more, or --

24 A There should be. But much of it was handled by
25 phone and by the simple mailing of the documents.

1 Q Okay. I'd like to also show you a document
2 that is marked 024940 (tendering). Can you identify
3 that?

4 A That's an American Industrial Hygiene
5 Association Hygienic Guide on Chlorodiphenyls containing
6 42 and 54 percent chlorine.

7 Q Now, you said "diphenyl." Is that the same
8 thing as biphenyl?

9 A That is correct. Diphenyl is simply the IUC
10 correct way of saying it.

11 Q Did you prepare that document?

12 A Mr. Wheeler and I prepared part of it and were
13 the advisors on the document itself, yes.

14 Q And was that a document which was published in
15 the public records?

16 A It was published in the Journal of the American
17 Industrial Hygiene Association, and was printed as a
18 separate document and was sold by them as an individual
19 document or in a book of documents containing as many
20 Hygienic Guides as you wanted, or the whole set if you
21 wished.

22 Q What is the American Industrial Hygiene
23 Association?

24 A It is the primary industrial hygiene
25 association in the world.

1 Q And how widely are their publications
2 disseminated --

3 A Worldwide.

4 Q -- in industry?

5 A Worldwide.

6 Q And in addition to having those articles
7 published, what did Monsanto or people like yourself do
8 with an article like that?

9 A Well, we collected -- we bought them from the
10 AIHA and sent them as a set to all of our plants, all of
11 the foreign plants, and to all of the major sales
12 offices for a source of information for them.

13 MR. LACEY: I'm going to want those.

14 MR. JONES: What did you say?

15 MR. LACEY: I'm going to want those.

16 MR. JONES: Oh, sure.

17 BY MR. JONES:

18 Q Have you ever heard of a Chemical Safety Data
19 Questionnaire?

20 A Some of the -- the letters you just asked for,
21 in connection with providing information for those.

22 Q Well, let me show you a document which is
23 marked 025338 through 025341 (tendering). Can you
24 identify that?

25 A It's a request from Ford Motor Company for us

1 to supply them with information on their Hazard Data
2 Form or their Chemical Safety Data Form. And we
3 transmitted the data we had in our files and from our
4 own form onto the Ford form.

5 We did this to -- I don't -- dozens of
6 companies asked; and where the form was adequately put
7 together, we would do that. If it were -- if it -- if
8 it was not possible to do that, then we would send them
9 a collection of our toxicity data, and did that in many
10 cases.

11 Ford happened to be -- happened to give out a
12 decent form. There were -- there were some, though, on
13 cards that just simply were not appropriate. So we
14 would send the card back and a whole pile of information
15 or bulletins and so forth, and say, "Here is the
16 information, and here's a summary of the toxicity,"
17 using the Toxicity Summary, and let them try to put it
18 on their little card.

19 Q So are you saying, then, that Ford was a little
20 more sophisticated than --

21 A -- many, many companies that had their
22 professional crews.

23 If you'll notice, we got some of these requests
24 from -- from Purchasing Agents, because someone had told
25 the Purchasing Agents to go get this information, I -- I

1 presume. We got some of them. And -- and -- and we
2 sent it in filled-out forms, if the form was appropriate
3 to fill out; if we could put -- fit our data to their
4 form. In other words, if the form allowed enough
5 latitude to put it down, we did.

6 Q So these Chemical Safety Data Questionnaires
7 were then forms which the customer sent to you which
8 they requested that you fill out?

9 A Right.

10 Q And what were the purposes of those forms?

11 A Presumably, it's for their information on their
12 sheets.

13 Now, these are predicates to the current
14 computer-system era, where they wanted these so they
15 could key-sort them, or something like that. That's why
16 they had specific forms, because we could have given
17 them a copy of the AIHA Guide, which gives them a lot of
18 the same data; but they wanted it in their way so they
19 could use it in their own -- in their systems. Many of
20 these things went on key-sort files.

21 Q Okay.

22
23 (Conference off the record between
24 Mr. Jones and Mr. Crawford)
25

1 BY MR. JONES:

2 Q Mr. Garrett, I'd also like to show you a
3 document which is marked as 032231 (tendering). Could
4 you please identify whether you wrote that, when you
5 wrote it, if you did, and who you sent it to?

6 A It's to an official in the Los Angeles County
7 Air Pollution Control District, and we provided them
8 with some information that they asked for.

9 Q well, just answer my question, though. When
10 was it written?

11 A March 24, 1969.

12 Q And did you, in fact, write that?

13 A Yes.

14 Q I'd like to show you --

15 BY MR. JONES: Just a second, David.

16 MR. LACEY: May I see it for a
17 moment?

18 MR. JONES: One second. I'm not
19 going to be that long.

20 MR. LACEY: Okay.

21 MR. JONES: Okay.

22 BY MR. JONES:

23 Q I'd like to also show you a document which is
24 marked 029459 (tendering) --

25 A Uh-huh.

1 Q -- and please do the same thing. Just identify
2 it: the date, who wrote the letter --

3 A That's from --

4 Q -- and who was it to?

5 A That's from Lynn Shaw, who's a -- who's an
6 occupational -- who's the industrial hygiene -- at that
7 time, Chief of the Industrial Hygiene staff of the
8 Department of Health of the State of New Jersey. And it
9 was the same thing. It was an -- information they
10 wanted.

