

STATE OF ALABAMA
IN THE CIRCUIT COURT OF CALHOUN COUNTY

MARS HILL MISSIONARY
BAPTIST CHURCH, et al.,

Plaintiffs,

CIVIL ACTION NUMBER

versus

CV-96-243

MONSANTO COMPANY, et al.,

Defendants.

DEPOSITION OF WILLIAM B. PAPAGEORGE, P.E.

The deposition of WILLIAM B.

PAPAGEORGE, P.E., was taken before Deborah
Salers Garrett, Certified Shorthand Reporter,
Registered Professional Reporter, as
Commissioner, commencing at 1:20 p.m. on March
31, 1998, by the Plaintiffs, at the law
offices of Lightfoot, Franklin & White, 300
Financial Center, 505 North 20th Street,
Birmingham, Alabama, pursuant to the
stipulations set forth herein.

Regional Reporting Service, Inc.
755 Walnut Street
Gadsden, Alabama 35901-0755

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EXHIBITS

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EXHIBITS

Plaintiffs'	Marked	Offered
Forty-one	234	
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Fifty	286	
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Fifty-two	298	

No other exhibits were marked for
identification, offered or attached as
exhibits hereto.

REGIONAL REPORTING SERVICE, INC.

STIPULATIONS

IT IS STIPULATED AND AGREED by the parties, through their respective counsel, that the deposition of WILLIAM B. PAPAGEORGE, P.E., may be taken before Deborah Salers Garrett, CSR, RPR, as Commissioner and Notary Public, Alabama at Large, at Birmingham, Alabama, on March 31, 1998, at 1:20 p.m.

IT IS STIPULATED AND AGREED that the signature to and reading of the deposition by the witness is waived, the deposition to have the same force and effect as if full compliance were had with all laws and rules of Court relating to the taking of depositions.

IT IS STIPULATED AND AGREED that it shall not be necessary for any objections to be made by counsel to any questions except as to form or leading questions and that counsel may make objections and assign grounds at the time of trial or at the time said deposition is offered in evidence or prior thereto.

IT IS STIPULATED AND AGREED that notice of filing by the Commissioner is waived.

REGIONAL REPORTING SERVICE, INC.

STATE OF ALABAMA, BIRMINGHAM, MARCH 31, 1998

WILLIAM B. PAPAGEORGE, P.E.,

after having been first duly sworn, was examined and testified as follows:

MR. ATKIN: Should we just put this on the record, the joint stipulation allowing for videography?

MR. PECK: Sure. You can make it an exhibit or whatever.

EXAMINATION

BY MR. ATKIN:

Q. Good afternoon, Mr. Papageorge. How are you?

A. Fine.

MR. ATKIN: Good. Before we begin, I just want to have this marked as an exhibit. And this is the joint stipulation that was entered

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into between counsel that this deposition may be recorded by videography. (Plaintiffs' Exhibit Number One was marked for identification.)

Q. Can you state your full name, please, for the record?

A. William B. Papageorge.

Q. And how do you spell Papageorge?

A. P-a-p-a-g-e-o-r-g-e.

Q. Where do you presently reside, Mr. Papageorge?

A. In St. Louis County, Missouri.

Q. Is that near St. Louis?

A. Yes.

Q. Are you presently employed?

A. I'm self-employed. I guess that's appropriate.

Q. Okay. What do you do?

A. Consulting.

Q. What type of consulting do you do?

A. Technical.

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Q. When you say technical, what do you mean?

A. It deals with such things as engineering and chemistry.

Q. Okay. You have testified before in other cases involving PCBs; is that correct?

A. That's correct.

Q. Approximately how many cases have you testified in?

A. I've never kept score, frankly. I would suggest in depositions and trials is approaching thirty or forty.

Q. Okay. Do you recall how many trials you testified in as opposed to depositions?

A. Oh, six to ten, somewhere in there.

Q. When was the last time you testified at a trial in connection with a PCB case?

A. I'm trying to recall. It's about two years ago.

Q. Do you remember where that case was venued?

A. East St. Louis, Illinois.

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1 Q. Do you know who the parties were?
 2 A. Cerro Copper, C-e-r-r-o, versus
 3 Monsanto. I believe that's the
 4 designation or close to it.
 5 Q. Was that in state court as opposed to
 6 federal court?
 7 A. I'm hesitating because I was under the
 8 impression it was a federal district
 9 court over there, but I'm not positive.
 10 Q. Can you briefly tell us your educational
 11 background?
 12 A. I'm sorry?
 13 Q. I'm sorry. I should speak louder. Can
 14 you briefly tell us your educational
 15 background?
 16 A. I received a bachelor of science degree
 17 in chemical engineering from Washington
 18 University located in St. Louis,
 19 Missouri in 1943. I received a master
 20 of science degree in chemical
 21 engineering also from Washington
 22 University in 1947. Additional formal
 23 credits were earned at Oklahoma A & M,

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1 now known as Oklahoma State University,
 2 in Stillwater, Oklahoma, toward a doctor
 3 of science degree in the period 1947 to
 4 1951.
 5 Q. Before I go any further, let me just --
 6 Obviously you have been involved in a
 7 lot of depositions. You are familiar
 8 with the whole process, correct?
 9 A. I'm learning all the time.
 10 Q. Let me just state, I'm sure you know the
 11 rules. But the one rule I want to
 12 emphasize is that if I ask you a
 13 question, please make sure that you
 14 understand the question before I ask --
 15 before you answer it. Okay?
 16 A. I understand what you're saying. But
 17 sometimes what I understand is not what
 18 you had intended for me to understand.
 19 The question may not quite fit.
 20 Q. Well, if there is any need for
 21 clarification, you know, feel free to
 22 ask me to try to clarify it for you.
 23 Okay?

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1 A. Okay.
 2 Q. Once you give the answer, we are going
 3 to assume that you understood my
 4 question. Okay?
 5 A. I understand.
 6 Q. Okay. Did you -- Can you tell us
 7 briefly your employment history at
 8 Monsanto, just what titles you held and
 9 approximately what years, to the best of
 10 your recollection? I know this goes
 11 back a while.
 12 A. I know it does. I joined Monsanto in
 13 1951, late '51. My initial assignment
 14 was as a process engineer in the plant's
 15 engineering department.
 16 MR. PECK: That's his CV.
 17 MR. ATKIN: Why don't we mark that
 18 as Exhibit Two.
 19 (Plaintiffs' Exhibit Number
 20 Two was marked for
 21 identification.)
 22 Q. Maybe that will help refresh your
 23 recollection.

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1 A. Should I continue referring to this,
 2 or will this speak for itself?
 3 Q. Whatever -- If you could continue
 4 referring to that, if that will refresh
 5 your recollection, and that way we have
 6 it on the record.
 7 A. Very good. Following that assignment,
 8 which lasted until 1954, I became
 9 designated as a senior chemical engineer
 10 still within the same engineering
 11 department. In 1955 I was appointed a
 12 production supervisor.
 13 Q. What did you do as a production
 14 supervisor?
 15 A. I supervised the actual operations
 16 related to the manufacture of chemicals.
 17 Q. Okay.
 18 A. Not all the chemicals in the plant, but
 19 an assigned group.
 20 Q. Do you recall what the assigned group
 21 was?
 22 A. My initial assignment, as sort of a
 23 trainee, was in the manufacture of

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materials called plasticizers. These are materials that are added to brittle plastics to make them flexible.

Q. Uh-huh (indicating yes).

A. The second assignment as a production supervisor was the supervision of a department that made chemicals that were eventually used in making other chemicals that were used as rubber additives to improve automobile tire performance and rubber tubing and that kind of products.

Q. Okay.

A. In 1956 I was appointed a maintenance supervisor. And that assignment involved the supervision of a team of craftsmen who were involved in installing minor new projects, like a new pump or a new tank or a new instrument. Following that I was appointed as maintenance superintendent at the same plant. That was in 1957.

Q. Which plant is this now?

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A. This is the plant that Monsanto referred to as the J. F. Queeny Plant located in St. Louis.

Q. Okay.

A. As maintenance superintendent I was responsible for the activities of eight to ten supervisors covering all of the mechanical repair and installation activities in the plant.

In 1959 I became an assistant engineering superintendent, which takes me back to the original engineering department where I now supervised the engineering activities for anywhere from six to twelve engineers and three to six technicians who were assigned the task of responding to the production department's needs for a bigger tank or a different pump or a new process or a new agitator, whatever required some engineering calculations to help them decide on what would be the best approach.

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In 1961 I was appointed a general superintendent of warehouse, inventories, and utilities.

Q. This is still at the Queeny Plant?

A. Still at the same plant. This particular operation really provided services to the manufacturing supervisors other than the maintenance function.

We would deliver the raw material. We'd pick up the finished product. We'd supply power, electrical power or clean water or pick up the trash, whatever assistance they needed to help the processes continue ongoing.

Q. Okay.

A. All of the assignments I just described with Monsanto up to now were with this John F. Queeny Plant.

In 1964 I was assigned to the plant located in Sauget, Illinois, S-a-u-g-e-t, of Monsanto, as a general superintendent of manufacturing. I was

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one of, as best I remember, a half a dozen or so general superintendents.

Each of us were assigned a list of products that we were responsible for producing. In 1965 I was appointed plant manager at the Anniston, Alabama plant. In 1970 I was appointed manager, environmental control.

Q. At Anniston?

A. No. Reporting back to St. Louis.

Q. You were located in St. Louis then?

A. Yes.

In 1973 my title -- Well, let me go back a bit. The title, manager, environmental control, was changed after a few months to manager, environmental protection. So if you see documents with those two titles, I hope that explains the difference.

Q. Okay.

A. In 1973 I was appointed manager, product acceptability, of the operating unit within Monsanto referred to as the

REGIONAL REPORTING SERVICE, INC.

1 Monsanto Industrial Chemical Company.

2 Q. Still stationed in St. Louis?

3 A. Yes.

4 Q. Okay.

5 A. In 1977 I was appointed the manager of
6 product acceptability for the chemical

7 -- sorry -- Monsanto Chemical

8 Intermediates Company.

9 Q. What does the manager of product
10 acceptability do, or what did you do?

11 A. I was assigned a group of Monsanto
12 products, and I was responsible for
13 monitoring the safety of these products,
14 the proper packaging, the proper
15 labeling, the information in their
16 brochures, describing these products,
17 any communications that were required by
18 regulatory agencies, both local, state,
19 federal, international.

20 Q. Okay.

21 A. Later on in 1977 I was appointed a
22 director of environmental operations for
23 Monsanto Chemical Intermediates Company.

REGIONAL REPORTING SERVICE, INC.

1 Q. And what did your duties involve in that
2 position?

3 A. In addition to the product type matters
4 that I just described for the product
5 acceptability job, I picked up such
6 things as industrial hygiene at the
7 plants of individuals working with these
8 chemicals produced at plants. And this
9 is a situation where the plants were
10 assigned to the unit I was working with
11 rather than the chemicals assigned.

12 Q. Okay.

13 A. And also as the title indicates, I was
14 involved with environmental issues
15 relating to the plants and the products
16 produced at these plants.

17 Q. Okay.

18 A. In 1983, as a result of a reorganization
19 within Monsanto, I was appointed a
20 director, environmental operations, for
21 the operating unit referred to as the
22 Monsanto Industrial Chemicals Company,
23 the same kind of assignments, different

REGIONAL REPORTING SERVICE, INC.

1 group of plants.

2 In 1986 I was named manager of
3 occupational health for another
4 reorganization within Monsanto. This
5 was referred to as the Monsanto Chemical
6 Company. And I finally retired at the
7 end of that year.

8 Q. The end of 1986?

9 A. '86.

10 Q. Have you been a consultant ever since?

11 A. I'm sorry?

12 Q. I'm sorry. Have you been a consultant
13 ever since?

14 A. Yes.

15 Q. Mr. Papageorge, did you meet with anyone
16 to prepare for your testimony, your
17 deposition testimony here today?

18 A. Yes, I did.

19 Q. Who did you meet with?

20 A. Mr. Michael Kelly, Mr. Gerard Davidson,
21 Mr. Adam Peck, and Mr. Bud Cox.

22 Q. When did you meet with them?

23 A. Well, with Mr. Davidson and Mr. Kelly I

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1 met last week, as I remember.

2 Q. Where was that meeting?

3 A. In St. Louis.

4 Q. How long did you meet with them for?

5 A. Oh, less than half a day the first day,
6 from, say, after lunch until four
7 thirty.

8 Q. Okay.

9 A. And the next day I met from, say, eight
10 thirty to noon.

11 Q. Okay.

12 A. And then I met with those two gentlemen
13 and Mr. Peck and Mr. Cox yesterday.

14 Q. For how long?

15 A. Actual meeting time was a couple of
16 hours in the late afternoon.

17 Q. Any other time?

18 A. And this morning I met with
19 Mr. Davidson, Mr. Kelly, and Mr. Peck
20 from about -- Let's see. It was roughly
21 eight thirtyish, quarter to nine until
22 about a quarter to twelve.

23 Q. Did you review any documents in

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1 preparation for your testimony here
2 today?

3 A. Yes, I did.

4 Q. What did you review?

5 A. I recall there was a mound of paper. I
6 recall --

7 Q. Like that right (indicating) --

8 A. Oh, it was a box full, sir. And really
9 most of it was the transcript of a
10 deposition taken for what I'm going to
11 call the Nevada Power versus Monsanto
12 case.

13 Q. Okay. Did you review any of the --
14 Withdrawn.

15 It was the transcript of a
16 deposition?

17 A. Yes.

18 Q. And did you review any of the exhibits
19 that were part of the deposition in that
20 case?

21 A. Some of them. As I read through the
22 transcripts -- And I had to refresh my
23 memory as to what are they talking

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1 about. I would go back and find the
2 exhibit and refresh my memory, yes.

3 Q. Can you tell us -- Without looking at
4 the documents, can you tell us offhand
5 specifically which documents you looked
6 at?

7 A. I recall seeing a copy of correspondence
8 that I had issued back in the '70s
9 regarding the status of the
10 environmental issue as it related to
11 PCBs. I have forgotten the date now and
12 the specifics in it. It is interesting.
13 I don't remember the details. I have so
14 many documents in mind that it gets
15 confusing.

16 Q. Well, I'm going to show you a lot of the
17 documents that I have, and perhaps that
18 will refresh your recollection.

19 A. That's good. That will be helpful.

20 Q. Are you being compensated by Monsanto
21 for your time in preparing for the
22 deposition and testifying here today?

23 A. I don't receive any compensation for

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1 testifying as a fact witness.

2 Q. Are you being compensated for your time?
3 I didn't mean to imply it was for your
4 testimony. I meant in preparing for a
5 deposition and to appear here today.

6 A. No. I'm being paid for consulting with
7 attorneys, with reviewing the past. I
8 suppose you would call that part of the
9 preparation.

10 Q. Yeah. That is what I meant.

11 A. And I am paid for that. But the time
12 that I am involved, say, in this
13 deposition, I'm not paid for that.

14 Q. Okay.

15 A. I'm not paid for the time I sit in the
16 airplane either.

17 Q. But you are paid for the hours, the time
18 you spent consulting with the attorneys
19 regarding the deposition?

20 A. Yes.

21 Q. Okay. How much are you compensated?

22 A. About -- I usually charge a hundred
23 fifty to two hundred dollars an hour.

REGIONAL REPORTING SERVICE, INC.

1 Q. Okay. And can you tell us
2 approximately -- Withdrawn.

3 Have you already submitted a bill
4 for the time you spent consulting with
5 the attorneys?

6 A. On this particular deposition?

7 Q. Yes, yes.

8 A. I have not. I haven't sat down to
9 calculate anything.

10 Q. Can you tell us approximately how many
11 hours you have spent altogether that you
12 plan to bill in connection with
13 consulting with the attorneys?

14 A. It is going to be about fourteen hours.

15 Q. Okay. Do you have any plans to be out
16 of the country during June of this year?

17 A. No, sir.

18 Q. Sir, do you know if Monsanto ever
19 conducted departmental waste audits of
20 the Anniston plant?

21 A. Will you help me with the expression
22 "departmental waste audits"? I'm not
23 familiar with that terminology.

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- 1 Q. Sure. Did Monsanto ever conduct an
2 audit to identify the waste components
3 from its operating departments?
4 A. I'm not aware of any program that was
5 conducted that would cover the full
6 spectrum of waste from each operating
7 unit within the plant.
8 MR. ATKIN: Let's mark this as
9 Exhibit Number Three, if we
10 could.
11 (Plaintiffs' Exhibit Number
12 Three was marked for
13 identification.)
14 Q. I'd ask you to look at the document, if
15 you could. And I might apologize. I
16 don't have another set for you. With
17 logistics being what they were, it just
18 didn't work out that way.
19 A. I have scanned the exhibit. It does
20 refresh my memory about this activity.
21 I misunderstood your question up to the
22 point when you asked about Monsanto
23 audit, outside of all forty Monsanto

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- 1 of the -- the purpose of the Anniston
2 plant conducting departmental waste
3 audits? I believe that is reflected
4 right where it says, "Objective."
5 A. Yes.
6 Q. Okay. And is it fair to say that the
7 purpose of the audits was to identify
8 major waste components from all the
9 operating departments and to provide
10 reliable flow data so that waste laws
11 can be accurately calculated?
12 A. Yes.
13 Q. Do you recall, Mr. Papageorge, whether
14 audits were done of the Aroclor
15 department? And to refresh your
16 recollection, I'm referring to page
17 number three.
18 And just for the record, let me
19 state that this document is a February
20 24th, 1969, progress report from the
21 technical services department of the
22 Anniston, Alabama plant, and it bears
23 Bate stamp designation DSW 014277

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- 1 plants conducting general audits.
2 Q. And I don't mean to interrupt you, but
3 let me just say I know these documents
4 go back a long ways. I know you are
5 going to have to refresh your
6 recollection about a lot of them, and
7 that is fine.
8 I'm sorry. So this does refresh
9 your recollection about departmental
10 waste audits that were done?
11 A. Well, it does refresh my memory in terms
12 of this particular exhibit describes a
13 plan to conduct the audits.
14 Q. Okay.
15 A. I'm having still some problems recalling
16 when and if the audit was ever conducted
17 and what the results were. I can't
18 place that just yet.
19 Q. That's okay. We will get to that in a
20 minute. All right.
21 A. All right.
22 Q. As identified in this document, do you
23 know what the purpose of the audit was,

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- 1 through DSW 014281. Okay. I'm sorry.
2 A. Your question, as I remember it, was did
3 the Anniston plant conduct an audit of
4 the Aroclor department.
5 As I said earlier, this document
6 doesn't refresh my memory on that. It
7 does indicate a plan to do so. I don't
8 know if that plan was executed.
9 Q. Okay.
10 A. I don't remember that the plan was
11 executed.
12 Q. Got you. Let me show you another
13 document. And we will mark this as
14 Papageorge Four for identification.
15 This is a progress report from the
16 technical services department of the
17 Anniston, Alabama plant dated July 23rd,
18 1969, bearing Bate stamp designation DSW
19 014284 through DSW 014295.
20 (Plaintiffs' Exhibit Number
21 Four was marked for
22 identification.)
23 Q. If you can look at that document,

REGIONAL REPORTING SERVICE, INC.

perhaps it would refresh your recollection.