11 Q Would you please also identify 032240.

12 A That's the Michigan Water Resources Commission
13 people, asking for concerning Aroclors as far as its
14 toxicity to -- to their purviews, fish and wildlife.

15 Q Now, let's just identify now.

16 A It was to Mr. W. G. Turney, Michigan Water
17 Resources Commission in Lansing, Michigan. And this
18 gentleman asked for some information, and we provided
19 the information to him.

20 Q And what is the date of that?

21 A November 11, 1969.

22 Q Now, I'd like also to show you a document which
23 is marked 032246 (tendering). Can you identify that?

24 A This is dated January 26th, 1970. It's to
25 Mr. C. L. Gough, G-o-u-g-h, in the Indiana State

1 Department of Health. And they asked for some
2 information, and we provided it to them.

3 Q Okay.

4 Now, all of those documents that we've just
5 been discussing and that you have before you there in
6 the pile or in front of you: Those are all documents
7 that have been written by you?

8 A Yes.

9 Q And they were in response to information
10 requested by various Governmental agencies?

11 A That's correct.

12 Q And it was environ- -- information concerning
13 the health effects of Aroclors and safe handling of
14 Aroclors?

15 A And its effect on fish and wildlife.

16 Q And you supplied the information by those
17 letters --

18 A Yes.

19 Q -- back to them and answered their questions?

20 A Yes.

21 Q And is -- would that be the only inquiries that
22 you received during the time that you worked with
23 Monsanto from Governmental agents?

24 A No.

25 Q About how many would you receive?

1 A That would be difficult to say; a number of
2 them a year.

3 As you know, I was involved in the pollution
4 control business and was an official at one time in the
5 Water Pollution Control Federation. And I would be
6 approached in the -- in the area of fishery and -- and
7 water pollution from that side of my duties at that
8 time.

9 Q So this is only, then, a representative sample
10 of the several --

11 A That is correct.

12 Q -- inquiries that you received?

13 A That is correct.

14 Q And several of those were even on the
15 telephone. Is that correct?

16 A Yes, with a slip-in affair with an envelope
17 with the bulletins or something. I would slip it to
18 them.

19 MR. JONES: Pass the witness.

20
21
22 RE-EXAMINATION

23
24 QUESTIONS BY MR. LACEY:

25 Q Mr. Garrett, you are a retiree from Monsanto

1 after 35 years of employment?

2 A That is true.

3 Q Do you receive any retirement income from
4 Monsanto?

5 A Yes.

6 MR. JONES: Object to the question.
7 That is completely irrelevant to this
8 deposition.

9 MR. LACEY: It is not irrelevant.

10 MR. JONES: Certainly, it is --

11 BY MR. LACEY:

12 Q How much do you --

13 MR. JONES: -- what this man
14 receives.

15 BY MR. LACEY:

16 Q How much do you get by way of compensation from
17 Monsanto as a retiree of the company?

18 MR. JONES: You don't have to answer
19 those types of questions.

20 BY MR. LACEY:

21 Q Do you have any problems --

22 MR. JONES: That's -- that's your own
23 personal business.

24 BY MR. LACEY:

25 Q Do you have any problems with telling me that?

1 A I would prefer not to answer that.

2 Q Do you hold -- do you own any stock in
3 Monsanto?

4 MR. JONES: Same -- same thing.

5 A I purchased it.

6 BY MR. LACEY:

7 Q You do own stock in Monsanto?

8 A A small amount.

9 Q I see. How many shares?

10 MR. JONES: You don't have to answer
11 that if you don't want to.

12 A I don't think it is proper to answer it.

13 BY MR. LACEY:

14 Q I see. Well, there's no question about your
15 being a loyal Monsanto employee, is there?

16 MR. JONES: He's not an employee.

17 A I'm not an employee.

18 BY MR. LACEY:

19 Q Were you a loyal Monsanto employee?

20 A I don't know what you mean. You use -- you
21 make the word "loyal" sound nasty.

22 Q I see. Okay. Is there any question about your
23 sentiments lying with Monsanto in this lawsuit?

24 A To tell you the frank truth, I don't know what
25 the lawsuit is much about.

1 Q I see.

2 A But if -- you know.

3 Q Now, with regard to the memorandum that was
4 written to the Krummrich plant about the Medical
5 Department's opinion with regard to the eating of
6 lunches in the Aroclor Department, I just want to be
7 perfectly clear: Did you or did you not at the same
8 time write similar memorandums to every -- with regard
9 to every other department in the plant?

10 A The letter was in connection with a discussion
11 and a question concerning Aroclors. However, at the
12 time --

13 Q My question to you is a very specific --

14 A -- the Medical Department --

15 MR. JONES: Please let --

16 MR. LACEY: No.

17 BY MR. LACEY:

18 Q My question is a --

19 MR. JONES: Please let him finish --

20 BY MR. LACEY:

21 Q -- very specific one --

22 MR. JONES: -- his answer.

23 BY MR. LACEY:

24 Q -- and that is: Did you write a similar memo
25 regarding every other department at the plant at the

1 same time?

2 MR. JONES: Mr. Lacey, I would
3 appreciate you not interrupting the
4 witness. Let him answer his questions.

5 MR. LACEY: I'd like the que- -- I'd
6 like the answer to my question, which is
7 either "yes" or "no."

8 MR. JONES: Let him answer it.

9 MR. LACEY: You told him yourself --

10 MR. JONES: Let him --

11 MR. LACEY: I heard him in your own
12 examination tell him, "Just answer my
13 question," and that's what I'm going to
14 ask him to do.

15 MR. JONES: Well, let him answer it.
16 Don't --

17 MR. LACEY: Fine.

18 MR. JONES: -- jump on his answer
19 before you --

20 MR. LACEY: Let me ask --

21 MR. JONES: -- ask the next question.

22 MR. LACEY: Let me ask the question.

23

24 (Discussion off the record)

25

1 BY MR. LACEY:

2 A Did you, at the same time you wrote that
3 memorandum about not eating lunches in the Aroclor
4 Department, write a similar memorandum regarding each
5 other department in the Krummrich plant?

6 A I have no idea.

7 Q Okay. In fact, are you aware of writing a
8 similar memo regarding any other department in the
9 Krummrich plant at that time?

10 A On many occasions.

11 Q At that time?

12 A In -- in this general time area --

13 Q I see.

14 A -- time space.

15 Q Okay. Why did you pick the Aroclor Department
16 to write this particular memo regarding?

17 A It obviously resulted from a question on
18 Aroclor and eating.

19 Q When you say, "It obviously resulted," what
20 tells you that?

21 A It said, "It is the opinion of the Medical
22 Department that eating lunches should not be allowed in
23 this department."

24 Q Well, what tells you there was any question
25 that came in that that's responding to?

1 A At the time -- at the time and through the
2 early part of my career in Monsanto, the Medical
3 Department -- and that included Dr. Kelly and the rest
4 of us -- felt that eating in the processing areas was
5 improper. We used every possible chance to say, "Do not
6 do it."

7 So this letter contains a double message:
8 Aroclor in specifics, and the whole practice of eating
9 in the process units.

10 Q My specific question to you is: What tells you
11 that there was a question that came into the Medical
12 Department saying, "Is it okay to eat in the lunchroom
13 or in the operating room in the Aroclor Department?"

14 A Well, I don't know, but it sounds like we're
15 answering a query.

16 Q Well, that --

17 A That's my view, and that's my opinion of it:
18 We're answering a query.

19 Q What in the memo can you point to that -- that
20 leads you to believe that you're answering an inquiry?

21 A "It is the opinion of" -- why would the opinion
22 of the Medical Department be expressed in -- in -- in
23 this memo in connection with this problem if it had not
24 covered the entire plant and would have been sent to the
25 Plant Manager -- in this case, sent to the Safety

1 Director, who obviously queried us about something
2 connected with eating in that Aroclor Department.

3 MR. CRAWFORD: David, he gave you

4 that same answer about 30 minutes ago --

5 BY MR. LACEY:

6 Q Let me ask a question about that.

7 MR. CRAWFORD: -- to the same

8 question.

9 BY MR. LACEY:

10 Q When you made plant inspections and found
11 unsafe practices, did you send out memos like this to
12 advise people of those unsafe practices and what you
13 thought ought to be done about them?

14 A I ans- -- I -- every plant inspection I made, I
15 answered -- I finished with a letter report to the Plant
16 Manager; to the -- the contact in the plant, if it were
17 the hygienist and they had one, and they didn't in those
18 early days; or to the Safety Director, with copies to
19 Dr. Kelly and to our files.

20 Q Okay. And so then you must not have discovered
21 this problem on a plant tour?

22 A It -- it could have come from that kind of a
23 report or a letter.

24 Q I see. Okay. So it may not be an inquiry; it
25 may be a plant tour that led to this?

1 A It may have been a plant tour.

2 Q Now, Mr. Jones asked you whether the reference
3 to "our own experience" referred only to Monsanto
4 experience, or also to the experience of your customers;
5 and you said that referred to not only Monsanto's
6 experience, but that of your customers. Is that
7 correct?

8 A It would be difficult to separate the two.

9 Q Well, with regards to your customers'
10 experience, you made no effort to investigate whether or
11 not your customers were having toxicological problems
12 with PCBs, did you?

13 A We had information from the -- our association
14 with their people in the meetings we went to at regular
15 intervals.

16 Q My question to you is: You made no effort to
17 determine whether or not your customers were having
18 toxicological problems with your PCBs, did you?

19 A I -- I don't see that that's germane.

20 No. But we didn't also make any effort to see
21 if they all wore mustaches or not. I mean --

22 Q I understand.

23 A -- I don't see that it makes any difference.

24 Q Well, I think it makes some difference if you
25 say, "Well, we didn't know about any problems with our

1 customers." It's a difference -- there's a difference
2 between whether you looked --

3 A There is --

4 Q -- to find out if there are any, or just none
5 of them came to your attention.

6 A There is little doubt they would have asked.

7 Q I see. And it's your testimony that you're not
8 aware of circumstances where people brought those
9 problems to the Medical Department. Correct?

10 A We had many, many, many requests from many,
11 many, many places about information.

12 Q No, I'm not saying about information. I'm
13 saying, brought to the Monsanto Medical Department
14 problems resulting from exposure of workmen to PCBs.

15 A No.

16 Q Okay.

17 Now, with regard to the document on Toxicology
18 and Safe Handling of Monsanto Aroclor, Document 18731
19 through 18737 (tendering), if I understood the questions
20 that you were asked, you don't recall Monsanto in the
21 United States having a single document devoted solely to
22 toxicology and safe handling. Is that correct?