MR. PECK: Do you want to go off the record when he reads or just want the tape to run?

MR. ATKIN: I guess you can let it run, whatever you prefer. Let it run.

Q. Let me just indicate now that you have reviewed the document, this was a document that was prepared apparently by Mr. Wright; is that correct?

A. That is correct.

Q. Okay. Who was Mr. Wright?

A. He was the individual at the Anniston plant who was the -- who was given the assignment to monitor environmental issues at that plant. I have forgotten his title, but it was something like environmental supervisor or some such words.

Q. Okay. And I note that you are listed as one of the recipients of this document.

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Is that correct?

A. That is correct.

Q. Do you recall receiving this document?

A. I do now that I have glanced at it, yes.

Q. And this document reflects that an audit was in fact done of the Aroclor department; is that correct?

A. That is correct.

Q. And apparently the audit was completed sometime in or about July of 1969; is that correct?

A. That is correct.

Q. Okay. Did you have any involvement at all in the conducting of the audit?

A. My involvement is one where I am the plant manager of the plant in which Mr. Wright worked, and the department that he audited was under my responsibility.

Q. Does this refresh your recollection as to whether or not an audit had ever been done previously of the Aroclor department?

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A. No, it doesn't.

Q. Okay. Do you have any reason to believe that an audit was done of the Aroclor department prior to July of 1969?

A. I cannot speak for the years before 1965, so I just would be guessing.

Q. Okay. Was the reason that an audit was being done of the Aroclor department in 1969 because of the concern over PCBs being found in the tissue of some animal and the concern over the effect that the PCBs were having on the palatability of the fish?

And I don't mean to trick you. Why don't I refer you back to Papageorge Three. It would also expedite things a bit.

A. I see the sentence that you are referring to.

Q. Okay.

A. The fact that the Aroclor materials, which I think today we would call PCB materials --

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Q. We can do that.

A. -- were being found in the tissue of some animals certainly triggered some thinking regarding where are these things, what are they, and where are they coming from.

I recall the use of the word "palatability," and I have no information from anywhere over the decades that anybody indicated that the palatability of fish was an issue in 1969. It just doesn't ring any kind of memory bell.

Q. Okay. Do you know whether the contents of this document was actually prepared by Mr. Wright?

A. Which document? Are we looking at Three or Four?

Q. Three.

A. Three. I have no reason to believe --

Q. Otherwise?

A. -- otherwise.

Q. And the same would hold true for

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Papageorge Four; is that correct?

A. That is correct.

Q. There was no reason that Monsanto couldn't have done audits of the Aroclor department before 1969; is that correct?

A. There was one very limiting shortcoming.

Q. Okay.

A. The ability to measure PCBs in part per million or less levels was not available until roughly 1968. And even then there was some difficulty experienced in duplicating results. And it depended an awful lot on the laboratory and the experience of the chemist. And so it was undergoing a period of development in '68.

So without that technology being available, a true audit -- Well, an audit could have been held, but the answers would have come out zero PCBs.

Q. Prior to 1968?

A. Yes. And even during '68. We would have gotten some answers that always

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would have a question mark after them.

Q. Okay. Looking at Papageorge Four --

A. I have it.

Q. Okay. Was a determination made as to how much the average total loss -- the average daily losses of organic PCBs were?

A. Well, I see --

Q. I'm actually referring you to the summary on the first page, to the second sentence, which reads, "The average total losses of organic material from these departments is approximately twenty-seven pounds per day."

A. My hesitation is due to the fact that there are many chemicals involved in this particular operating unit that are called organics. Some of them are PCBs. There is also, as I remember, benzene and biphenyl and hydrogenated biphenyl and many other materials which would come out as organic material.

Q. Okay.

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A. So I just don't know how much of that, if any, is PCB.

Q. Well, according to this document, I believe it says the major sources of organic -- primarily Aroclors, but with smaller amounts of biphenyl, Santowax, and HB-40.

Does that refresh your recollection as to whether the major component of the organic waste was from Aroclors?

A. Not really, because when they speak of Aroclor, at that point in time, at the Anniston plant within Monsanto, the word "Aroclor" covered chlorinated biphenyls as well as chlorinated terphenyls.

Also, within that operation, because of their use as starting materials, there were other organic materials present.

So again, the expression "organic materials" is not really definitive.

Q. Does this document reflect an audit that

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was also done of the HCl department?

A. Yes, it does.

Q. And it also reflects the results of the amounts of HCl, average losses of HCl per day; is that correct?

A. I believe I saw that here. Let me look at it.

Q. Actually I'm referring to the first page, to DSW 014284.

A. Well, the number that I see on that first page is the number we mentioned earlier referring to organic material of twenty-seven pounds a day. And it --

Q. When you said may, may also encompass not only PCBs but other organic materials?

A. In terms of organic material, correct, right.

Q. Right.

A. And then when you say --

Q. I'm referring to the last sentence on the first paragraph on the summary which states, "The chlorinated solvent should be

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average loss of eleven hundred pounds of HCl per day, and the HCl department losses were an average of fifteen thousand five hundred pounds per day."

A. I see that, yes.

Q. So this does in fact report or give reporting on the HCl losses, the average HCl losses?

A. You are correct.

Q. And at or about the time that this audit was conducted, did Monsanto become concerned about the effects of PCBs in the plant effluent water on Snow Creek and Choccolocco Creek? And I am referring to the first page, the last paragraph on the first page.

A. I see the reference, yes.

Q. Does this refresh your recollection, sir, as to whether or not -- Withdrawn.

Do you know whether Monsanto became concerned about the effects of PCBs on Snow Creek and Choccolocco Creek prior to July of 1969?

REGIONAL REPORTING SERVICE, INC.

A. Not to my recollection.

Q. Now, in or about July 1969 Monsanto visually checked Snow Creek and Choccolocco Creek for PCBs; is that right? And I'm referring you to the document.

A. Yes.

Q. And this document reflects that -- what the results of that visual inspection were; is that correct?

A. I recall seeing it as I scanned it.

Q. I'm on the first page, actually.

A. Still?

Q. Yeah.

A. It is the last paragraph, first page. Yes, sir, I see it.

Q. It reflects that none was noted more than one block from the plant boundaries.

A. I see that, yes.

Q. Does that mean, sir, that up to one block from the plant boundaries Monsanto was able to visually detect PCB waste?

REGIONAL REPORTING SERVICE, INC.

A. Well, that tells me that the observer who went out looking for evidence of PCBs, which look an awful lot like the motor oil that drips out of your car on the garage floor -- he went out looking, and he spotted what he thought might be a PCB. Remember, he didn't analyze for it. He just saw that stain, if you will. And it was at most a block -- And I'm assuming that is a city block -- a typical city block away from the plant boundary line.

Q. Okay. Did Monsanto take samples of mud and water downstream from the plant at that time?

A. I'd have to refresh my memory.

Q. Also on the first page.

A. Yes, they did take samples.

Q. Okay. How many samples did they take?

A. It indicates here six samples of mud and water.

Q. Do you know where they were taken from?

A. I'd have to look at the map that's

REGIONAL REPORTING SERVICE, INC.

referred to here.

Q. Okay.

A. But I don't find a map.

Q. Neither do I. That is why I asked you.

A. It's for some reason missing.

Q. But you don't remember offhand?

A. Oh, no, I don't.

Q. Now, if you turn to page DSW 014289, which is page six of this document --

A. I have it.

Q. That reflects that samples were taken of -- two sets of samples, mud and water, were collected from Snow Creek in September of 1968. Is that correct?

A. I'm having difficulty finding reference to two here.

Q. Do you see where -- Let me help you out. Do you see where it says, "Sample location"?

A. Yes.

Q. The paragraph just above that. It says, "During September of 1968 two sets of samples, mud and water, were collected

REGIONAL REPORTING SERVICE, INC.

1 from Snow Creek."

2 A. I see that, yes.

3 Q. And it also reflects that these samples

4 were analyzed for PCBs by the organic

5 research method, correct?

6 A. I'm confused by your use of the word

7 "method."

8 Q. It says, "By organic research."

9 A. Yes, sir.

10 Q. Do you know what is meant by the term

11 "organic research"?

12 A. This refers to the team of analytical

13 chemists assigned to Monsanto's central

14 research department to work on new

15 technology for analyzing for chemicals,

16 and PCB was one of their projects.

17 Q. Okay. And this in fact gives the

18 results of the samples that were taken

19 in 1968; is that correct?

20 A. Are we still on the same page as the two

21 samples?

22 Q. Yes.

23 A. As I read it, it shows me analyses were

REGIONAL REPORTING SERVICE, INC.

1 completed on the two samples of the

2 sediment and the one sample of water.

3 Apparently the second sample of water

4 was dropped and broken.

5 Q. Right. What is the figure given for the

6 parts per billion of the one water

7 sample?

8 A. Fifty-eight, plus or minus two.

9 Q. And it also gives results for the

10 sediments; is that right?

11 A. I'm sorry? It also gives results?

12 Q. Yes, for the sediment.

13 A. Yes, it does.

14 Q. And are you able to determine from the

15 results of the sediment how many

16 thousands of parts per million of PCBs

17 were found in the samples, in the two

18 samples of sediment?

19 A. Thousands of parts per million?

20 Q. Yes.

21 A. Well, this number you see there is not

22 identified as to the magnitude of that

23 number. We don't know if it's parts per

REGIONAL REPORTING SERVICE, INC.

1 million or parts per billion.

2 I'm sorry. I read it now. I read

3 it.

4 Q. It is percent, right?

5 A. Percent, yes, sir.

6 Q. So this would be parts per hundred,

7 would it not?

8 A. Yes. It would be point two, plus or

9 minus point oh two in percent.

10 Q. Parts per hundred?

11 A. Yes.

12 Q. And does the second sample one block

13 below the plant have one?

14 A. Yes. It is one point six four pounds

15 per hundred pounds.

16 Q. Okay. Now, this progress report is

17 labeled on top "Company Confidential" on

18 the first page.

19 A. Yes, sir.

20 Q. What does that mean?

21 A. Well, it is information that someone in

22 the company, generally the author of a

23 document, believed that it was unique to

REGIONAL REPORTING SERVICE, INC.

1 the company's operation and that his

2 opinion ought to be kept confidential

3 and for use within the company to manage

4 its affairs.

5 Q. Okay.

6 A. It is the author's judgment call.

7 Q. Okay. To your knowledge, sir, did

8 Monsanto ever disclose to the residents

9 of Anniston in 1968 or 1969 that

10 twenty-seven pounds of organic and acid

11 waste from the Aroclor and HCl

12 departments were being lost from the

13 plant?

14 A. There was no reason to talk those

15 numbers. They were meaningless.

16 Q. But the answer is no?

17 A. That is correct.

18 Q. Thank you. Did anyone ever tell the

19 residents of Anniston at that time that

20 Monsanto was visually checking Snow

21 Creek and Choccolocco Creek to determine

22 the effects of the PCBs in the plant

23 effluent water?

REGIONAL REPORTING SERVICE, INC.

- 1 A. Sir, this is no different than a service
2 station man telling his neighbors he has
3 got motor oil on the curb by his service
4 station. Those things are just
5 nonproductive comments that one can make
6 to others.
- 7 Q. I'm going to move to strike. But the
8 answer, though, is no; is that right?
- 9 A. Yeah.
- 10 Q. Okay. Did anyone ever tell the
11 residents of Anniston that Monsanto had
12 taken samples of mud and water
13 downstream from the plant in Choccolocco
14 Creek and Snow Creek in 1968 and 1969?
- 15 A. Again, there was no rational reason for
16 talking to anybody, so they didn't do
17 it.
- 18 Q. Okay. The answer is no; is that right?
- 19 A. That is what you heard me say. We
20 didn't do it.
- 21 Q. Okay. And did Monsanto ever disclose to
22 the residents of Anniston in 1968 or
23 1969 that it had taken fish samples to

REGIONAL REPORTING SERVICE, INC.

- 1 be analyzed for PCB content as reflected
2 in this document?
- 3 A. The same rationale applies, sir. The
4 reason for doing so was not present, and
5 we didn't do it.
- 6 Q. Thank you. If I ask you a question that
7 calls for a yes or no answer, I would
8 appreciate it if you could confine your
9 answers to a yes or no.
- 10 A. Sir, you may appreciate it, but
11 sometimes a yes or no is not truthful,
12 nor accurate.
- 13 Q. Okay. By the way, sir, have you seen --
14 did you review Papageorge Three and Four
15 with the attorneys before coming to
16 testify here today?
- 17 A. I don't remember. No.
- 18 Q. Okay. You don't remember or no?
- 19 A. I don't remember seeing them, so I did
20 not see them.
- 21 Q. Okay. I'm going to show you another
22 document, which we will mark as
23 Papageorge Five for identification.

REGIONAL REPORTING SERVICE, INC.

- 1 And by the way, Mr. Papageorge, if
2 you need at any time to take a break,
3 just let me know.
- 4 (Plaintiffs' Exhibit Number
5 Five was marked for
6 identification.)
- 7 A. I will do that. I have read the
8 document.
- 9 Q. Thank you. This document is a memo --
10 Let me just identify it for the record.
11 This is a one-page memorandum from
12 Mr. Wright dated November 14th, 1969,
13 addressed to yourself; is that correct?
- 14 A. That is correct.
- 15 Q. And the subject is Aroclor spill on
16 March 6, 1969.
- 17 A. It is.
- 18 Q. Okay. And this reflects that in
19 November 1969 there was a loss of
20 fifteen hundred gallons of Aroclor 1242
21 to the plant acid sewer; is that
22 correct?
- 23 A. That is correct.

REGIONAL REPORTING SERVICE, INC.

- 1 Q. And it also reflects how this happened,
2 correct?
- 3 A. It does.
- 4 Q. And it says that the line on the bottom
5 of the number three Aroclor still
6 receiver failed, correct?
- 7 A. Yes.
- 8 Q. And did you first learn about this spill
9 in this memorandum?
- 10 A. This confirmed an oral report that was
11 given to me back when it happened.
- 12 Q. By Mr. Wright?
- 13 A. No. I believe it was the supervisor of
14 the Aroclor operation that told me.
- 15 Q. And who was that?
- 16 A. Jack Malloy.
- 17 Q. And do you recall how many gallons of
18 PCBs Monsanto was able to recover from
19 the fifteen hundred gallons that had
20 been lost?
- 21 A. I had to refresh my memory. It does
22 refer to three hundred fifty gallons of
23 material recovered for reuse.

REGIONAL REPORTING SERVICE, INC.

- 1 Q. Okay. What happened to the remainder of
2 the PCBs that had spilled?
- 3 A. As best I recall --
- 4 Q. You may want to refresh your
5 recollection from the document. If your
6 recollection is different from this,
7 that is okay.
- 8 A. As I recall, there were efforts made to
9 recover any material they could from the
10 sewer itself, and then there were
11 cleanup efforts of the neutralization
12 pit to which some of this leakage went.
13 And in both of those situations the
14 material would normally be put in drums
15 and hauled to the landfill for disposal.
- 16 Q. Okay. This memo reflects that the
17 remainder of the PCBs was probably lying
18 in the sewer and had been mixed with the
19 dirt and sand at the head of the acid
20 neutralization pit.
- 21 A. It does say.
- 22 Q. Is that consistent with your
23 recollection?

REGIONAL REPORTING SERVICE, INC.

- 1 A. Yes. There are ways to absorb the
2 liquids in sewers and then shovel them
3 out.
- 4 Q. Okay. Was a portion of this material
5 leaking through the limestone at the
6 effluent end of the pit, the limestone
7 pit?
- 8 A. Through the limestone?
- 9 Q. Yes.
- 10 A. Yes. It has to trickle down through the
11 limestone until it reaches the clay bed.
- 12 Q. And Mr. Wright believed it was highly
13 unlikely that Monsanto would be able to
14 recover any more of this material,
15 correct?
- 16 A. Yes. And keep in mind recovering means
17 reuse, profitable recovery.
- 18 Q. Okay. Was Monsanto concerned about how
19 much of the spilled PCBs might be
20 getting into Snow Creek?
- 21 A. At this point in time, yes, we were very
22 careful in monitoring that kind of
23 activity.

REGIONAL REPORTING SERVICE, INC.

- 1 Q. I'm talking specifically as a result of
2 this spill.
- 3 A. Sure. That's no different than any
4 other accident or event.
- 5 Q. Okay. And Monsanto in fact collected
6 samples from Snow Creek to determine how
7 much of the spill material had entered
8 Snow Creek; is that right?
- 9 A. How much, if any, yes.
- 10 Q. Yes. Who collected the samples; do you
11 recall?
- 12 A. No, I don't.
- 13 Q. Do you know where they were sent?
- 14 A. At that point in time they were probably
15 sent to this group we referred to
16 earlier, the organic research analytical
17 group.
- 18 Q. Do you know what the results were?
- 19 A. No, I don't remember.
- 20 Q. And did Mr. Wright make any
21 recommendations to prevent a recurrence
22 of this type incident?
- 23 A. Well, a recommendation is reflected in

REGIONAL REPORTING SERVICE, INC.