23 MR. JONES: I object to that
24 question. That's a mischaracterization
25 of his --

1 THE WITNESS: I just testified --

2 MR. JONES: -- testimony.

3 MR. LACEY: Well, I just want to make
4 sure I --

5 THE WITNESS: That is not true.

6 There are --

7 MR. JONES: Well, it mischaracterizes
8 his testimony.

9 BY MR. LACEY:

10 Q What documents are there --

11 MR. CRAWFORD: Well, wait just a
12 second. The court reporter's going to
13 quit. One at a time.

14 BY MR. LACEY:

15 Q What bulletins are you aware of that Monsanto
16 put out in the United States devoted solely to
17 toxicology and safe handling of Aroclors?

18 A We put out the bulletins you saw, the -- the
19 Hygienic Guides.

20 Q I see. Okay.

21 A We put out the Form 20s. We put out -- our
22 information and materials were involved -- were inserted
23 in many of the bulletins that went out on Aroclor in
24 general; and in -- particularly in the Tech Bulletins,
25 which also covered the -- the vapor pressures and other

1 materials.

2 Q Okay. Were -- now, let me -- let me sort these
3 out one by one.

4 You say that there were Hygienic Guides on PCBs
5 only. Right?

6 A That's right.

7 Q Were those given to customers on a regular
8 basis or only on an as-requested basis?

9 A They were published in the public -- in the
10 technical peer-reviewed press. They were also provided
11 by us to anyone who asked or anyone we felt was --
12 needed such a document.

13 Q Okay. So that was contained in some larger
14 volume that dealt with --

15 A Oh, yeah.

16 Q -- a lot of other chemicals besides --

17 A No.

18 Q -- PCBs?

19 A No. When it was -- the individual sheets were
20 individualized. They were folded to four-page sheets,
21 each individual one. We sent each -- any time anybody
22 queried us about -- about a product covered by one of
23 the sheets, we sent them a copy of the sheet.

24 Q You only sent out the Hygienic Guide series on
25 PCBs when a request came into Monsanto. Correct?

1 A No.

2 Q When else did they go out?

3 A We sent -- are you talking about this series
4 (indicating).

5 Q Yes, the Hygienic Guide.

6 A We sent it out when we were asked. You're
7 right.

8 Q Okay.

9 A When we were requested.

10 Q Now, what other documents did you send out that
11 were solely related to the toxicology and safe handling
12 of PCBs?

13 A We sent out the summaries of the toxicology
14 data itself.

15 Q And those were only sent out when requested.
16 Correct?

17 A True. They came from -- from articles printed
18 in the technical press.

19 Q What other -- what other documents devoted
20 solely to PCBs did Monsanto send --

21 A The section on safe handling in the Tech
22 Bulletins.

23 Q Okay. Now, that's not a document devoted
24 solely to the safe handling of PCBs; that's part of a
25 larger document, is it not?

1 A That's true.

2 Q This document that we've looked at, called "The
3 Toxicology and Safe Handling of Monsanto Aroclor,"
4 Document 18731 through 18737, is devoted solely to
5 toxicology and safe handling, is it not?

6 A It is devoted solely to Aroclors.

7 Q And solely to the safe handling and toxicology
8 of that -- that product, is it not?

9 A I hate to say this to you, but -- but we've
10 written doc- -- we've written letters longer than that.

11 Q But that document, short though it be, is
12 devoted solely to the toxicology and safe handling of
13 Monsanto Aroclors, is it not?

14 A I assume that's true. I don't know from my own
15 personal knowledge.

16 MR. JONES: Well, just testify to
17 your own personal knowledge.

18 A I don't know.

19 BY MR. LACEY:

20 Q Have you had difficulty in looking over that
21 short document and determining that's all it deals with?

22 A Not much difficulty.

23 Q And that is all it deals with?

24 A That is correct.

25 Q Okay.

1 Now, I believe you told Mr. Jones that if you
2 have long documents, they tend not to get read. Is that
3 correct?

4 A In -- in -- in -- in cases, if you
5 differentiate the audience.

6 Q And isn't it a fact if you put in a short
7 section on toxicology and safe handling in the middle of
8 a document that's 30 or 40 pages long, it's a lot less
9 likely that's going to get read than if you put out a
10 nice, short, succinct document like this one, devoted
11 solely to toxicology and safe handling (indicating)?

12 A I don't -- I don't know how to answer that
13 question. I really don't.

14 Q Well, isn't it a fact that when you bury a
15 section on toxicology and safe handling in the middle of
16 some Technical Bulletin, it's a lot less likely to get
17 read and heeded as part of some long document than to
18 put out a nice, short, succinct document like that one
19 (indicating), which is devoted solely to that particular
20 topic?

21 A Your premise is correct, but you're pointing to
22 various documents that are not correct.

23 Q Well, let me point to this one right here,
24 "Toxicology and Safe Handling of Monsanto Aroclor," that
25 very short document you've referred to (indicating).

1 A That -- that -- that document is -- is very
2 short. You're correct. It -- it covers approximately a
3 half a page of information on toxicology and a -- a
4 half a page on -- on first aid. There is virtually that
5 much information in connection with any of the documents
6 we put out.

7 Q Well, my question --

8 A It is not my idea of a -- of a -- of a top
9 document. It is their top document, because they have a
10 different audience than we have.

11 Q I see. But my question to you is: A separate
12 document like that on toxicology and safe handling is a
13 lot more likely to get read than if you bury the section
14 on toxicology and safe handling in the middle of some
15 much longer document. Correct?

16 A I would assume that's correct, but the -- the
17 information is not just theirs on the labels. And
18 that's the only thing they see when they receive the
19 brunt of this stuff.

20 Q I see. By the way, did the labels even say
21 that the material inside the drum was polychlorinated
22 biphenyl?

23 MR. JONES: Do you have a label that
24 you want to him look at?

25 A I don't know.

1 BY MR. LACEY:

2 Q You don't even know what was on the labels, do
3 you?

4 A I've seen 40,000 labels.

5 Q Okay.

6 A You have to show me the label.

7 Q My question to you is: You can't tell us, as
8 you sit here today, what was on those warning labels,
9 can you?

10 A I can tell that you when we put -- that we put
11 a separate label on connected with it being an -- a
12 chlorinated hydrocarbon -- a chlorinated hydro- --
13 hydrocarbon.

14 Q My -- that wasn't my question.

15 My question to you was whether the label even
16 said that it was, as this book says, chlorinated
17 diphenyl.

18 MR. JONES: I object to the question
19 until you identify a particular label.

20 A I don't know.

21 BY MR. LACEY:

22 Q You do not know.

23 A Show me --

24 Q Is that correct?

25 A You'll have to show me the label.

1 Q Fine.

2 A And you'd have to show me the year the label
3 appeared.

4 Q Okay. Well, in fact, the labels that Monsanto
5 put out didn't even have year dates on them, did they?

6 A I haven't the foggiest notion. I didn't make
7 those labels.

8 Q Okay.

9 Now, you indicated that it was in cases of
10 gross misuse that Monsanto would stop selling PCB
11 products to customers who were misusing them. Is that
12 correct?

13 A Uh-huh. Yes, that's what I said.

14 Q And you can only recall one incident of gross
15 misuse. Is that correct?

16 A Yes, that's correct.

17 Q And that was a case where --

18 A Wait, wait, wait. We discussed where we'd
19 refused its im- -- initial use for the same reason, and
20 the -- in that case -- I think we discussed two cases.

21 Q Well, there wasn't any misuse. They never got
22 an ounce of it, did they?

23 A They did in -- for their test work, yes.

24 Q I see.

25 A That's what we went to Newark, Ohio, for.

1 Q I see. So you -- you can think of three cases
2 where you refused to sell or stopped selling --

3 A That's correct.

4 Q -- for gross misuse?

5 MR. JONES: Well, that is a
6 mischaracterization.

7 THE WITNESS: That is a
8 mischaracterization. It actually is.

9 BY MR. LACEY:

10 Q I see. Well, what's the mischaracterization?

11 A Well, in the first place, two companies that
12 were using -- had set up to use it as a test run asked
13 us -- and there were many companies, I'm sure, that
14 did -- that -- that did the -- that used it that were
15 perfectly legitimate and -- and it was agreed to.

16 In these cases -- it happened to be a case
17 where there was excessive exposure to fumes from it.
18 And we said, "No, we don't think it's a good idea, and
19 we would refuse to sell it to you on this basis."

20 The other case that we talked about here was a
21 case where a -- a company, obviously disregarding its
22 use and its -- and its intended use as a hydraulic
23 fluid, a high-pressure hydraulic fluid, used it as an
24 open-faced -- open-faced brass-founding affair. In
25 open-faced molds, they poured brass from a reverberatory

1 furnace on a -- a mold that had been sprayed with one of
2 our Pydrauls.

3 Q Now, let me understand what the misuse was.

4 They put PCB-containing materials on a mold
5 they then put brass into --

6 A Hot molten brass.

7 Q -- and that hot material would cause this stuff
8 to steam up into the air. Correct?

9 A It created an -- an -- an -- an evolution of
10 gas; but it also created an evolution of very acid gas,
11 which released the mold. And it was a good mold release
12 agent. I'm not going to argue with that.

13 Q Okay. But the use of a PCB-containing material
14 as a mold release agent would be a gross misuse.
15 Correct?

16 A Oh, indeed it was.

17 Q And that is something that it would be the
18 obligation of Monsanto to stop selling the PCB material
19 if it was being used for that purpose?

20 A That's --

21 MR. CRAWFORD: Only talk about what
22 you know.

23 MR. JONES: I ob- -- I object to that
24 question as calling for a legal
25 conclusion.

1 You can testify to the facts.

2 BY MR. LACEY:

3 Q Well, let me -- let me ask: Is that -- is
4 using a PCB-containing material to assist in mold
5 release the type of gross misuse that you think should
6 have caused Monsanto to stop selling the PCB material --

7 A Yes.

8 Q -- to that customer?

9 A Yes.

10 Q Okay. Would it be gross misuse to use a
11 PCB-containing material if it was used in such a way
12 that hot metal could come into contact with it and
13 create these clouds of vapor and gas that you talked
14 about?

15 A That -- that would be --

16 MR. JONES: Object to the question,
17 because it's not specific enough.

18 A -- conjecture, I think, in my case. If -- if
19 you have a specific incident -- it --

20 BY MR. LACEY:

21 Q Let me ask a question, a very specific --
22 assume that Monsanto learned that General Motors was
23 using a hydraulic fluid that contained PCBs in such a
24 way that in its foundries molten metal was being dropped
25 into pools of the fluid, and vapors were coming up from

1 it where the workmen were working. Would that be a
2 gross misuse?