- 1 the memorandum, Exhibit Five.
- 2 Q. Okay. And what was the recommendation?
- 3 A. The recommendation he refers to there is
4 the installation either of a second
5 catch basin, which is this limestone
6 pit, or what he calls another device
7 between the PCB producing department and
8 the neutralization pit.
- 9 Q. Okay. Was that recommendation ever
10 implemented?
- 11 A. Yes.
- 12 Q. Okay. Do you know when?
- 13 A. About 1970. We installed a second
14 neutralization pit, and they also
15 installed a catch basin underneath the
16 operation to catch any leak of this
17 type.
- 18 Q. Okay. To your knowledge, sir, was this
19 incident the first time that hundreds of
20 gallons of PCBs had spilled into the
21 acid sewer?
- 22 A. To my knowledge, yes, this is the only
23 incident I'm aware of.

REGIONAL REPORTING SERVICE, INC.

1 Q. Are you aware of any incidents like this
 2 occurring after this point in time?
 3 A. There were no other incidences like
 4 this.
 5 Q. Okay. We are going to mark this for
 6 identification as Papageorge Six. And
 7 this is a document bearing Bate stamp
 8 number -- Bate stamp designation DSW
 9 013186 through 013191.
 10 (Plaintiffs' Exhibit Number
 11 Six was marked for
 12 identification.)
 13 Q. But before you go to that document --
 14 I'm sorry to do this out of order, but
 15 the document I just showed you before,
 16 Papageorge Five --
 17 A. Yes.
 18 Q. -- did you review that document with the
 19 attorneys when you met with them to
 20 consult regarding the deposition today?
 21 A. No.
 22 MR. PECK: I'm starting to think
 23 we didn't do a good job of

REGIONAL REPORTING SERVICE, INC.

1 it.
 2 Q. If you can look at this document, I will
 3 tell you that I'm only going to be
 4 interested in the first paragraph on
 5 page DSW 013187.
 6 MR. PECK: But if you want to look
 7 at all of it, go ahead.
 8 Q. Please, absolutely. Actually, in
 9 looking at the document, probably I
 10 think DSW 013186 and 13187 go together
 11 and probably the rest of the document
 12 somehow got attached. The reason I say
 13 that is because the summary is for
 14 September 1970, the summary reflected in
 15 the technical service department's
 16 monthly report. And the handwritten
 17 notes that I'd like to ask you about are
 18 dated April 6, 1970. Do you see that?
 19 A. I see that.
 20 Q. Okay. Have you had a chance to look
 21 through DSW 013187?
 22 A. I have.
 23 Q. Are these handwritten notes or a

REGIONAL REPORTING SERVICE, INC.

1 handwritten memo that was sent to you by
 2 Mr. Hodges?
 3 A. Yes.
 4 Q. All right. Okay. Who is Mr. Hodges?
 5 A. Mr. Hodges was the individual in
 6 Monsanto's organic division, organic
 7 chemicals division, who was assigned the
 8 task of monitoring environmental issues
 9 in the organic division's plant.
 10 Q. Okay. The memo reflects on page
 11 013187 --
 12 A. I see it.
 13 Q. It is referring now to Bill Papageorge,
 14 and then it says, "Anniston." Do you
 15 see that right underneath that?
 16 A. Yes.
 17 Q. It says, "Twenty-five to fifty pounds of
 18 Aroclors originally lost with some
 19 trapping of three Aroclors at the
 20 limestone neutralization."
 21 A. I see that.
 22 Q. Do you know for how long twenty-five to
 23 fifty pounds per day of Aroclors were

REGIONAL REPORTING SERVICE, INC.

1 being lost to the sewer at the Anniston
 2 plant?
 3 A. I have no idea. It might have been one
 4 minute and it might have been days.
 5 Q. Okay. If you look at the -- that first
 6 paragraph still, it does reflect that
 7 present losses in April 1970 -- See
 8 where it says, "Present losses are about
 9 five pounds per day?"
 10 A. Yes. It is the last part of that
 11 statement.
 12 Q. Yes. Five pounds per day or five
 13 hundred parts per billion, correct?
 14 A. That's what it says, yes.
 15 Q. So that reflects, sir, that as of April
 16 6, 1970, the plant was experiencing
 17 losses of PCBs to the sewer of five
 18 hundred parts per billion or five pounds
 19 per day, correct?
 20 A. I hesitate because you used the words
 21 "lost to the sewer." I see this as
 22 material entering the pit.
 23 Q. Okay. So when it says, "present

REGIONAL REPORTING SERVICE, INC.

losses," you are referring to material entering the pit?

A. Yeah. By losses, it's from the production unit down to the pit.

Q. To the pit. Okay. I'm sorry. Thank you for clarifying that.

And the goal was to reduce that level to ten parts per billion per day by October 1st, 1971, correct?

A. Correct.

MR. ATKIN: Let us mark for identification the next document, which is the July 21st, 1970, progress report.

Do you have that? I'm sorry. You do not have that. Okay. That's all right. We will take this one, but I guess we will have to stipulate for the record that the highlighted portions of this were done by me. Obviously the original

REGIONAL REPORTING SERVICE, INC.

documents did not have any highlighting on it.

MR. PECK: Okay. I've marked that Plaintiffs' Exhibit Seven for you.

(Plaintiffs' Exhibit Number Seven was marked for identification.)

MR. ATKIN: Thank you. Let's go off for one second.

MR. PECK: Sure.

(Discussion held off record.)

Q. Okay. Well, have you had a chance to review that document?

A. I have scanned it, not totally, thoroughly reviewed.

Q. Okay. I'm going to try to direct you to certain portions of the document.

Let me just say that -- for the record that Plaintiffs' Exhibit Seven for the Papageorge deposition is a progress report from the technical services department dated July 21st,

REGIONAL REPORTING SERVICE, INC.

1970, titled Aroclor Losses at the Anniston Plant, bearing Bate's number MONS 056663 through 056673.

If you could turn to page 056667.

A. I have it.

Q. Okay. According to that sheet, the average Aroclor concentration from April 22nd, 1970 through May 4th, 1970 was eighteen hundred and thirty-three parts per billion in the warehouse sewer. Is that correct?

A. That is correct.

Q. And the average Aroclor losses per day listed on that document were one point forty-three pounds?

A. That is correct.

Q. If you could turn to the document MONS 056670.

A. I have it.

Q. Okay. According to that sheet the Aroclor concentration in the total plant effluent averaged fourteen hundred sixty parts per billion per day for April

REGIONAL REPORTING SERVICE, INC.

15th, 1970 through June 30th, 1970. Is that correct?

A. That is correct.

Q. And the Aroclor losses per day averaged fifteen point seventy-four pounds for that period?

A. Yes.

Q. And in fact got as high on one of the sample days, on May 4th, 1970, as a hundred and ninety-eight pounds, correct?

A. I see that, but I note that it is included in a bracketed set of numbers with an asterisk.

Q. Do you know what that bracket and asterisk means?

A. I cannot at the moment determine what that is trying to tell us.

Q. Okay. If you could look at MONS, the next page, 056671.

A. I have it.

Q. As well as the document after it, 056672. Those two sheets give the

REGIONAL REPORTING SERVICE, INC.

1 results for the Snow Creek sampling
2 station; is that correct?

3 A. Yes.

4 Q. Okay. Do you know where the Snow Creek
5 sampling station was?

6 A. I'm confused by your -- Was when?

7 Q. At that time, when they took these
8 samples, the station, do you know where
9 it was? It says the Snow Creek sampling
10 station.

11 A. Oh, the actual spot where the samples
12 were taken?

13 Q. Yes.

14 A. Not specifically, no.

15 Q. Generally do you know? I mean, could
16 you give us some geographic description
17 that would enable us to pinpoint where
18 it was?

19 A. Not really, not without being
20 misleading.

21 I know the asterisk, sir, refers
22 to the note on page MONS 056672. Yes.
23 It is the limestone pit was being

REGIONAL REPORTING SERVICE, INC.

1 cleaned out when those bracketed numbers
2 were incurred.

3 Q. I see. It says, "Data not included in
4 average." What does that mean?

5 A. Each of these data sheets that have a
6 total at the bottom called average, any
7 bracketed numbers in each of those
8 columns are not included in the average.

9 Q. I see. Okay. Do you know how many
10 samples were set up on Snow Creek?

11 A. No, I don't.

12 Q. Okay. According to these two sheets,
13 the average amount of PCBs -- I guess if
14 you look at 056672, the parts per
15 billion at Snow Creek from April 15th,
16 1970 through June 21st, 1970 was seven
17 hundred sixty-eight parts per billion.
18 Is that right?

19 A. That's what it indicates, yes.

20 Q. And on some days -- I'm referencing now
21 in particular May 10th, 1970 -- the
22 amount of PCBs in parts per billion in
23 Snow Creek reached as high as ninety-six

REGIONAL REPORTING SERVICE, INC.

1 hundred parts per billion; is that
2 correct?

3 A. Do I have the right page, sir? Is that
4 MONS 056670?

5 Q. 6671.

6 A. 71?

7 Q. Look at 5-10.

8 A. 5-10, yes.

9 Q. And most of the samples that are
10 reflected on these sheets in fact
11 reflect levels that are beyond
12 saturation; isn't that right?

13 A. I hesitate, sir, because when we speak
14 of saturation, I need some guidance
15 regarding saturated in what. Is it
16 distilled water or filtered water or
17 water containing sediment to which PCBs
18 could adhere? So I don't know that I
19 could answer that, because a natural
20 material, when a sample is grabbed,
21 could be all kinds of degrees of
22 sediment in it.

23 Q. Okay. Fair enough. If you could take a

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1 look at the last page, MONS 056673.

2 A. I have it.

3 Q. This page lists the amounts of PCBs in
4 parts per billion found in eleven
5 different samples in Snow Creek and
6 Choccolocco Creek, correct?

7 A. That is correct.

8 Q. And it also breaks the PCB concentration
9 down by mud and water samples?

10 A. Correct.

11 Q. Let's just take a look at the first
12 sample there, which is dated 10-8-69.

13 A. I see it.

14 Q. The sample location is Snow Creek at
15 Glenaddie?

16 A. Yes.

17 Q. Where is Glenaddie in relation to the
18 plant? I guess by that, how far down --
19 how far is it from the plant?

20 A. I don't know that I ever measured it.
21 I'm going to say three miles,
22 thereabouts, less than five.

23 Q. According to this sheet, there were two

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1 point three six times ten to the seventh
 2 parts per billion Aroclor concentration
 3 in that sample of mud; is that right?
 4 A. That's what it indicates, yes.
 5 Q. How much is that in terms of parts per
 6 million; do you know?
 7 A. I'd need a paper and pencil to calculate
 8 it. That would be -- Unless I'm reading
 9 wrong and by mental arithmetic, about
 10 twenty-three point six parts per
 11 million.
 12 Q. Okay.
 13 A. A million has six zeros. This has ten
 14 to the seventh. So I take that ten and
 15 multiple by two point three six by ten.
 16 That gives me twenty-three point six for
 17 ten to the sixth million. I apologize.
 18 The whole column is parts per million.
 19 Q. Right. Isn't it in fact twenty thousand
 20 parts per million?
 21 A. Should I take the time to do the
 22 arithmetic? It is only an arithmetic
 23 answer. Somebody can calculate that.

REGIONAL REPORTING SERVICE, INC.

1 Q. Okay. That is a high level of PCBs,
 2 isn't it?
 3 A. Compared to what, sir?
 4 Q. Well, let's just say it is twenty
 5 thousand parts per million. Is that a
 6 high level of PCBs?
 7 MR. PECK: Object to the form of
 8 the question. The whole
 9 column is parts per billion.
 10 THE WITNESS: Yes, parts per
 11 billion.
 12 MR. PECK: So it wouldn't be
 13 twenty-three thousand parts
 14 per million.
 15 THE WITNESS: This is parts per
 16 billion.
 17 Q. Two thousand parts per million; is that
 18 right? Two point three six times ten to
 19 the seventh parts per billion is two
 20 thousand parts per million, isn't it?
 21 A. All right. I might as well take the
 22 time and do it.
 23 Q. Thank you. Thank you.

REGIONAL REPORTING SERVICE, INC.

1 A. All right. My arithmetic may be off,
 2 but I came up with two hundred
 3 thirty-six parts per million.
 4 Q. Okay. Is that a high concentration of
 5 PCBs?
 6 A. As I started to ask earlier -- I don't
 7 know how to define "high." If I were
 8 looking for a practical use of that
 9 mixture, I would suggest it's too low to
 10 do any good to anything. If I look at
 11 any other kind of indicator, I could
 12 come up with an answer that says it is
 13 high. I don't know what to compare it
 14 to, sir.
 15 Q. Okay. There is -- Sample number four --
 16 Actually -- I'm sorry. Sample number
 17 three dated October 8th, 1969.
 18 A. I see it.
 19 Q. It is Choccolocco Creek at the city
 20 treatment plant?
 21 A. I see it.
 22 Q. That was seven hundred thirty-eight
 23 thousand parts per billion, correct?

REGIONAL REPORTING SERVICE, INC.

1 A. Parts per billion?
 2 Q. Parts per billion, yes.
 3 A. Yes.
 4 Q. I'm sorry. I need to speak a little
 5 louder sometimes.
 6 A. My hearing is not that good.
 7 Q. I'm sorry. I'll try to speak up.
 8 Now, was the city treatment plant
 9 more than a half mile from the plant?
 10 A. Yes.
 11 Q. Okay. Were the results of those -- of
 12 these samples ever disclosed to anyone
 13 outside of Monsanto Company?
 14 A. Not to my knowledge.
 15 Q. Okay. How far is Mars Hill Missionary
 16 Baptist Church from the plant?
 17 A. I've never measured it. I don't know
 18 that anybody ever told me. Five city
 19 blocks or so.
 20 Q. Okay. Less than a mile?
 21 A. Yes.
 22 Q. Now, how far would you say the church is
 23 from the south landfill of the plant?

REGIONAL REPORTING SERVICE, INC.

- 1 A. About that order or magnitude of
2 distance.
- 3 Q. Something similar?
- 4 A. Similar, yes.
- 5 Q. Let us mark this for identification as
6 Papageorge Eight, Plaintiffs' Eight, for
7 the Papageorge deposition.
- 8 (Plaintiffs' Exhibit Number
9 Eight was marked for
10 identification.)
- 11 A. I have reviewed the exhibit.
- 12 Q. Okay. Thank you. This exhibit, for the
13 record, is a memorandum that was sent to
14 you, to W. B. Papageorge, from E. S.
15 Tucker; is that correct?
- 16 A. That's correct.
- 17 Q. Dated August 6th, 1970, bearing
18 apparently two different sets of Bate's
19 numbers. We will just give one of them,
20 NPC 0108099 through NPC 0108101. Was
21 this a memorandum -- Is it Dr. Tucker?
- 22 A. Yes.
- 23 Q. What is Dr. Tucker's first name?

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- 1 A. Scott. I'm sorry. He went by Scott. I
2 never knew what the E stood for.
- 3 Q. Okay. What was his position at
4 Monsanto?
- 5 A. He was an analytical chemist in
6 Monsanto's corporate research department
7 who was the principal research person in
8 developing PCB analytical methodologies.
- 9 Q. Okay. Now, I may as well ask you this
10 at this point so I don't lose too much
11 time. There were several people copied
12 on this memo.
- 13 A. There are.
- 14 Q. Can you tell us who they are?
- 15 A. M. W. Farrar is the director of research
16 involved with the PCB products used as
17 what Monsanto called plasticizers, which
18 really is another word for miscellaneous
19 use.
- 20 R. E. Keller was in Monsanto's
21 corporate research who headed the unit
22 in which Dr. Tucker worked, the
23 analytical research unit.

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- 1 Q. Okay.
- 2 A. E. P. Wheeler was a member of Monsanto's
3 corporate medical department.
- 4 Q. A doctor?
- 5 A. Not a medical doctor. He had a master's
6 in public health, as I remember. He was
7 for a while the assistant director,
8 reporting to Dr. Kelly, and he later
9 became manager of industrial health.
- 10 Q. Okay.
- 11 A. E. G. Wright, we discussed earlier, was
12 the manager of the Anniston plant
13 involved in environmental issues.
- 14 And P. B. Hodges is the individual
15 in the organic division's manufacturing
16 staff involved with environmental
17 decisions. I think we described him
18 earlier also.
- 19 Q. Right. Who is Mr. Garrett?
- 20 A. I'm sorry. I missed him. J. T. Garrett
21 was a member of Monsanto's medical
22 department who headed the industrial
23 hygiene group.

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- 1 Q. Okay. The first sentence of this memo
2 says, "During the October 1969
3 semiannual survey of the Choccolocco
4 Creek, a number of fish were collected,
5 quick frozen, and shipped to us for PCB
6 residue analysis." Do you see that?
- 7 A. I do.
- 8 Q. When did Monsanto start doing semiannual
9 surveys of Choccolocco Creek?
- 10 A. As best -- I'm trying to recall. It
11 seemed to me in April of '70. And I'm
12 trying to tie that in with the audit
13 programs that we saw earlier.
- 14 And the audits originally were
15 designed to look at samples of soil and
16 sediment and water and the like. And
17 while they were out there, they took
18 some fish samples. And I interpret this
19 to tell me that this was the second
20 batch of fish that they received in the
21 year 1970.
- 22 Q. But the sample was actually taken and
23 the survey of the creek was taken in

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- 1 October of 1969?
- 2 A. Yeah. But I'm trying to remember those
3 audits that we reviewed earlier. I
4 thought they were '69 audits. You may
5 recall in Exhibit Three --
- 6 Q. Right.
- 7 A. -- there was an audit plan developed for
8 the Anniston plant. That was in '69.
- 9 Q. Uh-huh (indicating yes).
- 10 A. Okay. And then there was this audit.
11 I have forgotten the question now. You
12 mentioned '68, did you?
- 13 Q. Yes. It says, "During the October '69
14 semiannual survey of the creek." I'm
15 wondering if you know when semiannual
16 surveys of the creek first began.
- 17 A. It is my recollection at the moment that
18 it began in the early part of 1969.
- 19 Q. Okay.
- 20 A. On or about the April period.
- 21 Q. Okay. And what did these surveys
22 consist of; do you know?
- 23 A. It's the collection of samples of water

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- 1 and sediment and fish.
- 2 Q. Okay.
- 3 A. And the subsequent analyses of these
4 samples.
- 5 Q. Okay. And how long did Monsanto do
6 these surveys for?
- 7 A. I just don't remember when they stopped.
- 8 Q. Okay. Were they still doing them when
9 you left Monsanto's employment?
- 10 A. I don't know.
- 11 Q. Okay. Pages two and three of this
12 document give the PCBs in parts per
13 million calculated as Aroclor 1254 for
14 various species of fish sampled at
15 Choccolocco Creek above and below the
16 confluence with Snow Creek, correct?
- 17 A. Correct.
- 18 Q. Do you know what the difference is
19 between the wet weight and the lipid
20 categories?
- 21 A. I'll give you my understanding.
- 22 Q. Great.
- 23 A. The wet weight is the sample as

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- 1 received. After it's defrosted and
2 thawed out, they weigh it and then
3 analyze the given weight of that
4 material.
- 5 The lipid weight, they take the
6 sample and extract it to remove all the
7 fat from it and then analyze the PCBs in
8 that fat.
- 9 Q. Okay.
- 10 A. Thank you.
- 11 Q. Now, on page NPC 0108100, which is the
12 second page -- I think the one you are
13 holding right there -- this reflects
14 that there were as many as one thousand
15 ninety-seven parts per million of PCBs
16 per wet weight for some species of fish.
17 I'm referring to the last figure, the
18 last column -- not the last column, for
19 the species *Notropis venustus*.
- 20 A. That's the last entry on the page?
- 21 Q. Yes.
- 22 A. Ten ninety-seven.
- 23 Q. That is parts per million, right?

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- 1 A. Parts per million as PCB of the type
2 represented by Aroclor 1254, yes.
- 3 Q. Which is one of the many Aroclor
4 compounds that were manufactured by
5 Monsanto, correct?
- 6 A. One of several mixtures of PCBs that are
7 sold by Monsanto.
- 8 Q. And if you look at that same species, it
9 also reflects that there were as many as
10 thirty-seven thousand eight hundred
11 parts per million of Aroclor 1254 PCBs
12 per lipid content, correct?
- 13 A. Yes.
- 14 Q. And people shouldn't eat fish with that
15 level of PCBs in them, should they?
- 16 A. Oh, I don't know, sir. You would have
17 to ask a nutritionist or a toxicologist.
18 This is the concentration in the fat.
19 How much fat is in the whole fish, I
20 don't know. So -- And at the same time,
21 even if I did know, I wouldn't know
22 what, if anything, would happen if they
23 ate it.

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- 1 Q. Okay. Do you know, sir, today, what the
2 maximum amount of PCBs allowed in fish
3 is?
4 A. Today? I haven't kept up to date on
5 today's levels. At one time I remember
6 it was five parts per million.
7 Q. That's the last that you recall?
8 A. Yes.
9 Q. Was the information in this memorandum
10 ever conveyed to Monsanto's customers?
11 A. No.
12 Q. Okay. The -- I'm sorry. You may want
13 to give it back to him for a second.
14 I'm sorry.
15 The top of the document --
16 Actually withdrawn. Withdrawn. That's
17 okay.
18 And the information in that
19 memorandum was never conveyed to the
20 residents of Anniston either; is that
21 correct?
22 A. Not to my knowledge.
23 Q. We will mark this as Plaintiffs' Exhibit

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- 1 Number Nine.
2 (Plaintiffs' Exhibit Number
3 Nine was marked for
4 identification.)
5 Q. For identification, while you are
6 looking at it, I will just identify it
7 for the record. This is a memorandum
8 written by Mr. Hodges to Mr. H. S.
9 Bergen, Jr., dated August 7th, 1970.
10 And I note that you are a -- you were
11 apparently a recipient of this document.
12 Is that correct?
13 A. That is correct.
14 Q. Do you recall seeing this document
15 before?
16 A. Yes, as I read it, I recall it, yes.
17 Q. Who was Mr. Bergen?
18 A. Mr. Bergen was the director of the
19 functional fluids business group in the
20 organic chemicals division of Monsanto
21 Company.
22 Q. And PCBs would have fallen under his
23 jurisdiction or been among the

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- 1 functional fluids that were part of the
2 business group that he was responsible
3 for?
4 A. That is correct.
5 Q. Okay. For the record, this document
6 bears Bate's number MONS 033851 through
7 033854.
8 A. I have scanned the exhibit.
9 Q. Thank you. What were Mr. Bergen's
10 responsibilities as the director of the
11 functional fluids of the business
12 group -- director of functional fluids
13 business group, I should say.
14 A. He was the individual responsible for
15 managing that group and make certain
16 that all of its activities resulted in
17 an acceptable performance, whether it be
18 environmental concerns or profit
19 concerns or public relations or --
20 Q. Everything?
21 A. Everything. The buck stopped there
22 insofar as the functional fluids
23 business was concerned.

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- 1 Q. And you received a copy of this memo,
2 correct?
3 A. Yes.
4 Q. You will note that it says at the top of
5 the memo, "Confidential, for your
6 information, and destroy." Do you see
7 that?
8 A. I do.
9 Q. Who determined that this memo should be
10 treated as confidential, for your
11 information, and destroy?
12 A. As I indicated earlier, it's a
13 judgmental call on the part of the
14 author.
15 Q. So that would have been Mr. Hodges?
16 A. Yes.
17 Q. Do you know why this memo was given that
18 designation by Mr. Hodges?
19 A. No. I can't speak for Mr. Hodges.
20 Q. Fair enough. The first sentence of the
21 memo says, "Following are the moves
22 underway resulting from the FDA findings
23 of high levels of PCB in fish taken from

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Choccolocco Creek downstream from its confluence with Snow Creek." Do you see that?

A. I do.

Q. Do you recall what the FDA's findings were?

A. I recall an incident where FDA representatives out of Atlanta, Georgia, reported the findings of PCBs in some fish that were taken. I don't recall too many of the other details. I do recall that a group from the Anniston plant went to the FDA offices to discuss this matter. I don't recall the exact timing.

Q. Okay. Were you a part of that group?

A. No.

Q. Do you know -- When it says it is referring to the FDA's findings, you don't recall when the findings were made, do you?

A. As best I can come up with is late spring, early summer 1970.

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Q. The first item under status states, we are presently discharging to Snow Creek about sixteen pounds a day of PCBs." Do you see that?

A. I do.

Q. Were you aware that as of August 1970 Monsanto was discharging sixteen pounds per day of PCBs to Snow Creek?

A. I was certainly made aware by the plant reports, yes.

Q. The third paragraph states, "Joe Crockett, secretary of the Alabama Water Improvement Commission, will try to handle the problem quietly, without release of the information to the public at this time." Do you see that?

A. I do.

Q. Did Monsanto request that Mr. Crockett try to handle the problem quietly, without releasing the information regarding the high levels of PCBs in fish from Choccolocco Creek?

A. I'm certain they did not.

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Q. Okay. Do you know who at Monsanto discussed with Mr. Crockett his handling the problem quietly without release of the information to the public?

A. I'm not under any impression that it was discussed. There was a request on Mr. Crockett's part to Monsanto people to handle data in this manner. And when you say who, it's this group that met with Mr. Crockett and the federal FDA people in Atlanta, as I recall, when this matter came up.

Q. And your recollection -- I don't want to put words in your mouth. But your recollection is it was Mr. Crockett's desire and request of Monsanto that the problem be handled without releasing the information to the public; is that correct?

A. That is true, yes.

MR. ATKIN: I think we are going to have to switch tapes.

THE VIDEOGRAPHER: The time is

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three thirty-one p.m., and we are off record to change tapes.

(A break was taken.)

THE VIDEOGRAPHER: The time is three forty-two, and this is the beginning of tape two.

Q. We are back on the record, Mr. Papageorge, and we were discussing, I believe, Papageorge Nine, is it?

A. Yes.

Q. Papageorge Nine. Had Monsanto had prior dealings with Mr. Crockett before this, before this memorandum?

A. Oh, yes, many.

Q. Concerning what?

A. Findings of PCBs in water and sediment samples and also sharing with him data on how we made PCBs. We shared with him diagrams, charts.

Q. Do you recall when you first had dealings with Mr. Crockett on a PCB issue?

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1 A. The best I can do is early 1970.
 2 Q. Okay. Did you review this document with
 3 Monsanto's attorneys when you were
 4 consulting on getting ready for this
 5 deposition?
 6 A. This Exhibit Nine?
 7 Q. Yes.
 8 A. No.
 9 Q. The last sentence of that first
 10 paragraph, on the first page, says, "Dr.
 11 Myers, Director of Public Health of
 12 Alabama, wants toxicity information on
 13 PCBs, and this will be conveyed
 14 personally to him by Jack Garrett next
 15 week." Do you see that?
 16 A. I do.
 17 Q. And Mr. Garrett, you told us, was
 18 involved in Monsanto's medical
 19 department; is that right?
 20 A. Yes, that is correct.
 21 Q. Do you know if he ever conveyed the
 22 information that was requested, the
 23 toxicity information that was requested

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1 by Dr. Myers?
 2 A. He did, yes.
 3 Q. Did he convey it personally?
 4 A. Yes.
 5 Q. Page four of that document, the last
 6 page, talks about fish, mud, and water
 7 sampling. And it states, "Since our
 8 fish samples from nearby Choccolocco
 9 Creek also showed high levels of PCBs,
 10 we are instituting more samplings to
 11 determine the extent of the problem."
 12 Do you see that?
 13 A. I do.
 14 Q. Was that ever done?
 15 A. Certainly.
 16 Q. When was it done?
 17 A. Following the date of this memo, on into
 18 '71.
 19 Q. Okay. Do you know what the results
 20 were?
 21 A. I don't remember them offhand, sir.
 22 Q. That's fine. Okay. We are done with
 23 Papageorge Nine.

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1 And let me just identify it for
 2 the record. It is a September 8th,
 3 1970, memorandum from W. B. Papageorge,
 4 St. Louis, to numerous people, beginning
 5 with Cameron, C-a-m-e-r-o-n. It bears
 6 Bate's number DSW 013975 through DSW
 7 013987. If I could get --
 8 (Plaintiffs' Exhibit Number
 9 Ten was marked for
 10 identification.)
 11 Q. Before I ask you something about the
 12 document, the list of people you sent
 13 this document, who is P. S. Park?
 14 A. He used to be one of Monsanto's
 15 attorneys.
 16 Q. Was he the head of the legal department?
 17 A. No.
 18 Q. Was he the attorney who worked on the
 19 PCB matter?
 20 A. As part of his assignment, yes.
 21 Q. Okay. If I could direct your attention
 22 to page nine of the memorandum bearing
 23 Bate's number DSW 013983.

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1 A. I have page nine.
 2 Q. This discusses Anniston. And it
 3 reflects that in August 1970 the Aroclor
 4 losses in the plant effluent increased
 5 to a level of seven thousand two hundred
 6 eighty parts per billion, equal to
 7 eighty-eight pounds per day; is that
 8 correct?
 9 A. Yeah. I found that in the second
 10 paragraph, yes.
 11 Q. Okay. That's all I have on that.
 12 We are going to mark for
 13 identification as Papageorge Eleven a
 14 memorandum dated September 15th, 1970,
 15 to Mr. Wright from Dr. Tucker. The
 16 recipients are Papageorge, Wheeler,
 17 slash, Garrett, Keller, and Hodges.
 18 (Plaintiffs' Exhibit Number
 19 Eleven was marked for
 20 identification.)
 21 Q. I will ask you to take a look at it, if
 22 you could.
 23 A. I have scanned the exhibit.

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- 1 Q. Thank you. This document -- The subject
2 of this document is fish samples from
3 the Coosa River, Choccolocco Creek
4 collected 8-9-70, correct?
- 5 A. Correct.
- 6 Q. And this reflects that fish samples
7 taken in February 1970 -- no --
8 collected in August 1970 were as high as
9 thirty-three point six parts per million
10 for Aroclor 1248 and sixty-four point oh
11 parts per million for Aroclor 1254; is
12 that correct?
- 13 A. You are referring to the highest number
14 for each type of Aroclor?
- 15 Q. Yes.
- 16 A. Well, they are on the page, yes, sir.
- 17 Q. Okay. And in fact, the thirty-three
18 point six parts per million of Aroclor
19 1248 was for a sample of catfish ten
20 miles upstream from Choccolocco; isn't
21 that right?
- 22 A. That's what it indicates, yes, sir.
23 (Plaintiffs' Exhibit Number

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- 1 Twelve was marked for
2 identification.)
- 3 MR. PECK: It looks like it should
4 only be one document.
- 5 MR. ATKIN: Yes. Thank you.
- 6 Q. This document, while you're looking at
7 it is, for identification, a September
8 18th, 1970 memo from Paul Hodges to Toby
9 Bell, Anniston, with seven recipients,
10 Mr. Papageorge being one of them.
- 11 A. I have read the exhibit.
- 12 Q. Okay. Who was Mr. Savage?
- 13 A. Mr. Savage was the member of the organic
14 chemical division's manufacturing group
15 who was assigned the Anniston plant as
16 some of his responsibilities.
- 17 Q. Okay. Who was Mr. Hosmer?
- 18 A. Mr. Hosmer was Mr. Savage's supervisor.
19 He was the head of that group.
- 20 Q. Okay.
- 21 A. Which also included the author,
22 Mr. Hodges.
- 23 Q. Okay. Who was Mr. Bell?

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- 1 A. Mr. Bell was at the Anniston plant in
2 part of the analytical laboratory, and
3 I'm trying to recall. At some point in
4 time he was closely related with Mr.
5 E. G. Wright in terms of supervision and
6 activity monitoring.
- 7 Q. Okay. This memo is marked confidential,
8 correct?
- 9 A. That's what it shows, yes, sir.
- 10 Q. The first sentence states, "In reviewing
11 your proposed letter to Joe Crockett
12 with legal, et al., we requested latest
13 emissions data on flow to Snow Creek."
14 Do you know what letter he is
15 referring to?
- 16 A. I don't recall any draft of any proposed
17 letter. I just don't recall that.
- 18 Q. Do you know why -- I know you don't
19 recall the letter, but do you know why a
20 proposed letter to Mr. Crockett would be
21 reviewed with legal?
- 22 A. Again, this is an example of the
23 author's perceptions and his judgment

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- 1 regarding what is confidential and what
2 isn't.
- 3 Q. Okay. Do you know who the et al. is
4 referring to when it says, "In reviewing
5 your proposed letter to Mr. Crockett
6 with legal, et al."?
- 7 A. I would be guessing.
- 8 Q. I don't want you to guess.
- 9 Was it customary for Monsanto's
10 management to review proposed letters
11 regarding PCBs to government officials
12 with the legal department?
- 13 A. Not customary, no. Again, it depended
14 on the person putting it together and
15 whether he felt he ought to consult with
16 anyone or do it on his own.
- 17 Q. Okay. Mr. Hodges says, "We had hoped
18 that it" -- This is referring to the
19 latest emissions data on the flow to
20 Snow Creek. "We had hoped that it might
21 show an improvement over the first week
22 in September and thus demonstrate a
23 favorable trend to Crockett. Instead,

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1 the emissions are considerably
2 increased, with 9-13-70 at six point two
3 five parts per million, or about eighty
4 pounds of PCBs for the day." Do you see
5 that?

6 A. I do.

7 Q. That level was considerably above what
8 Monsanto had targeted by September 1970;
9 isn't that right?

10 A. That is correct.

11 Q. Okay. In the next sentence Hodges says,
12 "From the legal standpoint, there is
13 extreme reluctance to report even the
14 relatively low emission figures because
15 the information could be subpoenaed and
16 used against us in legal actions."

17 Do you know, sir, if Monsanto in
18 fact reported the September 1970 PCB
19 emissions data for Snow Creek to
20 Mr. Crockett?

21 A. Well, eventually it was. But I don't
22 know the date.

23 Q. What do you mean by eventually? How

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1 long after this memo was written?

2 A. Within a few weeks, a month, before the
3 end of the year.

4 Q. You remember that?

5 A. Yes. There is continuing dialogue.

6 Q. Okay. To your knowledge,
7 Mr. Papageorge, did Monsanto ever
8 withhold information regarding PCB
9 emissions data from any governmental
10 agency?

11 A. No, sir, not to my knowledge.

12 Q. Mr. Hodges states -- goes on to state,
13 "Obviously, having to report these gross
14 losses multiplies enormously our
15 problems because the figures would
16 appear to indicate lack of control." Do
17 you see that?

18 A. I do see it.

19 Q. Did you ever have any discussions with
20 Mr. Hodges or Mr. Bell about the fact
21 that the PCB losses to Snow Creek appear
22 to indicate lack of control by Monsanto
23 to the PCB problems?

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1 A. No, I didn't. I believe I had
2 discussions, but they were related to
3 sampling and analytical methodology,
4 which always resulted in different
5 numbers every time. It was difficult to
6 pinpoint the numbers.

7 Q. Is it fair to say, sir, that Monsanto
8 had a lack of control over the PCB
9 problem throughout the history of the
10 Anniston plant?

11 A. Lack of control, no, sir. We did a
12 better job than any industry has ever
13 done with any chemical.

14 Q. Okay. Let's mark this for
15 identification as Papageorge Thirteen.

16 For identification purposes, this
17 is a one-page memo or letter from
18 Mr. Foresman, F-o-r-e-s-m-a-n, to
19 Mr. Engman, with multiple recipients,
20 including Mr. Papageorge.

21 (Plaintiffs' Exhibit Number
22 Thirteen was marked for
23 identification.)

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1 Q. Do you see that?

2 A. I do, yes.

3 Q. This memo discusses air sampling that
4 was done at the Krummrich Plant; is that
5 correct?

6 A. It relates to air sampling, proposed air
7 sampling program at the plant.

8 Q. At the Krummrich plant?

9 A. The Krummrich plant, yes.

10 Q. Were air samplings ever done at the
11 Anniston plant?

12 A. Yes.

13 Q. Okay. When?

14 A. We took some samples, as I remember, in
15 1970.

16 Q. Okay. Do you know how many samples you
17 took?

18 A. I don't remember now. We took enough to
19 assure ourselves that the releases were
20 below the acceptable for the worker who
21 is right on top of the fuming tank, so
22 to speak. And then the air program, the
23 technology for developing the sampling

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of air was transferred to the Krummrich plant to develop the technology. And then the intent was to share that technology with anybody, including the Anniston plant.