3 MR. JONES: Same objection. It's not
4 specific.

5 A I would -- I don't -- your -- your point is
6 well made. I -- it -- it might be a gross misuse, but
7 you'd have to know a hell of a lot more circumstances
8 than that.

9 BY MR. LACEY:

10 Q It -- it wouldn't be sufficient just to say,
11 "I've heard that," and not investigate it further; that
12 would require further investigation?

13 A That's correct.

14 Q Okay. And if -- if that were the circumstance
15 after you investigated, then it would warrant cutting
16 off the sales?

17 A It would warrant this -- the -- the -- the --
18 the position that we could take in connection with it,
19 yes.

20 Q Okay.

21 Now, you testified that in 35 years you never
22 saw a case where anybody was injured from exposure to
23 PCB-containing materials in the workplace. Correct?

24 A That is correct.

25 Q And you also never went into anybody's

1 workplace, other than a Monsanto workplace, to see how
2 it was being used or if people were being injured.
3 Isn't that correct?

4 A That is correct.

5 Q Okay. So while you never saw it, with the
6 exception of Monsanto, you also never looked for it?

7 A I never heard about it, either --

8 Q Okay.

9 A -- either; any other of the people who did
10 handle it.

11 Q I see.

12 Now, you mentioned that you really couldn't go
13 into competitors' plants. Was Westinghouse a competitor
14 in the sale of PCB products with Monsanto?

15 A I didn't go into Westinghouse plant, because
16 they did not invite me into their plant. And we just
17 dealt with -- with their industrial hygiene group and
18 their medical group; Dr. Kelly, through the years, over
19 the phone.

20 Q My question is: They weren't a competitor with
21 you, were they?

22 A I haven't the vaguest notion of their spread of
23 materials, whether it --

24 Q I see.

25 A -- competed with any of ours or not.

1 Q I see. Well, the -- the reason you didn't go
2 into plants like Westinghouse and TVA and Ford and see
3 how they were using your PCB products isn't because you
4 requested the opportunity and they said, "No, I'm sorry,
5 you're one of our competitors, so we won't let you in,"
6 is it?

7 A I haven't the vaguest notion.

8 Q You never requested the right to go into a
9 Westinghouse facility and see how they were using PCBs,
10 did you?

11 A No, and they never requested the right to come
12 in our place that I know of, to look at -- at our whole
13 company spread, either.

14 Q You never requested the right to go into a TVA
15 facility and look at how they were using your PCB
16 materials, did you?

17 A No.

18 Q And you never requested the right to go into a
19 Ford facility and see how they were using your PCB --

20 A That's right.

21 Q -- materials, did you?

22 A But we had no reason to believe that the
23 discussion with their hygienists and toxicologists and
24 medical people was incorrect when they explained to us
25 the methods that were used in handling it.

1 Q Well, if there was something that brought to
2 your attention that they did have a problem, would it
3 then be appropriate for you to seek permission to go
4 into their plants and see how the product was being
5 used?

6 A No. Unless we had an awful lot of illnesses
7 and sicknesses, I wouldn't have known about it in any
8 case.

9 Q Well, if you knew about it, however,
10 Monsanto --

11 A We would try to investigate it through --
12 through the salespeople that handled that particular
13 sales part of the contract, yes.

14 Q I see.

15 When were Material Safety Data Sheets first
16 used at Monsanto?

17 A Chemical Safety Data Sheets and those things
18 were out probably in the late '40's.

19 Q And were those things --

20 A Well, wait. We contributed to -- to -- to
21 the -- the sheets put out by the Manufacturing Chemists
22 Association, to the -- the American Petroleum Institute,
23 to the National Safety Council, to the American
24 Industrial Hygiene Association, and any other of those
25 of -- of sheets that were, in our opinion, of

1 professional use or value. Now, I don't recall that we
2 ever did one on PCBs, except the AIHA one; but I could
3 be wrong.

4 In addition to that, we made 155 of our own
5 that were Monsanto data sheets that we gave to customers
6 and to our plants, and they covered a whole host of
7 Monsanto materials. And it is possible that one of
8 those were there. They have long since been
9 discontinued.

10 Q Okay. The only sheets that you can
11 specifically recall the Medical Department preparing on
12 PCB materials, as opposed to other materials, is this
13 Hygienic Guide series?

14 A Yes, sir.

15 Q And that's the document that's numbered 24940
16 through 24943. Is that correct?

17 A That's true.

18 Q Now, this Hygienic Guide series was actually
19 prepared by you and Elmer Wheeler. Correct?

20 A We prepared it -- a good deal of it, yes.

21 Q Who else prepared it?

22 A Well, we had -- they had a committee that did
23 the firming up of the information that picked up the
24 document here and -- and most of the -- of the -- the --
25 the information that they looked up the references. And

1 we did the majority of the writing in the wording.

2 Q You provided the substance to it --

3 A That's true.

4 Q -- and they put it in a form --

5 A That is right.

6 Q -- consistent with their own documents?

7 A And we certainly provided that data, yes.

8 Q So the substance of this Hygienic Guide series
9 on chlorodiphenyls came from Monsanto?

10 A Yes.

11 Q Okay. Do you know -- strike that.

12 You've testified that you think that there were
13 many, many, many other companies that you corresponded
14 with about the safe handling of PCBs, other than the
15 ones shown to you by your lawyer in this group of one,
16 two, three, four, five, six, seven, eight -- eight
17 letters and one memo covering from 1961 through 1977.
18 Is that correct?