Q. Okay. You say that the samples were done in 1970 to the best of your recollection, correct?

A. Some sampling was done at the Anniston plant, yes.

Q. And were there any samples done at the Anniston plant after 1970?

A. I'm hesitating because the unit was shut down in '71.

Q. Which unit?

A. The PCB unit in Anniston was shut down in '71. I think it was about the middle of the year. So the technology that was developed at Krummrich did not get a chance to be implemented at Anniston before the unit shut down.

Q. Okay. Do you know if air samples were ever done in Anniston, outside the

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plant?

A. No. Because the samples taken right near the source of the PCBs showed us that safe levels were there, and we couldn't imagine that they would be any worse at a distance from the plant.

Q. Okay. So the answer is no?

A. That is correct.

(Plaintiffs' Exhibit Number Fourteen was marked for identification.)

MR. ATKIN: Is that Papageorge Fourteen?

MR. PECK: Uh-huh (indicating yes).

Q. For the record, for identification purposes, Papageorge Fourteen, is a monthly report from the technical services department for October 1970, bearing Bate's number DSW 013900 and DSW 013901.

A. I have scanned the exhibit.

Q. Thank you. You received a copy of this

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report, correct?

A. That's what it indicates.

Q. Okay. Who was Mr. V. R. Haupt?

A. He was a member of the Anniston plant's technical services department and headed up one of the engineering sections.

Q. Okay. And what were his responsibilities?

A. They included the supplying of any technical information relating to modifying equipment, purchasing new equipment, preparing projects for approval of funds to do these engineering types of activities.

Q. Okay. Do you know why Mr. Haupt designated this report as confidential, read and destroy?

A. Again, author's judgment.

Q. Did you destroy the memo after reading it?

A. Who?

Q. You. You did receive it, didn't you?

A. Yes. I didn't destroy it.

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Q. Did Monsanto have a policy at that time, in October 1970, about destroying documents that were generated internally?

A. They had a records retention program, based on some parameters, on how long to keep certain kinds of documents. I don't know if that's what you are referring to. There was a booklet issued to employees that was supposed to guide them as to how long you keep files.

Q. Okay. And do you recall reading that booklet?

A. Oh, yes.

Q. Did that booklet have a policy in it regarding retention of documents that had been labeled "read and destroy"?

A. I don't recall such guidance, no.

Q. In this report, in the first paragraph, Mr. Haupt reports that there were four high daily values of the PCB levels in the sewer of the Anniston plant, from

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one thousand to four thousand parts per billion. Do you see that?

A. I see it.

Q. Do you recall having any discussions with anybody at Monsanto about this memo?

A. Not any more than the normal discussions I have with most memos. Nothing stands out here in my memory.

(Plaintiffs' Exhibit Number Fifteen was marked for identification.)

A. I have reviewed the document.

Q. Okay. This is Papageorge Fifteen -- thank you -- for identification. And it is a memorandum dated October 7th, 1970, apparently written by Mr. Savage.

A. That is correct.

Q. And directed to your attention; is that correct?

A. Correct.

Q. And this discusses the September 1970 PCB levels in Snow Creek from losses

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from the Anniston plant; is that correct?

A. That is one of the subjects, yes.

Q. And it reports that the average PCB loss for the month of September 1970 was high at twenty-six hundred parts per billion or thirty-two pounds a day. Do you see that?

A. I do.

Q. And it reflects that the PCB levels in Snow Creek were still very high in September 1970, doesn't it?

A. Well, this is the author's comparison of the finding of twenty-six hundred parts per billion, with some target that was lower than that that they were shooting for. So this is where the description "high" comes from.

Q. That is the author's description? That is Mr. Savage's description?

A. Certainly it's his, but it's based on what the plant and Mr. Savage had all agreed in shooting for a target.

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Q. What is the target they were shooting for?

A. As I remember, we were all shooting for ten parts per billion based on the ability of the analytical technology to detect that with confidence. It is not based on any other consideration, only the ability to measure and believe the number when you got it.

MR. ATKIN: Okay. Okay. Why --

It is all right. It is only one page.

Adam, could we just get copies of these two documents, if we could? Thank you. That will make it easier for everybody.

MR. PECK: Off the record.

MR. ATKIN: Off the record.

(Discussion held off record.)
(Plaintiffs' Exhibit Number Sixteen was marked for identification.)

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Q. Mr. Papageorge, I show you a document, one page, bearing Bate's number DSW 014091. This is a document to W. F. Taffee from E. G. Wright. Mr. Wright you have already told us about. Who was Mr. Taffee?

A. Mr. Taffee was a member of the technical services department at the Anniston, Alabama plant, to whom Mr. E. G. Wright reported.

Q. Okay. Have you ever seen this memo before? I note that you are not a recipient.

A. I don't recall this memo, but I recall the information that it contains.

Q. Okay. Towards the middle of the memo -- this is probably the information you are referring to -- Mr. Wright says, "Several samples have been collected from the ditch upstream from the sump." And it gives the results which show that there were sixty-four thousand eight hundred parts per billion of PCBs, 1242

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only, on October 15th, 1970; thirty-five thousand parts per billion of 1242, only, on October 21st; and twenty-eight hundred parts per billion of 1242, only, on October 22nd. Correct?

A. Yes.

Q. Do you know what ditch it is referring to?

A. This is a newly constructed ditch at the landfill designed to collect rainwater, surface water. And not only was it designed to collect, but it also gave an opportunity to grab samples and see how well this ditch with the sump was working to keep the PCBs from going anywhere.

Q. Okay. And it reflects that the samples taken on October 15th and October 21st from the ditch contained visible PCBs; is that correct?

A. That's what it says. Apparently they saw something other than crystal clear water.

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biphenyls and Aroclors that were chlorinated terphenyls.

Q. Okay.

A. And the idea was to communicate with the Alabama authorities the chlorinated biphenyls, not to confuse the picture with this other line of products.

Q. I'm talking within the chlorinated biphenyl group. Do you recall seeing any memoranda, letters, anything, or having any discussions with anyone regarding the reporting of only certain Aroclors within that group to the Alabama Water Improvement Commission?

A. I remember the distinction made between the polychlorinated biphenyls and the monochlorinated biphenyls. Is that what you have in mind?

There was one of the -- Aroclor 1221 is a -- strictly speaking, a monochlor biphenyl. It doesn't really fit under a PCB category.

Q. Okay.

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Q. Okay. That's all I have on that.

Did there come a point in time, Mr. Papageorge, that Monsanto began reporting daily -- daily PCB losses to the Alabama Water Improvement Commission?

A. Yes.

Q. Do you recall when that was?

A. Starting at about the time of these memos, the middle to latter part of 1970.

Q. And what Aroclor losses were reported, for which Aroclors?

A. Any that the analysts detected.

Q. Okay. Do you recall seeing any memoranda, internal memoranda, stating that Monsanto would only report certain Aroclors to the Alabama Water Improvement Commission?

A. The only memo of that type or only incident of that type that I recall was the attempt to clarify the difference between Aroclors that were chlorinated

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A. I remember some reference to that kind of distinction. I don't know if that is what you had in mind or not.

Q. Okay. Let me hand you a document that we will mark for identification as Plaintiffs' Exhibit Seventeen, a one-page memorandum to yourself from Mr. Mason dated October 1st, 1970, bearing Bate's number MONS 098219. Okay?

(Plaintiffs' Exhibit Number Seventeen was marked for identification.)

A. Yes.

Q. I'm sorry. I should look up every once in a while. Who is Mr. Mason?

A. Mr. Mason was an assistant general manager in the organic -- I'm sorry -- in the -- at that time -- I'm trying to remember. There were so many company reorganizations.

He was an assistant general manager in the Monsanto Industrial

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1 Chemicals Company.
 2 Q. Okay. This memo discusses the problem
 3 of PCB contaminated fish at Anniston,
 4 correct?
 5 A. Yes, it does.
 6 Q. And in the second paragraph, Mr. Mason
 7 states, "I think it would be useful if
 8 you and I could tour Anniston to discuss
 9 the subject in more detail, both with
 10 our consultants and with the plant
 11 personnel involved."
 12 Do you recall touring the Anniston
 13 plant with Mr. Mason to discuss the
 14 problem?
 15 A. Yes, I do, very much.
 16 Q. Okay. Who are the consultants he is
 17 referring to?
 18 A. I'm trying to remember their names at
 19 the time. We had some fish experts, I'm
 20 going to call them, ethologists from
 21 Tulane University helping us.
 22 Q. Do you recall their names?
 23 A. Suttkus and Gunning, if my memory serves

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1 Q. What was your idea?
 2 A. My idea was that the fish obviously were
 3 in an environment, in a situation where
 4 PCBs were present, and it was found in
 5 their tissues because they consumed it.
 6 Q. Okay. Did you ever consider the
 7 landfill as a source of the PCBs that
 8 the fish had consumed?
 9 A. No. I found that very difficult, to
 10 look at that landfill and associate that
 11 with the places these fish were taken.
 12 Just -- I couldn't do it. I didn't have
 13 any information to help me there.
 14 Q. Okay. Just so that -- I think we
 15 covered this already, but I just want to
 16 make sure I'm absolutely clear on this.
 17 Monsanto never took air samples --
 18 PCB levels from the air anywhere outside
 19 the Anniston plant; is that correct?
 20 A. That is correct.
 21 Q. This is Eighteen.
 22 While Mr. Peck is putting the
 23 designation on, let me just for the

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1 me right, Gunning and Suttkus.
 2 Q. In the first paragraph of this
 3 memorandum, Mr. Mason says that, "He
 4 thought it would be useful if we obtain
 5 additional information on the exact
 6 location of PCB deposits and have a
 7 better idea of where the fish are
 8 picking up this material." Do you see
 9 that?
 10 A. Yes, I do.
 11 Q. Did you ever provide Mr. Mason with the
 12 information on the exact location of PCB
 13 deposits?
 14 A. We thought we were, but Mr. Mason needed
 15 some more touring, and this was his way
 16 of getting personally exposed to the
 17 site and the situation.
 18 Q. Okay. Did you ever get a better idea of
 19 where the fish were picking up the PCBs,
 20 as discussed in this paragraph?
 21 A. I don't think I personally got a better
 22 idea. It may be that Mr. Mason did. I
 23 can't evaluate that.

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1 record indicate this is a two-page
 2 document bearing Bate's number DSW
 3 013117 through 013118.
 4 Apparently the first page is a
 5 cover slip from the desk of
 6 Mr. Papageorge, dated 12-8-1970, and the
 7 letter underneath is dated December 7th,
 8 1970.
 9 (Plaintiffs' Exhibit Number
 10 Eighteen was marked for
 11 identification.)
 12 Q. This is a memorandum addressed and
 13 written by Mr. Papageorge; is that
 14 correct?
 15 A. Correct.
 16 Q. To Mr. Savage?
 17 A. Correct.
 18 Q. Okay. In this memorandum you state that
 19 one of the important objectives of the
 20 PCB control program was to control the
 21 losses of PCBs in Monsanto's plant
 22 through the waste water effluent to
 23 fifty parts per billion by January 1st,

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1 1971, and ten parts per billion by
2 September 1st, 1971, but that in
3 November 1971 Anniston had fourteen
4 hundred and ten parts per billion in its
5 waste water effluent, correct?

6 A. That's correct.

7 Q. So two months after the date Monsanto
8 had targeted to get the PCB levels in
9 the plant's waste water down to ten
10 parts per billion, the plant was in fact
11 experiencing PCB losses of one hundred
12 and forty times greater than the
13 targeted amount. Isn't that correct?

14 A. No, sir. That ten parts per billion was
15 targeted for 1971. This is referring to
16 November 1970.

17 Q. I'm sorry. Excuse me. Also you say --
18 You also say, "Because of the
19 seriousness of the PCB problem, this
20 level of performance cannot be allowed
21 to continue." What did you mean by the
22 seriousness of the PCB problem?

23 A. Its presence in places that we never

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1 suspected was perceived to be
2 unacceptable, and we were trying to
3 reduce the opportunity for PCBs to get
4 there in the future.

5 Q. Okay. I hand you what will be marked as
6 Papageorge Exhibit Number Nineteen. For
7 identification purposes, this is the
8 summary of the January 1971 technical
9 services department monthly report,
10 bearing Bate's number DSW 013907 and
11 013908.

(Plaintiffs' Exhibit Number
Nineteen was marked for
identification.)

15 Q. Have you had a chance to look at that?

16 A. Yes, I have.

17 Q. This memo reflects -- This monthly
18 report reflects that in January 1971
19 Aroclor losses were three hundred seven
20 parts per billion or one point eight
21 pounds per day, correct?

22 A. Yes.

23 Q. Okay. And that was still six times

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1 greater than the targeted level for
2 January 1971; isn't that right?

3 A. That is correct.

4 Q. By the way, did Monsanto ever set a
5 specific target for the quantity of PCBs
6 that would be tolerated in the plant in
7 the ambient air, atmospheric
8 concentration of PCBs?

9 A. Monsanto didn't set that. The American
10 Conference of Industrial -- I mean of
11 Governmental Industrial Hygienists set
12 the standard for the amount of PCB
13 vapors in the air that a person should
14 be exposed to during his normal
15 eight-hour working day, five days a
16 week, for a lifetime of exposure.

17 Q. Do you recall what that level was in or
18 about January 1971?

19 A. For the PCB that represented Aroclor
20 1242, it was one milligram per cubic
21 foot of air.

22 Q. Okay.

23 A. And for the PCB that was a similar to

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1 Aroclor 1254 --

2 Q. What do you mean by similar to 1254?

3 A. Chemically it contains those types of
4 PCBs that are in this commercial mixture
5 which Monsanto called Aroclor 1254.

6 Q. Thank you.

7 A. The vapor for such a mixture was limited
8 by this group of industrial hygienists.

9 Q. By the HCGIH?

10 A. HCGIH, to a half of a milligram per
11 cubic meter of air. I believe that's
12 the standard that exists today.

13 MR. PECK: Just for clarification,

14 I first heard you on 1242 --
15 you said one milligram per
16 cubic foot of air.

17 THE WITNESS: I'm sorry. Cubic
18 meter.

19 MR. PECK: In the second you said
20 point five per cubic meter.

21 THE WITNESS: All of the units are
22 in metrics. So it's
23 milligrams and meters.

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MR. ATKIN: Thank you for
clarifying that.

Q. We will mark for identification purposes, as Exhibit Twenty to your deposition, a document bearing Bate's number MONS 098414, dated January 29th, 1971. It appears to be a memorandum from Mr. Papageorge to Mr. Savage, with several recipients.

(Plaintiffs' Exhibit Number
Twenty was marked for
identification.)

A. I have read the exhibit.

Q. Okay. By January 1971, you had concluded that high levels of PCBs would continue to exist in the plant waste streams because of the PCBs trapped in the soil and the sewer system, correct?

A. That is correct.

Q. Okay. What did you mean when you said that high levels would continue because of the PCBs trapped in the soil?

A. What I had in mind was the fact that

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PCBs tenaciously hang onto soil particles like little magnets. And since they aren't destructible in the environment, they will be there forever, such that any time a water flow occurs in this soil, the chances of that soil, with its PCB being transported, will remain. And later if a sample of that contaminated water is taken, sure enough, PCBs will be found in it.

Q. Which soil were you referring to?

A. Well, this was soil in the plant where previous contamination had occurred, like an overflow of those neutralization pits, for example.

Q. Okay. And what did you mean when you said that the PCBs were trapped in the soil?

A. It is another way of expressing my magnetism the PCB has for surfaces, clinging to them.

Q. In the last sentence of the second paragraph you state, "Cleanup of these

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sources can be economically impractical." Do you see that?

A. I do.

Q. What did you mean by that?

A. I was theorizing in a way what kinds of technology could be applied to extract the PCBs in soil. And with my quick, off the top of head kind of study, I visualized that this could be a monstrous task in terms of equipment and successful achievement. So I quickly extrapolated that into an economic kind of thought, and I was hoping that by getting others involved we could get perhaps a different perspective that could still get to the solution without my high costs estimates, which were, as I said earlier, not based on any highfalutin calculations or science. It was just a gut feel I had that this could be a monster.

Q. Okay. You also concluded that the PCB contamination in the plant was so

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widespread that all of the plant's effluents must be treated; is that correct?

A. Yes.

Q. And that this would result in a system more complex and costly than anyone had anticipated, correct?

A. Yes.

Q. You also said the type treatment needed approaches tertiary treatment -- that's t-e-r-t-i-a-r-y -- which at Krummrich is scheduled for completion by 1973.

What did you mean by tertiary treatment?

A. There was at the time a proposal made by the technical community in Monsanto, which included researchers in the engineering department, to subject any contaminated soil to a three-step process. That is where the word "tertiary" came from.

I at this point in time don't recall all of the details. But it

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involved dissolvents to extract. It involved exposing it to a temperature to drive off PCBs. And I forget the third approach. Nevertheless, there was a plan to introduce this at the Krummrich plant.

Q. And was this in fact introduced at the Krummrich plant?

A. No.

Q. Do you know why not?

A. It was determined to be impractical, and the need was never established.

Q. When you say impractical, what do you mean by that? Do you mean economically?

A. Economically impractical for the perceived benefits when the problem up front was never really determined, why do this, what is the harm. We never were able to pin that down. Presence is one thing; harm is totally different.

Q. Okay. You then propose that one pound per day of PCBs in the water effluent be achieved by September 1971 in Monsanto's

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plants and one pound per day to the air by the end of 1971, correct?

A. Correct.

Q. Were those levels in fact achieved by those dates?

A. Well, the Anniston plant, as you recall, was shut down. So the remaining plant --

Q. When was the Anniston plant shut down?

A. As best I remember, about May or so of 1971. Now, the Krummrich plant -- They did achieve it, but I don't recall the date anymore.

Q. Okay. You based your proposal -- your proposed levels on the fact that you believed that governmental agencies might tolerate those levels, correct?

A. Yes.

MR. ATKIN: Okay.

MR. PECK: Off the record just a second.

MR. ATKIN: Sure.

(Discussion held off record.)

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(The deposition was continued to April 1 at 9:00 a.m.)

THE VIDEOGRAPHER: Beginning of tape three.

THE COURT REPORTER:

Mr. Papageorge, I will remind you you are still under oath.

Q. (By Mr. Atkin) Good morning,

Mr. Papageorge.

A. Good morning.

Q. How are you today?

A. Fine.

Q. Yesterday you told us that you are now a self-employed consultant, correct?

A. That is correct.

Q. Do you do work for Monsanto as a self-employed consultant?

A. No.

Q. Okay. What type of work do you do as a self-employed consultant?

A. It is generally of a technical nature involving engineering principles, some chemistry, and advising those with whom

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I am consulting to consider certain approaches, search for certain documents, supplying names of individuals who might be of further help.

Q. Okay.

A. That type activity.

Q. Who do you consult for?

A. Well, there are several here lately. A law firm, Smith, Helms, Mulliss and Moore.

Q. Is that in connection with the PCB litigation?

A. Correct.

Q. Okay.

A. Then I served as an expert witness, I believe is the terminology, for the Syntax Company on the west coast.

Q. What do they do?

A. I don't propose to know everything they do. They are in pharmaceuticals, agricultural chemicals, and the like.

And then I also did some

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consulting for the Chrysler Corporation as an expert witness.

Q. In connection with what kind of litigation?

A. This involved the presence of PCBs in waterways around the Will Run plant. And I don't know all the legal ramifications. It appears there was some dispute regarding who was responsible of the many operators in that facility, in that area.

Q. The work you did for Syntax Company, was that also in connection with a PCB matter?

A. No.

Q. What kind of matter was that?

A. Well, the issue was primarily one of the presence of dioxins generated at one of their plants in Missouri.

Q. Dioxins at a plant in Missouri?

A. Yes.

Q. And what was the nature of your involvement in that case?

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A. I was asked to give my opinions regarding the role of the plant manager in the operations of a chemical producing facility.

Q. Do you recall when you were involved in that case?

A. 1994, 1995.

Q. Okay. And when did you do work as an expert witness for Chrysler Corporation?

A. Chrysler Corporation was '96, as best I remember.

Q. Did you testify in either of those cases?

A. In court?

Q. Did you give a deposition?

A. Depositions, yes.

Q. In both cases?

A. Yes.

Q. Okay. Do you know where the Syntax Company matter -- Well, first of all, do you know who the name of the plaintiff in that case was?

A. It was an insurance company.

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Q. Okay.

A. I don't recall which company.

Q. But Syntax Company was one of the defendants in the case?

A. Was the defendant.

Q. The defendant. Okay. Where was that case venued?

A. By venue you mean --

Q. Where was it, what jurisdiction?

A. San Francisco is as close as I can --

Q. Do you know if it was state court or federal court?

A. I don't know that.

Q. How about the Chrysler Corporation matter?

A. That was up in the Detroit, Michigan area.

Q. Do you know if that was state court or federal court?

A. I don't.

Q. Do you know the name of the plaintiff in that matter?

A. Some of them. I can't propose to recall

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all. As I remember, there was -- General Motors was involved. Of course, Chrysler was a defendant -- Well, all of these were defendants: General Motors, Chrysler, the operator of the airport, the air field, the air terminal next to the operating facility. I just don't remember all the others.

Q. Okay. You say that you have done -- Withdrawn.

Other than the litigation -- the consulting work you did in connection with the litigation for Syntax Company and the consulting work you did in connection with the Chrysler Corporation matter in Detroit, Michigan, do you recall the names of any of the other companies that you have done consulting work for?

A. No. There weren't any others.

Q. Those are the only two?

A. Including the law firm I mentioned earlier.

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- 1 Q. How long have you done consulting
2 work -- What firm was that?
3 A. Smith, Helms, Mulliss, and Moore.
4 Q. How long have you done consulting work
5 for Smith, Helms?
6 A. The activity started in the middle of
7 1987.
8 Q. What type of work have you done for
9 them?
10 A. It was primarily -- I'm going to use the
11 word "tutorial approach." And in the
12 earlier periods, in every case it
13 involved the introduction to attorneys
14 who had no background regarding PCBs.
15 So I played the role of, in laymen's
16 terminology, trying to get them familiar
17 with the chemistry, the manufacturing
18 procedures, the uses of the materials,
19 why they were so used, and of course
20 some idea of Monsanto's role in the PCB
21 situation and my impressions regarding
22 the overseas producers.
23 Q. What do you mean by the overseas

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- 1 producers? Who are you referring to?
2 A. I'm referring to the PCB producers in
3 Europe and in Japan.
4 Q. Okay. Now, you say from -- that that
5 was your involvement -- your time as a
6 consultant with Smith, Helms was a
7 tutorial approach at the beginning. Has
8 that changed over time? Has that role
9 evolved at all?
10 A. It has evolved to a degree, primarily
11 because their attorneys now involved are
12 already pretty well tuned in on the
13 situation. So my time spent in that
14 kind of activity has been reduced. And
15 now it revolves primarily around the
16 recollection of activities and people
17 and documents that they're looking for
18 and can't seem to find or can't
19 identify. And I try to help them with
20 what I can recall regarding those
21 questions.
22 Q. Still in connection with the PCB
23 litigation; is that right?

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- 1 A. Yes.
2 Q. Okay. You haven't done work directly as
3 a consultant for Monsanto since you
4 retired; is that correct?
5 A. That is correct.
6 Q. And you began as a consultant in 1987;
7 is that correct?
8 A. That's correct.
9 Q. How much have you been paid per year in
10 connection with your consulting work
11 that you have provided to Smith, Helms?
12 A. I'd suggest about one hundred thousand a
13 year.
14 Q. Since 1987?
15 A. Yes.
16 Q. And how much have you charged -- or how
17 much did you receive in connection with
18 the consulting work you did for Chrysler
19 Corporation?
20 A. Two hundred fifty dollars an hour.
21 Q. Any idea how many hours you put in on
22 that matter?
23 A. I don't recall the hours. As best I can

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- 1 remember, it's about thirty thousand
2 dollars total.
3 Q. Okay.
4 A. And that is a guess right now. I don't
5 have the numbers vividly in mind.
6 Q. Sure. And what about in connection with
7 the Syntax Company matter? How much did
8 you bill them for your services?
9 A. A hundred and fifty dollars an hour.
10 Q. Any idea approximately how much the
11 total bill was?
12 A. Approximately forty thousand.
13 Q. Okay. You said you have received
14 approximately one hundred thousand
15 dollars a year for your consultation
16 work in connection with Smith, Helms.
17 Has that been for every year from 1987
18 to the present, approximately?
19 A. I want to be sure I understand. Do you
20 mean per year or total for the ten years
21 or whatever?
22 Q. No. I'm saying per year.
23 A. Yes.

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- 1 Q. Do you get a pension from Monsanto?
- 2 A. Yes.
- 3 Q. How much does that pension come to
- 4 annually?
- 5 A. Annually about sixty thousand.
- 6 Q. Do you own any Monsanto stock?
- 7 A. Yes.
- 8 Q. How many shares do you have?
- 9 A. I'm trying to recall. About eighteen
- 10 thousand.
- 11 Q. Have you been given any options on the
- 12 acquisition of Monsanto stock?
- 13 A. At what point in time?
- 14 Q. At any point in time.
- 15 A. Yes.
- 16 Q. Okay. Tell me when.
- 17 A. Starting in -- when I became director,
- 18 environmental operations -- that is 1977
- 19 -- I began to receive option
- 20 opportunities on an annual basis.
- 21 Q. Okay. And did you exercise those
- 22 options?
- 23 A. Eventually.

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- 1 Q. Okay. When you say eventually, do you
- 2 recall what year?
- 3 A. As best I recall, the initial
- 4 opportunity to participate in the option
- 5 program gave me a six-year period,
- 6 holding period. So that would drive the
- 7 date in the 1983 point.
- 8 Q. And that's when you exercised the
- 9 option?
- 10 A. Not all of them. That first -- The
- 11 others all had what I'm going to call
- 12 waiting periods.
- 13 Q. Okay. Have you exercised any options
- 14 since 1987?
- 15 A. Yes.
- 16 Q. Okay. How many shares have you
- 17 exercised options for since 1987?
- 18 A. I just don't remember.
- 19 Q. Approximate?
- 20 A. Eight to ten thousand. That's very
- 21 approximate.
- 22 Q. Were any of the options to purchase
- 23 Monsanto stock given to you after 1987?

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- 1 A. No.
- 2 Q. Other than the pension you receive from
- 3 Monsanto, are there any other benefits
- 4 that you receive from Monsanto today?
- 5 A. Medical insurance to back up my Medicare
- 6 coverage.
- 7 Q. Okay. Anything else?
- 8 A. There is a life policy available to my
- 9 beneficiaries when I'm gone.
- 10 Q. Okay. Do you get a monthly retainer
- 11 from Smith, Helms?
- 12 A. Yes.
- 13 Q. How much is that?
- 14 A. It's been running eighty-five hundred a
- 15 month.
- 16 Q. And how long have you had that retainer?
- 17 A. I'm not certain of the year. It's
- 18 either '88 or '89, somewhere in that
- 19 area.
- 20 Q. Through the present?
- 21 A. Yes.
- 22 Q. Now, if you -- Do you have an hourly
- 23 billing rate that you bill Smith, Helms

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- 1 at?
- 2 A. On occasion.
- 3 Q. Okay. And what is it on occasion?
- 4 A. A hundred and fifty an hour.
- 5 Q. What would the occasions be?
- 6 A. I don't know that we have clearly
- 7 defined that. There are times when I am
- 8 involved in an activity and I
- 9 communicate I spent so many hours, and
- 10 they know it's a hundred and fifty. So
- 11 what they do back at the office
- 12 accounting-wise, I'm not aware of. All
- 13 I know is a check arrives, and it
- 14 actually becomes a part of that
- 15 retainer. So it's a way to help account
- 16 for some of the activity.
- 17 Q. Okay. For example, in connection with
- 18 appearing for depositions, such as
- 19 appearing here today for a deposition,
- 20 do you bill -- would you send Smith,
- 21 Helms a bill for that time?
- 22 A. No, no.
- 23 Q. So that would fall within the time --

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1 The time you spend would fall within the
2 monthly retainer that you are getting;
3 is that correct?

4 A. That is correct.

5 Q. Okay. Okay. Let us mark as Papageorge
6 Twenty-one, for identification, a
7 three-page document, the first page
8 bearing Bate's numbers DSW 013422
9 through DSW 013424, the first page being
10 apparently a cover slip from the desk of
11 William B. Papageorge and the remainder
12 being a document from Mr. Wright to
13 Mr. Crockett.

14 (Plaintiffs' Exhibit Number
15 Twenty-one was marked for
16 identification.)

17 Q. Is that correct?

18 A. Correct.

19 Q. And this document reports on the
20 December 1970 Aroclor losses for Aroclor
21 1242 and 1254 from the Anniston plant,
22 correct?

23 A. Right.

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1 Q. And Mr. Wright asks that this data be
2 held as confidential material. Do you
3 know why he asked that?

4 A. Yes.

5 Q. Why?

6 A. It has to do with the confidence that
7 had yet to be established regarding the
8 ability of the analytical equipment to
9 give accurate data. And as long as
10 Monsanto was still in the process of --
11 I'm going to use the term -- fine-tuning
12 its method to the point where they had a
13 lot of confidence in the analytical
14 results, at that point the promise, as I
15 recall, was made to the AWIC that we
16 would inform them when that day occurs,
17 and it was up to the AWIC then to do
18 whatever they wanted with the data.

19 Q. Did Monsanto ever get the type of
20 confidence in the analytical abilities
21 of its equipment that you are referring
22 to?

23 A. Yes.

REGIONAL REPORTING SERVICE, INC.

1 Q. And when was that?

2 A. It was later in 1971. As best I
3 remember -- Let me think. The last
4 quarter of '71 is as close as I can come
5 to it.

6 Q. Okay. Did Mr. Crockett agree with
7 Mr. Wright's request that this data be
8 held as confidential material?

9 A. Yes.

10 Q. And do you know why?

11 A. Well, it fit in with his own request
12 that he had made previously to us, that
13 we not share this data and let the state
14 agency decide when and how.

15 Q. Were you ever privy to any conversations
16 with Mr. Crockett regarding the treating
17 of this data as confidential material?

18 A. By the word "privy," do you mean was I
19 present in the room when it was
20 discussed?

21 Q. Yes.

22 A. I was not.

23 Q. Who discussed it with him?

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1 A. As I remember, the representatives from
2 the plant, Mr. Wright, the plant
3 manager, Gene Jessece, and Toby Bell.
4 Those names come to mind.

5 Q. Okay. Did you participate in any
6 meetings in which Monsanto
7 representatives had discussions
8 regarding the fact that they were going
9 to ask Mr. Crockett to treat this data
10 as confidential material?

11 A. No.

12 Q. Okay. Okay. That's all I have on that
13 document.

14 (Plaintiffs' Exhibit Number
15 Twenty-two was marked for
16 identification.)

17 Q. The next document is Papageorge
18 Twenty-two. For identification
19 purposes, it bears Bate's number DSW
20 013408 and DSW 013409.

21 I'd ask you to take a look at it,
22 if you could.

23 A. I have read the document.

REGIONAL REPORTING SERVICE, INC.

- 1 Q. Thank you. And you were a recipient of
2 this document, correct?
- 3 A. Correct.
- 4 Q. And this is a document reporting on the
5 daily Aroclor 1242 and 1254 losses from
6 the Anniston plant for the month of
7 March 1971, from Mr. Wright to
8 Mr. Crockett, correct?
- 9 A. That is correct.
- 10 Q. And in April 1971 the average Aroclor
11 losses for Aroclor 1242 and 1254 from
12 the Anniston plant were four point three
13 three pounds per day, correct?
- 14 A. You said April. This is the average for
15 the month of March reported in April.
- 16 Q. I'm sorry. I meant March. Is that
17 correct?
- 18 A. That is correct for March.
- 19 Q. Okay. By the way, was your proposal
20 that the PCB losses in the water and air
21 not exceed one pound per day ever
22 adopted by Monsanto?
- 23 A. The proposal, yes. It was adopted as a

REGIONAL REPORTING SERVICE, INC.

- 1 target, yes.
- 2 Q. Was that target ever reached at the
3 Anniston plant?
- 4 A. I understand it eventually was, yes.
- 5 Q. Do you know what "eventually" means?
- 6 A. It was after the shutdown of the
7 PCB-producing facilities and the
8 dismantling of the facilities. And with
9 continued sampling and analyzing, it
10 eventually reached that point.
- 11 Q. Any idea what year?
- 12 A. I'm going to say early 1980s.
- 13 Q. Okay.
- 14 A. That's a guess on my part. I was not
15 involved.
- 16 Q. Fair enough.
- 17 Q. Okay. We will mark for identification
18 Papageorge Twenty-three, bearing Bate's
19 number DSW 014798 through DSW 014800.
20 (Plaintiffs' Exhibit Number
21 Twenty-three was marked for
22 identification.)
- 23 Q. And this is a May 24th, 1971 letter from

REGIONAL REPORTING SERVICE, INC.

- 1 Mr. Wright to Dr. Gerald Gunning,
2 correct?
- 3 A. That is correct.
- 4 Q. And you were a recipient of this letter,
5 correct?
- 6 A. Correct.
- 7 Q. And who was Dr. Gunning?
- 8 A. Dr. Gunning was a professor of fish
9 biology at Tulane University who had a
10 consulting firm and had done some
11 consulting for Monsanto.
- 12 Q. Why was Mr. Wright sending Dr. Gunning
13 residue data from the March 1971 survey
14 of Choccolocco Creek fishes?
- 15 A. As part of his assistance to the plant
16 regarding fish in area waterways,
17 Dr. Gunning had taken some fish samples.
18 And these samples were sent to the St.
19 Louis Monsanto analytical center for
20 analyses. And the results we see here
21 were obtained by that laboratory.
- 22 Q. Okay. Let's look at the results for a
23 second, if we could. I'd like for you

REGIONAL REPORTING SERVICE, INC.

- 1 to turn to DSW 014799.
- 2 This data shows that as of March
3 1971 some of the fish sampled in
4 Choccolocco Creek had as many as one
5 thousand seven hundred ninety-one parts
6 per million of PCBs, isn't that right,
7 if you look at sample number three?
- 8 A. I believe I see that number.
- 9 Q. Okay.
- 10 A. I'm personally confused by this. I'd
11 have to study it a little longer. I see
12 two sets of numbers with each box, one
13 in parentheses and --
- 14 MR. PECK: I think the
15 parenthetical may be the
16 lipid weight, maybe the fat
17 analysis, and the
18 non-parenthetical may be the
19 wet. I'm not sure.
- 20 THE WITNESS: That is what I
21 assumed. It doesn't say
22 that.
- 23 MR. PECK: And I think the number

REGIONAL REPORTING SERVICE, INC.

he asked about was in the
parenthetical, which I think
would have been the fat
analysis.

Q. Is that your understanding as well?

A. That -- Yes.

Q. Thank you.

A. May I point out something?

Q. I haven't asked you anything else, so
the answer is no.

A. It has to do with the parentheses. It
is on the document.

Q. Okay. Thank you. Let's take a look at
Papageorge Twenty-four for
identification.

(Plaintiffs' Exhibit Number
Twenty-four was marked for
identification.)

Q. For identification purposes, it is a
two-page document. For identification
purposes, Papageorge Twenty-four bears
Bate's number DSW 013395 through --

Well, I'm sorry. It looks like

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these might be -- probably should not be
together, these two documents. I take
that back. Let's just take the first
page, take the front page of that
document. I apologize for that.

So Papageorge

Twenty-four is a one-page
document. It is the
technical services -- the
technical services department
monthly report summary for
July 1971 bearing Bate's
number DSW 013395.