19 MR. JONES: I object to the question.

20 Mr. Garrett is not represented by me.

21 MR. LACEY: I see.

22 MR. JONES: He is not my lawyer --

23 MR. LACEY: I see.

24 MR. JONES: -- or I am not his
25 lawyer.

1 A In -- in -- it has been my recollection that
2 there were many more memos and telephone conversations,
3 with subsequent passage of information, than those.

4 BY MR. LACEY:

5 Q Regarding PCBs?

6 A Regarding PCBs.

7 Q And do you have any information about why it is
8 that the Monsanto lawyer only showed you these
9 documents?

10 A Monsanto has a -- a -- had in force and still
11 does, I understand, a Document Retention Program that
12 would have taken those documents out and destroyed them.

13 Q So we have --

14 A Yes.

15 Q -- we have a few that are left over here by --

16 A That's correct.

17 Q -- by good luck?

18 A That is correct.

19 Q I see.

20 Do you recall, in the correspondence back and
21 forth with the Ford Motor Company regarding Pydraul 312,
22 that they requested information on what chemicals were
23 in the product?

24 A No. What they did was -- and that's not just
25 Ford Motor Company, because many, many companies did

1 the scientific -- I recall some of the companies that
2 we did the full ones on, such companies as lumber
3 companies and so forth. And on all of the products that
4 they particularly purchased from us, their Purchasing
5 Departments generally sent them to us.

6 In the case of Ford, they sent this one to us.
7 In -- in fact, this guy Crushaw, Creshaw, sent it to
8 Elmer. And we filled it out on their form. This is
9 their form.

10 Q Yes. My --

11 A We -- we filled them out on a lot of different
12 forms.

13 Q My question to you is: Do you recall that in
14 the sequence of correspondence, Ford ultimately asked
15 Monsanto to tell them what chemicals were in the Pydraul
16 product?

17 A I don't recall that. It's possible.

18 Q And the practice of Monsanto was not to tell
19 people what chemicals were in the product. Isn't that
20 correct?

21 A No, not necessarily. It is correct in the case
22 where we had contractual obligations to someone else who
23 owned the formulation patent.

24 Q Well, let me show you one of the letters that
25 Mr. Jones showed you earlier, Letter No. -- or Document

1 No. 25349, dated November 14th, 1963, from you to an
2 industrial hygienist at the TVA, relating to Pydraul 625
3 (tendering).

4 And they obviously asked for what the
5 composition of that fluid was, and you refused to
6 divulge it. Correct?

7 A I did not refuse to divulge it. I was told not
8 to -- to divulge it, because it -- we had contractual
9 obligations with the owner of the patent, which was not
10 Monsanto.

11 Q The point is: You did not supply the
12 information --

13 A No.

14 Q -- that they requested?

15 A The data that we supplied them was on Pydraul
16 625; not on the Aroclor content, but the finished
17 full --

18 Q And what they asked for was, "Tell us what
19 chemicals are in that product."

20 A That's true.

21 Q And you tell them, "We cannot tell you."

22 A That is correct.

23 Q Okay. Now, the correspondence I see here with
24 the TVA and what your lawyer has shown you all relates
25 to --

1 MR. JONES: Again, Mr. Lacey, I must
2 object. I do not represent Mr. Garrett.

3 MR. LACEY: I see.

4 BY MR. LACEY:

5 Q The correspondence that the Monsanto lawyer has
6 shown you with the TVA all relates to this fluid,
7 Pydraul 625, does it not (tendering)?

8 A That's true --

9 Q Did you --

10 A -- to the best of my knowledge. Is that
11 another one? No, that's different.

12 Okay. Go ahead.

13 Q Do you have any recollection of having provided
14 any information to the TVA on PCB-containing dielectric
15 fluids, as opposed to hydraulic fluids?

16 A I don't recall. We provided so damn much
17 information, I really don't recall.

18 Q Well, Pydraul 625 was not a dielectric fluid,
19 was it?

20 A No. It -- if it -- if it had the -- the
21 Pydraul name, it was a hydraulic fluid.

22 Q Okay. And the only correspondence that I see
23 here that dealt with Westinghouse was the letter of
24 November 1st, 1967, from you to Mr. Speicher, which sent
25 him a copy of your Inerteen label (tendering). Is that

1 correct?

2 A His label, I suspect. Inerteen was not a
3 Monsanto patent, trademark.

4 Q Well, now, Monsanto made Inerteen, didn't they?

5 A Monsanto made the -- the -- the -- the -- the
6 PCB that went into it.

7 Q Well, Monsanto actually made the Inerteen,
8 didn't it?

9 MR. JONES: I object to that.

10 That's --

11 A I don't know.

12 MR. JONES: -- a mischaracterization.

13 BY MR. LACEY:

14 Q I see. Well, look at the first sentence. It
15 says, "I am sending you a copy of our Inerteen label,
16 which you requested in your letter of October 17th."

17 There's no question but what the Inerteen label
18 that's referred to there is Monsanto's Inerteen label?

19 A We probably blended the product for them. But
20 it's their label; it's their trademark.

21 Q You mean the label would have --

22 A They provided us with the labels. We put the
23 labels on the drums. If we thought the label needed
24 correcting, we would tell them.