Q. Have you had a chance to look at that
document?

A. I have.

Q. Okay. And this is a summary of a
monthly report from the technical
services department for the current
level of Aroclor waste for July 1971,
correct?

A. Correct.

Q. Prepared by Mr. Haupt, H-a-u-p-t?

REGIONAL REPORTING SERVICE, INC.

A. Yes.

Q. And this document, again, is marked
confidential, read and destroy, correct?

A. Yes.

Q. And that would have been Mr. Haupt's
determination, correct?

A. Yes.

Q. And it reflects that the PCB losses
during July 1971 averaged two point one
four pounds per day or two hundred and
forty parts per billion, correct?

A. Yes.

Q. And that is more than twice the target
amount; isn't that right?

A. Would you repeat that last --

Q. Sure. That is more than twice the
targeted amount; isn't that right?

A. Correct.

Q. Okay. And that brings us to Papageorge
Twenty-five for identification. For
identification purposes, Papageorge
Twenty-five bears Bate's numbers DSW
013382 through 013384.

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(Plaintiffs' Exhibit Number
Twenty-five was marked for
identification.)

A. I have scanned the document.

Q. Okay. This report, the first page of
the report, discusses the fact that two
EPA representatives and Mr. Crockett
visited the Anniston plant to collect
several samples for PCB analysis from
the plant effluent and that they also
took samples from Choccolocco Creek,
correct?

A. Correct.

Q. Did you participate in the meeting
between them and Monsanto?

A. No.

Q. The next document, the next page, DSW
013383, says at the top, "Confidential.
This pollution control section is for
immediate information purposes only.
Detach and destroy upon reading. Do not
file." Do you see that?

A. I do.

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1 Q. You were one of the people who received
2 this memorandum, correct?
3 A. Yes.
4 Q. Did you destroy this document after
5 reading it?
6 A. No, sir. This came out of my file, this
7 copy.
8 Q. Okay. The next page, DSW 013384, the
9 final page, it appears that the average
10 losses of PCBs reported to the AWIC were
11 less than the total average losses
12 actually experienced by the plant; isn't
13 that right?
14 A. I see two numbers reported as average
15 pounds per day.
16 Q. Right.
17 A. The higher number includes in it --
18 Q. Well --
19 A. It is not clear.
20 Q. It appears to me -- Maybe we can figure
21 this out together. It appears the total
22 average, the first set of figures for
23 parts per billion is thirty-two, and

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1 pounds per day is zero point two
2 eight --
3 A. I see that.
4 Q. -- for PCB losses. The next section
5 says, "The average losses, which will be
6 reported to the Alabama Water
7 Improvement Commission, are as follows:
8 Average pounds per day, zero point one
9 two pounds per day, Aroclor 1242 and
10 1254," correct?
11 A. I see that, yes, sir.
12 Q. So is that because Monsanto was only
13 reporting to the Alabama Water
14 Improvement Commission the PCB losses,
15 average pounds per day for Aroclor 1242
16 and 1254?
17 A. Yes.
18 Q. And why was that?
19 A. Those were the major commercial PCB
20 mixtures that were of interest, not only
21 to Monsanto but literally everybody
22 involved with the PCB environmental
23 issue.

REGIONAL REPORTING SERVICE, INC.

1 Q. Were there other Aroclor mixtures
2 manufactured at the Anniston plant?
3 A. Yes.
4 Q. How many?
5 A. Oh, there were Aroclor 1260, Aroclor
6 1268, Aroclor 1232.
7 Q. Any others?
8 A. That's all I can recall.
9 MR. PECK: Did you say --
10 MR. ATKIN: I'm sorry?
11 THE WITNESS: I didn't mention
12 Aroclor 1221 because it was
13 not perceived as a PCB. It
14 was a monochloro biphenyl.
15 Q. But Aroclor 1260 and 1268 and now 1232
16 were PCBs, isn't that right?
17 A. Yes.
18 Q. Okay. Thank you. That's all I have on
19 that document.
20 For identification purposes,
21 Papageorge Twenty-six is a document
22 bearing Bate's numbers -- two sets of
23 Bate's numbers. We will use the one

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1 with the first designation, which is NEV
2 093668 through NEV 093704.
3 (Plaintiffs' Exhibit Number
4 Twenty-six was marked for
5 identification.)
6 Q. I'd ask you just to take a look at it if
7 you could. I should just tell you, I'm
8 only going to be asking you questions
9 about the first two pages, so that is
10 all you really need to look at.
11 A. I have reviewed the first three pages.
12 Q. Okay. One more than necessary. Have
13 you ever seen this document before?
14 A. I don't recall it at all.
15 Q. Okay. Did you know -- Were you aware
16 that Monsanto, federal, and state
17 authorities had collected sediment
18 samples from eight different sites along
19 a one and three quarter mile segment of
20 Choccolocco Creek in 1983?
21 A. I don't recall that at all.
22 Q. Okay. And the -- In the summary
23 section, it gives the results of those

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1 samples under gas chromatography; is
2 that right?

3 A. Yes.

4 Q. And it says that PCB concentrations
5 average nine point nine ug/g. Can you
6 tell me what that means?

7 A. Parts per billion.

8 Q. Is that reading above background levels?

9 A. I'm sorry.

10 Q. Is that reading above background levels?

11 MR. PECK: Object to the form of
12 the question.

13 A. I have no idea.

14 Q. September 28th, 1983. That's it for
15 that.

16 And that brings us to Papageorge
17 Twenty-seven for identification, which
18 is a document bearing Bate's number DSW
19 015232 through -- I'm not sure. Well,
20 we'll keep it together. 015272.

21 I think perhaps the last three
22 pages might be a separate document.

23 MR. PECK: It looks like the first

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1 two pages are DSW 015232 and
2 233, and then it goes to a
3 MONS number, 023540.

4 MR. ATKIN: Okay. I see. Let us
5 take off the first two pages
6 and use those. Then maybe we
7 will talk about the rest.

8 MR. PECK: Okay. Although I
9 suspect there was an
10 enclosure to this document,
11 because it says, "Enclosed
12 are the results." And y'all
13 may have just mixed and
14 matched your documents
15 somehow.

16 MR. ATKIN: Okay. Thank you. I'm
17 sorry.
18 (Plaintiffs' Exhibit Number
19 Twenty-seven was marked for
20 identification.)

21 Q. So Papageorge Twenty-seven is now a
22 document -- a two-page document bearing
23 Bate's numbers DSW 015232 and 015233.

REGIONAL REPORTING SERVICE, INC.

1 Have you looked at that?

2 A. I have.

3 Q. Okay. And this is a letter dated
4 January 15th, 1985, from Juanita
5 Settine, S-e-t-t-i-n-e, supervisor of
6 laboratories for the University of
7 Alabama in Birmingham, directed to
8 Mr. Geary, G-e-a-r-y, Allen, office of
9 the attorney general in Montgomery,
10 Alabama. Have you ever seen this
11 document before?

12 A. I have not.

13 Q. This document reports on the results of
14 the University of Alabama's GC/MS
15 analyses of samples taken by the
16 attorney general on December 12th, 1984,
17 correct?

18 A. The date is correct, sir, but I don't
19 know if the attorney general took the
20 samples.

21 Q. Well, the reason I say that is in the
22 first sentence it says, "Enclosed are
23 the results of our GC/MS analyses of

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1 your samples of 12 December 1984." When
2 I say -- Apparently there was an
3 analysis being done of samples, at
4 least, that were provided by the
5 attorney general, is that correct, by
6 the attorney general's office?

7 MR. PECK: Object to the form of
8 the question.

9 A. I would suggest that that implies that
10 the supervisor of the laboratories
11 received samples from the office of
12 Mr. Allen, and she was reporting on the
13 results of the analyses.

14 Q. You are correct. Okay.

15 Were you aware that the attorney
16 general took samples for PCB analysis of
17 soil from the Anniston area in December
18 1984?

19 A. I was not.

20 Q. Okay. Do you see the results for the
21 ditch at church 1310?

22 A. I see that, yes.

23 Q. And those results are two hundred

REGIONAL REPORTING SERVICE, INC.

1 twenty-six parts per million of PCBs,
2 correct?

3 A. That is reported here, yes.

4 Q. Okay. Do you know what church it is
5 referring to?

6 A. No, I don't.

7 Q. In December 1984 the samples taken from
8 Snow Creek, the ditch at church 1310,
9 and a Monsanto ditch one hundred yards
10 below galvanized pipe 1300 showed that
11 PCBs were present ranging from
12 twenty-seven parts per million to two
13 hundred twenty-six parts per million,
14 correct?

15 A. That's what is indicated, yes.

16 Q. Were you aware of the results of those
17 samples?

18 A. No.

19 Q. I'm done with that. Thank you. The
20 next document is Papageorge
21 Twenty-eight, for identification.

22 (Plaintiffs' Exhibit Number

23 Twenty-eight was marked for

REGIONAL REPORTING SERVICE, INC.

1 identification.)

2 Q. And this is a November 14th, 1983 letter
3 from Robert Thompson, of the United
4 States Department of Agriculture, Soil
5 Conservation Service, addressed to
6 Mr. Jerry Brown of Monsanto Agricultural
7 Products Company in Anniston, Alabama,
8 correct?

9 A. That is correct.

10 Q. And the letter is dated November 14th,
11 1983?

12 A. That is correct.

13 Q. Okay. Do you know who Jerry Brown is?

14 A. Yes, sir.

15 Q. Who is Jerry Brown?

16 A. He is a Monsanto employee at the
17 Anniston, Alabama plant.

18 Q. Do you know what his duties are?

19 A. Through the years his duties did change.
20 As I understood it, in 1983 he was
21 perceived to be the top individual
22 relating to environmental issues at the
23 plant.

REGIONAL REPORTING SERVICE, INC.

1 Q. You were no longer at the Anniston plant
2 at that time, were you?

3 A. That is correct.

4 Q. Have you ever seen this letter before?

5 A. I do not recall ever seeing it.

6 Q. Okay. Were you aware that the United
7 States Department of Agriculture took
8 samples from Choccolocco Creek for PCB
9 sampling in 1983?

10 A. I was not.

11 Q. So obviously you weren't aware of the
12 results of any of those samples,
13 correct?

14 A. That is correct.

15 Q. Were you ever told by anyone that in
16 1983 soil samples from Choccolocco Creek
17 were showing results in the hundreds of
18 parts per million?

19 A. No.

20 Q. Between the early 1970s and early 1980s
21 did Monsanto ever take samples from
22 Choccolocco Creek?

23 A. Yes. I remember some sampling on the

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1 creek.

2 Q. When was that?

3 A. In the early '70s.

4 Q. I guess what I'm trying to get at is
5 between the -- Let me rephrase it.

6 Between the mid 1970s and early
7 1980s did Monsanto take samples from
8 Choccolocco Creek?

9 A. I do not know.

10 Q. Do you know who would know that?

11 A. Middle '70s to -- The obvious answer
12 that comes to mind is the plant manager.

13 Q. Who was that between the mid '70s and
14 early '80s?

15 A. I'm trying to recall. I believe
16 Mr. Jessee, Gene Jessee, J-e-double
17 s-double e. And I don't remember the
18 names of his successors.

19 Q. Okay. Fair enough. Do you know if
20 Monsanto ever took samples from Snow
21 Creek between the mid 1970s and early
22 1980s?

23 A. I do not.

REGIONAL REPORTING SERVICE, INC.

- 1 Q. Okay. What types of sampling, if any,
2 did Monsanto do from the mid 1970s
3 through the early 1980s to detect PCBs
4 in soil in the Anniston area?
- 5 A. I do not know.
- 6 Q. Do you know who would know that?
- 7 A. The only name that comes to mind is -- a
8 strong possibility is Mr. Brown and of
9 course the plant manager in charge at
10 the time.
- 11 Q. Okay. Can you just refresh my
12 recollection? When did you leave the
13 Anniston plant?
- 14 A. The end of 1969.
- 15 Q. And did you return to the Anniston plant
16 for any period of time on a regular
17 basis?
- 18 A. Not regular. I've had two-day visits,
19 that kind of thing.
- 20 Q. Okay. What types of air samples, if
21 any, did Monsanto do from the mid 1970s
22 through the early 1980s to detect PCBs
23 in air in the Anniston area?

REGIONAL REPORTING SERVICE, INC.

- 1 A. I do not know.
- 2 Q. Again, do you think that Jerry Brown
3 would be the person to be most
4 knowledgeable about that?
- 5 A. That's my strong suspicion.
- 6 Q. Okay. What types of sampling, if any,
7 did Monsanto do from the mid 1970s
8 through the early 1980s to detect PCBs
9 in fish in the Anniston area?
- 10 A. I do not know.
- 11 Q. And again, you think perhaps Jerry Brown
12 would be the most knowledgeable person?
- 13 A. I'd start with him.
- 14 Q. Okay. We will.
- 15 Let us mark for identification
16 purposes Papageorge Twenty-nine. And
17 this is a document -- a one-page
18 document bearing Bate's number STR
19 029900.
- 20 (Plaintiffs' Exhibit Number
21 Twenty-nine was marked for
22 identification.)
- 23 A. I have reviewed the documents.

REGIONAL REPORTING SERVICE, INC.

- 1 Q. Okay. When was the last time you saw
2 this document? Withdrawn. Let me make
3 it easier.
- 4 Did you review this document in
5 connection with your meetings with
6 counsel when you consulted in connection
7 with -- for this deposition?
- 8 A. With this deposition?
- 9 Q. Yes.
- 10 A. No, sir.
- 11 Q. Okay. This document is dated March
12 30th, 1970. It appears to be either a
13 memorandum or a letter from Mr. R. Emmet
14 Kelly -- Dr. R. Emmet Kelly, that would
15 be, to W. B. Papageorge, correct?
- 16 A. That is correct.
- 17 Q. Dated March 30th, 1970, correct?
- 18 A. Correct.
- 19 Q. Who are the recipients of this letter?
20 Who is H. S. Bergen?
- 21 A. Bergen was my supervisor, the director
22 of the functional products business
23 group.

REGIONAL REPORTING SERVICE, INC.

- 1 Q. And who was Mr. Minckler?
- 2 A. Mr. Minckler was the general manager of
3 the organic chemicals division in
4 Monsanto Company under which the
5 functional products business group
6 reported.
- 7 Q. And Mr. Park was legal, correct?
- 8 A. Correct.
- 9 Q. And Mr. Springgate?
- 10 A. Mr. Springgate was Mr. Bergen's
11 counterpart in the plasticizer business
12 group.
- 13 Q. Okay. And you became aware from this
14 memo that the Ohio Health Department had
15 found PCBs, particularly Aroclor 1254,
16 in samples of milk from at least three
17 herds in Ohio, correct?
- 18 A. That is correct.
- 19 Q. Had you ever become aware before this
20 memo of the possibility of milk being
21 contaminated by PCBs?
- 22 A. Yes.
- 23 Q. When?

REGIONAL REPORTING SERVICE, INC.

- 1 A. Early 1970, as best I recall.
 2 Q. And how did that come about?
 3 A. I received a report of the findings of
 4 milk in cattle in Georgia that was later
 5 attributed to the fact that cattle were
 6 grazing under -- on land under power
 7 lines. And these areas were sprayed
 8 with oils to discourage dense weed
 9 growth. And it was eventually
 10 determined that these oils contained
 11 PCBs in them.
 12 Q. Okay. In seeing what's reported here,
 13 the Ohio Health Department traced the
 14 contamination to the PCBs in the paint
 15 in the silos, correct?
 16 A. That is correct.
 17 Q. Now, the third paragraph says, "All in
 18 all this could be quite a serious
 19 problem, having legal and publicity
 20 overtones." Do you see that?
 21 A. I do.
 22 Q. What legal overtones was Mr. Kelly
 23 concerned about?

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- 1 MR. PECK: Object to the form of
 2 the question.
 3 A. I don't know. You'd have to ask
 4 Dr. Kelly on that. That's his --
 5 Q. Did you have any legal overtones you
 6 were concerned about when you received
 7 this memorandum?
 8 A. The only overtones I gathered is when I
 9 read Dr. Kelly's reactions, and that
 10 brought the thought to my mind.
 11 Q. Do you know what publicity overtones
 12 Dr. Kelly was concerned about?
 13 A. I do not.
 14 Q. Did you have any publicity overtones
 15 that you were concerned about when you
 16 saw this memo?
 17 A. I don't recall ever being overly
 18 impressed with publicity so much as
 19 trying to explain the presence of PCBs
 20 in that particular situation.
 21 Q. Okay. The last paragraph states, "This
 22 brings us to a very serious point. When
 23 are we going to tell our customers not

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- 1 to use any Aroclor in any paint
 2 formulation that contacts food, feed, or
 3 water for animals or humans? I think it
 4 is very important that this be done."
 5 Do you see that?
 6 A. I do.
 7 Q. Before this incident in Ohio, did
 8 Monsanto ever consider telling its
 9 customers not to use PCBs in any paint
 10 formulation that contacted food, feed,
 11 or water for animals or humans?
 12 A. At this point in time there was serious
 13 consideration given to those very
 14 thoughts of PCBs in relationship to food
 15 for animals or humans.
 16 Q. When you say at this point in time, do
 17 you mean after receipt of the memo,
 18 before receipt of the memo?
 19 A. Before. We were in the process of
 20 coming up with a PCB phase-out program.
 21 Dr. Kelly was not aware of that
 22 activity. So what he was proposing was
 23 already being seriously considered and

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- 1 resulted in Monsanto's program that was
 2 announced in -- oh, in a couple of
 3 months after that, about May of 1970 or
 4 thereabouts. Early summer is the best I
 5 can recall now. And the part I have in
 6 mind here is that reference to the
 7 termination of sales of PCBs to the open
 8 uses, including paints.
 9 Q. Okay. After you received this memo, did
 10 you discuss its content with Dr. Kelly?
 11 A. Oh, yes, yes.
 12 Q. Okay. Do you recall the sum and
 13 substance of the conversations you had?
 14 A. Oh, he was certainly surprised that we
 15 were thinking the way he was, let's
 16 stop.
 17 Q. Did you discuss it with anybody else?
 18 MR. PECK: The contents of this
 19 memo?
 20 MR. ATKIN: Yes.
 21 A. Well, I recall mentioning that I had
 22 received the memo and that they,
 23 Mr. Bergen and Mr. Springgate, had

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received copies of it, and these two individuals were part of the discussion of phasing out PCB sales. All we did was touch base with each other that things were going quite well, the way we hoped they would.