25 I don't recall anything about this, nor what

1 they're talking about.

2 Q But that's the only correspondence that you
3 have here with anybody at Westinghouse about a product
4 that involved PCBs, is it not?

5 A It's in the correspondence I see in this pile,
6 yes.

7 Q Yes. And you don't recall sending anything
8 else besides one of Monsanto's Inerteen labels to
9 Westinghouse to be --

10 MR. JONES: Objection. That's a --

11 A I don't believe --

12 MR. JONES: Objection. That's a
13 mischaracterization of the testimony
14 again.

15 MR. LACEY: I see.

16 BY MR. LACEY:

17 Q Do you recall sending any document at the
18 request of Monsanto, other than the Inerteen label
19 referred to in the letter of November 1st, 1967,
20 Document 16391?

21 MR. JONES: Objection to the question
22 as being vague.

23 What other information are you
24 referring to?

25 MR. LACEY: Any.

1 BY MR. LACEY:

2 Q I'm trying to find out if you sent any'
3 information.

4 A Certainly.

5 Q What?

6 A We sent all the toxicology data that was
7 available to Mr. Speicher.

8 Q Where are the transmittal letters sending that?

9 A I haven't the foggiest.

10 Q I see. But you have a specific recollection of
11 having done that?

12 A I've -- I've known Wilbur for years.

13 Q That's not my question.

14 A He would never have let us get by without
15 providing him with every nickel's worth of information
16 we had.

17 Q Okay. So he would have requested that, and
18 then you would have responded by --

19 A That's correct.

20 Q -- sending him that?

21 A That is correct.

22 Q What would that toxicological information have
23 consisted of?

24 A Copies of -- of -- of published documents and
25 copies of our own summaries.

1 MR. CRAWFORD: You've got two
2 minutes.

3 MR. LACEY: Pass the witness.

4 MR. JONES: That's it.

5

6 (Discussion off the record)

7

8 THE VIDEOTECHNICIAN: This concludes
9 the deposition of Mr. Jack T. Garrett, and
10 the time is 7:56 p.m.

11 MR. LACEY: And everyone has missed
12 their plane.

13

14 (The deposition was concluded
15 at 7:56 p.m.)

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1 THE STATE OF _____ *

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3 COUNTY OF _____ *

4
5 I, JACK T. GARRETT, hereby certify--that I
6 have read the foregoing transcript of my testimony given
7 in the foregoing numbered and styled case, and that same
8 is true and correct to the best of my knowledge and
9 belief.

10 I further certify that any and all
11 corrections have been made on a separate page and
12 attached hereto.

13 SIGNED on this the _____ day of _____,
14 1987.

15
16 _____
17 JACK T. GARRETT

18 SWORN TO AND SUBSCRIBED BEFORE ME on this
19 the _____ day of _____, 1987.

20
21
22 _____
23 Notary Public
24
25

1 THE STATE OF TEXAS *

2 COUNTY OF HARRIS *

3
4 I, LINDA C. BAKER, a Certified Shorthand
5 Reporter, hereby certify that the foregoing testimony
6 was given before me after the Witness had been first
7 duly sworn.

8 I further certify that I prepared this
9 transcript and that the foregoing 205 pages constitute a
10 complete and correct copy of the transcript of the
11 proceedings, and that the original is being given to the
12 attorney taking same, to be filed by him if necessary.

13 I further certify that I am neither attorney
14 for, related to, nor employed by any of the parties to
15 the lawsuit in which this deposition was taken; further,
16 I am neither related to nor employed by any attorney of
17 record in this cause, nor do I have a financial interest
18 in the matter.

19 GIVEN UNDER MY HAND AND SEAL OF OFFICE in
20 Houston, Texas, on this the 14 day of June, 1987.

21 
22 LINDA C. BAKER, CSR, RPR

23 Certification Number: 505
24 Date of Expiration: December 31, 1988
25 Address: 2900 Smith Street, Suite 104
Houston, Texas 77006
Phone: 713/523-3767

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		Price per pound			
		T/C or T/T	T/L Drums	LTL Drums	5 gallon
Effective Jan. 1, 1971					
1016	Not marketed on January 1, 1971.				
1221	*				
1242	0.180	0.222	0.242	0.327	
Effective Apr. 1, 1972					
1016	0.205	0.240	0.260	0.365	
1221	0.200	0.235	0.255	0.360	
1242	discontinued-----				
Effective Feb. 1, 1974					
1016	0.22	0.255	0.275	0.38	
1221	0.22	0.255	0.275	0.38	
Effective Feb. 8, 1974					
1016	0.28	0.32	0.34	0.44	
1221	0.29	0.33	0.35	0.45	
Effective July 1, 1974					
1016	0.355	0.395	0.415	0.505	
1221	0.365	0.405	0.425	0.515	
Effective Nov. 1, 1974					
1016	0.367	0.415	0.435	0.525	
1221	0.510	0.565	0.585	0.675	
Effective Oct. 1, 1975					
1016	0.397	0.450	0.470	0.570	
1221	no change	no change	no change	no change	
Effective Mar. 1, 1976					
1016	0.53	0.585	0.605	0.705	
1221	0.68	0.73	0.75	0.85	



no date, Monsanto has been unable to determine the prices for Aroclor 1221
of January 1, 1971.

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