Q. Did Monsanto ever tell its customers not to use Aroclor in paint formulation that contacts food, feed, or water for animals or humans?

A. There was a reference, as I remember, on a label about keeping it away from animal feed and human food.

Q. Do you remember when, when these labels were issued that had that specific warning?

A. I don't know specifically, '71, about '71.

MR. ATKIN: Okay. That's all I have.

MR. PECK: Why don't we take a quick break?

MR. ATKIN: Sure.

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(A break was taken.)

THE WITNESS: I'd like to review briefly what we talked about in retainers and what I get paid for and what I don't.

MR. ATKIN: Well, I'll tell you what, your counsel will have a chance to ask any questions of you when I'm done and --

THE WITNESS: I may have answered correctly. The more I thought about it, I wondered if I heard you correctly, sir. Because I wanted to make sure that it's understood I don't get paid when I'm under oath. That's about as clear as I can make it.

MR. ATKIN: Okay.

THE WITNESS: But in preparation, like I met with the attorney last week or so, that time is

REGIONAL REPORTING SERVICE, INC.

part of this consulting service.

MR. ATKIN: Okay.

THE WITNESS: But the minute I'm under oath, the pay stops. It's not reported.

MR. ATKIN: Okay. That's fine.

THE WITNESS: I don't know if I made that clear earlier. And the more I thought about it, I thought I better reiterate it.

MR. ATKIN: I thought that is what you meant. That's fine. Thank you for clarifying. (Plaintiffs' Exhibit Number Thirty was marked for identification.)

Q. Let me show you Papageorge Thirty for identification. This is a two-page document dated February 10th, 1967, apparently a letter from Dr. Kelly to Mr. D. Wood in London. And it bears

REGIONAL REPORTING SERVICE, INC.

Bate's number NEV 0237645 and NEV 0236 --

MR. PECK: I think you said that wrong.

MR. ATKIN: 023645?

MR. PECK: Yeah.

Q. And NEV 023646. I'd ask you to review that if you could.

A. I have reviewed the exhibit.

Q. Okay. Who was Mr. Wood?

A. Mr. Wood was a Monsanto employee in the marketing department working out of Brussels, Belgium.

Q. Okay. Was he responsible for the marketing of Aroclor products?

A. He was one of several, yes.

Q. Who else was responsible for marketing Aroclor products?

A. Oh, I don't know the whole team. They had Europe and Africa divided into areas. I remember a Don Cameron.

Q. Okay. Who was responsible for marketing Aroclors in the United States at or

REGIONAL REPORTING SERVICE, INC.

1 about this time period?

2 A. There were two individuals. Don Olson

3 was responsible for marketing of the

4 functional fluids products. And Walter

5 Schalk, S-c-h-a-l-k, was responsible for

6 the marketing of PCBs in plasticizers.

7 Q. Okay. Who are the folks who are CCed on

8 this memo; do you know? Mr. Buchanan?

9 A. Mr. Buchanan was a marketing

10 representative working out of St. Louis.

11 As best I recall he was at that time in

12 plasticizers marketing. I do not

13 recognize the other three names listed.

14 Q. Okay. Did you ever see a copy of this

15 before?

16 A. Yes.

17 Q. And when did you see it?

18 A. I first saw copies of this document when

19 I underwent my tutorial with Elmer

20 Wheeler of Monsanto's medical department

21 in early January or February 1970.

22 Q. What was that tutorial about?

23 A. Mr. Wheeler was bringing me up to date

REGIONAL REPORTING SERVICE, INC.

1 in the states when the various technical

2 and lay news media pick up the subject.

3 This is especially" -- Well, let me just

4 stop there.

5 Do you know what Dr. Kelly meant

6 by that paragraph?

7 MR. PECK: Object to the form of

8 the question.

9 A. Anybody reading could -- Dr. Kelly was

10 concerned that the sketchy kinds of

11 information that he was hearing

12 regarding PCBs that was unconfirmed and

13 hadn't been thoroughly studied might get

14 into the news media, the public press

15 and all and really create concerns that

16 would not be justified.

17 Q. Okay. And did he discuss those concerns

18 with you?

19 A. Yes. He was concerned about health

20 effects that weren't proven, allegations

21 that were being made with no basis.

22 Q. Allegations regarding what?

23 A. A specific, the fact that some of the

REGIONAL REPORTING SERVICE, INC.

1 on what was known about PCBs as of

2 January 1970.

3 Q. Okay. And that's when you first saw

4 this document?

5 A. Yes.

6 Q. Do you recall any discussions with

7 Mr. Wheeler about this document?

8 A. Of course not word for word, but in

9 essence this document was Mr. Wheeler's

10 way of bringing up the subject of how

11 PCBs were being found in environmental

12 samples at a Swedish laboratory and how

13 Monsanto received the first information

14 regarding that study.

15 Q. That was a study done by Jensen?

16 A. Yes.

17 Q. Okay. This memo reflects that by 1967

18 Monsanto was getting concerned about

19 PCBs in the air and in fish and other

20 living reservoirs, correct?

21 A. Correct.

22 Q. The third paragraph states, "We are very

23 worried about what is liable to happen

REGIONAL REPORTING SERVICE, INC.

1 symptoms that were later attributed to

2 DDT were being automatically, if you

3 will, transferred to PCBs, without any

4 real scientific support for that

5 conclusion.

6 Q. Okay. Anything else?

7 A. That's just an example. I don't

8 remember all the --

9 Q. The other allegations that he was

10 concerned about?

11 A. Correct.

12 Q. Would you go to the second page, NEV

13 023646, the last paragraph?

14 A. I see it.

15 Q. This paragraph, the beginning of the

16 paragraph states, "The consensus in St.

17 Louis is that while Monsanto would like

18 to keep in the background in this

19 problem, we don't see how we will be

20 able to in the United States."

21 Did Dr. Kelly ever discuss with

22 you the fact that Monsanto wanted to

23 keep in the background regarding the PCB

REGIONAL REPORTING SERVICE, INC.

1 problem?

2 A. No.

3 Q. Did you ever hear it mentioned from

4 anyone at Monsanto that Monsanto wanted

5 to keep in the background regarding the

6 PCB problem?

7 A. Never.

8 Q. Okay. The next sentence states, "We

9 feel our customers, especially NCR, may

10 ask us for some sort of data concerning

11 the safety of these residues in humans."

12 Do you see that?

13 A. I do.

14 Q. Was this the first time to your

15 knowledge that Monsanto first considered

16 that its customers might ask for some

17 sort of data concerning the safety of

18 these residues in humans?

19 A. No. The questions regarding health

20 effects of PCBs were shared with

21 customers like NCR. They already knew

22 what Monsanto knew.

23 Q. When was this, as of 1967?

REGIONAL REPORTING SERVICE, INC.

1 to express a concern that at this point

2 in time Monsanto's customers may ask for

3 that type of data?

4 MR. PECK: Object to the form of

5 the question.

6 A. Dr. Kelly was expressing a concern about

7 requests for data that is not at that

8 point in time run for an industrial

9 chemical. He was concerned that the

10 emphasis would be to conduct studies

11 similar to those run for Food and Drug

12 Administration registration, either as a

13 food additive or as a pharmaceutical.

14 And that just wasn't deemed appropriate

15 for an industrial chemical.

16 Q. Deemed by who?

17 A. Just everybody in the world that worked

18 with industrial chemicals.

19 Q. So are you saying that the type of data

20 that is referenced here in this memo by

21 Dr. Kelly that the customers might be

22 concerned about relates to the type of

23 data that would go towards FDA

REGIONAL REPORTING SERVICE, INC.

1 A. Yes.

2 Q. Okay. What did they know? What did

3 they know regarding the health effects

4 of PCBs?

5 A. Well, it is the kind of information that

6 appeared in the product brochures, and

7 they knew about skin effects. And these

8 are all at levels that really shouldn't

9 be permitted in terms of exposure, skin

10 problems, breathing problems.

11 Q. Anything else?

12 A. Do not ingest kind of thought, don't get

13 it in your food. And since NCR is

14 mentioned here, as an example, a company

15 like NCR would typically have their

16 medical man talk to Monsanto's medical

17 man, as one professional talking to the

18 other, so they are both talking the same

19 technical language.

20 Q. If Monsanto had already provided its

21 customers with data concerning the

22 safety of PCBs in humans, do you know

23 why Dr. Kelly seemed to feel or seemed

REGIONAL REPORTING SERVICE, INC.

1 registration?

2 MR. PECK: Object to the form of

3 the question.

4 A. That is what the next sentence

5 emphasizes.

6 Q. What type of data is that?

7 A. It is referred to here as toxicological,

8 slash, pharmacological. It's extensive,

9 multi-year study with test animals.

10 Q. Which at that point in time had not been

11 done, is that correct, by Monsanto?

12 A. For what?

13 Q. For PCBs.

14 A. That is correct. That is typical of an

15 industrial chemical, yes.

16 Q. When you talk about the warnings that

17 had been provided to customers by

18 Monsanto, you mentioned certain health

19 hazards, correct?

20 A. Yes.

21 Q. Did those warnings also include

22 information about liver problems?

23 A. In some cases, yes. I remember some

REGIONAL REPORTING SERVICE, INC.

reference to continued excessive exposure could damage the liver to the point where it could no longer recover itself.

Q. Did those warnings ever talk about possible systemic injury from PCB exposure?

A. Yes.

Q. Do you recall when for the first time the warnings included information about possible liver trouble?

A. I don't remember a specific date. It seems like it was in product brochures and product literature for decades. I just don't remember a date.

Q. And I guess the same would hold true for possible systemic injury, that you wouldn't recall the exact date?

A. That is correct.

Q. Did you have any involvement in formulating the warning labels that Monsanto put on its PCB products?

A. Some of them.

REGIONAL REPORTING SERVICE, INC.

Q. Okay. What was your involvement?

A. I was involved in the wording of the paragraph that referred to the findings of PCBs in the environment and the precautionary statements included in that paragraph, to handle it carefully and not allow it to escape into the environment. And eventually there was a phrase or a sentence included referring to prevention of entry into animal feed and human food.

Q. And one of the things that Monsanto did tell its customers was they should avoid prolonged breathing of PCB vapors or mists, correct?

A. Oh, yes, definitely.

Q. That's all I have on that document.

Before we go on to Thirty-one, did Monsanto ever provide the residents of Anniston with any data concerning the health hazards of PCBs in humans?

A. Uh-uh (indicating no). Why would they?

Q. The answer is no?

REGIONAL REPORTING SERVICE, INC.

A. No.

(Plaintiffs' Exhibit Number Thirty-one was marked for identification.)

Q. Let's take a look at Papageorge Thirty-one, for identification. This is a two-page document dated December 5th, 1958, authored by D. F. Smith and addressed to Mr. R. D. Minter at the general offices of Monsanto in St. Louis.

A. I have read the exhibit.

Q. Okay. Who is Mr. Smith?

A. Mr. Smith was a Monsanto employee in the organic division of Monsanto Company in that business group that sold hydraulic fluids and other industrial fluids.

Q. And who is Mr. Minter?

A. Mr. Minter had so many different assignments, I personally don't know exactly what his assignment was in the date of this memo, which reads like it's 1958.

REGIONAL REPORTING SERVICE, INC.

Q. Right.

A. He was involved with the marketing of hydraulic fluids, but I don't recall his exact title or position at that time.

Q. Okay. Do you know who -- Well, we know who Mr. Wheeler is. Do you know who the other recipients of this memo were?

A. I don't remember Mr. Newcombe. Mr. Casperi was an attorney.

Q. Okay. Have you ever seen this letter before?

A. I don't recall it.

Q. Okay. Were you ever told by anyone that Monsanto wanted to disclose the minimum information necessary to comply with regulations regarding PCB labeling and not to disclose information which could damage its sales position in the synthetic hydraulic fluid field?

A. No, I was never told that.

Q. Okay. Thank you.

(Plaintiffs' Exhibit Number Thirty-two was marked for

REGIONAL REPORTING SERVICE, INC.

identification.)

- 1
2 Q. For identification purposes, this is a
3 document bearing Bate's number MONS
4 096865 and MONS 096866 dated February
5 14th, 1969, either a memorandum or
6 letter written from Mr. -- written by
7 Mr. Roush, R-o-u-s-h, Don Roush, to
8 J. J. Roder, R-o-d-e-r, in Chicago;
9 subject, inquiry from Vapor Corporation
10 on toxic effects of chlorinated
11 biphenyl. Have you had a chance to look
12 at this?
- 13 A. I am reading it, reviewing it now.
- 14 Q. Take your time, please.
- 15 A. I have read the exhibit.
- 16 Q. Okay. Who is Mr. Roush?
- 17 A. Mr. Roush was a representative of
18 Monsanto's marketing department located
19 in St. Louis that was responsible for
20 the marketing of heat transfer fluids.
21 Mr. Roush was the technical person on
22 that staff who would work with the
23 customers on technical matters involving

REGIONAL REPORTING SERVICE, INC.

- 1 was advised of the bran oil poisoning of
2 quite a number of Japanese citizens
3 attributed to PCBs. That's what became
4 known as the Utsu incident, correct?
- 5 A. You meant the first paragraph. I think
6 you said the second.
- 7 Q. I'm sorry. The second sentence of the
8 first paragraph.
- 9 A. I see that, yes, sir.
- 10 Q. And that's what became known as the Utsu
11 incident?
- 12 A. Correct.
- 13 Q. How many people got sick in the Utsu
14 incident?
- 15 A. Oh, I don't recall the number.
- 16 Q. Several hundred?
- 17 MR. PECK: Object to the form of
18 the question.
- 19 A. That's a good estimate.
- 20 Q. Do you know how many people died?
- 21 A. I don't recall any deaths.
- 22 Q. Okay. Did Monsanto ever tell customers
23 about the Utsu incident?

REGIONAL REPORTING SERVICE, INC.

- 1 the use of heat transfer fluids.
- 2 Q. Who was Mr. Roder?
- 3 A. Mr. Roder was a field salesman, field
4 representative located in the Chicago
5 office of Monsanto.
- 6 Q. When you say field representative, what
7 were his responsibilities?
- 8 A. He is the individual that was given the
9 responsibility for a geographic area,
10 and he would call on the customers and
11 potential customers in that area.
- 12 Q. He was a sales rep?
- 13 A. Yes.
- 14 Q. Do you know who Mr. Gustaf is, referred
15 to in this memorandum?
- 16 A. No, I don't.
- 17 Q. Okay. This memo apparently concerns
18 inquiries that were being made by a
19 customer, Vapor Corporation, about the
20 toxic effects of PCBs, correct?
- 21 A. Yes.
- 22 Q. In the second sentence of the first
23 paragraph Mr. Roush says that Monsanto

REGIONAL REPORTING SERVICE, INC.

- 1 A. I know personally that starting in 1970
2 we instructed the field representatives
3 at their sales meetings of the incident
4 and what occurred and what was found. I
5 know I personally talked to groups of
6 customers.
- 7 Q. I understand. But was there a corporate
8 policy either to tell or not to tell
9 Monsanto's customers about the Utsu
10 incident?
- 11 A. The policy was to share whatever
12 information we had.
- 13 Q. So to your knowledge, Monsanto did share
14 that information with its customers?
- 15 A. Yes.
- 16 Q. And was a letter sent out to the
17 customers about the Utsu incident?
- 18 A. No.
- 19 Q. How was the information to be shared
20 with them?
- 21 A. Telephone conversations, personal
22 visits, one-on-one type of thing, or at
23 customer group meetings, either within a

REGIONAL REPORTING SERVICE, INC.

customer's plant or meetings at which several customers would gather at a Monsanto conference room, for example.

Q. Was there a directive issued to Monsanto field reps that they should tell Monsanto customers about the Utsu incident?

A. Yes.

Q. Was that directive in writing?

A. I never saw it in writing.

Q. Okay. Do you know who issued that directive?

A. Mr. Bergen passed that on to Mr. Fallon, who was the individual in charge of the heat transfer business.

Q. Did Monsanto ever tell the FDA about the Utsu incident?

A. I know we discussed it with the FDA, but my exposure to that discussion -- The FDA knew about it already. I don't know where they found out.

Q. Do you know when Monsanto first discussed the FDA -- with the FDA the

REGIONAL REPORTING SERVICE, INC.

Utsu incident?

A. It was in 1970. My hesitation is because it wasn't specific FDA. FDA representatives were in the room along with the Department of Agriculture and so on, the Interagency Task Force on PCBs. This was one of the subjects discussed.

Q. And that was sometime in 1970?

A. Yes.

Q. Do you remember if it was the earlier or latter part of 1970?

A. I would suggest late summer, early fall.

Q. You mentioned Interagency Task Force on PCBs. What was that?

A. The government agencies were attempting to learn what they could about the PCB environmental issue in 1970, and they had informally formed a study group at the encouragement of the head of the -- it is the office of science and technology, but I don't recall exactly what its title was at that time. And it

REGIONAL REPORTING SERVICE, INC.

included representatives from the Department of Agriculture, the Interior Department, the Department of Commerce, FDA. I'm sure I left out some, but it was supposedly representative of any federal activity that might be involved with PCBs.

Q. Did Monsanto ever tell any of the residents of Anniston, Alabama about the Utsu incident?

A. Not that I know of.

Q. Can PCBs cause certain toxic and systemic effects as indicated in paragraph two of this memorandum?

MR. PECK: Object to the form of the question.

A. Yes.

Q. Okay. And did Monsanto ever tell any of the residents of Anniston, Alabama, that PCBs could cause certain toxic and systemic effects?

A. No.

Q. Okay. The next to last sentence in the

REGIONAL REPORTING SERVICE, INC.

third paragraph states -- I take it back. It is the last sentence in the third paragraph. It states, in quotes, "I can only suggest that you attempt to put Gustaf's mind at ease regarding the toxic aspects of these chlorinated biphenyls by playing down the medical reports and playing up proper system design." Do you see that?

A. I do.

Q. Did Monsanto ever attempt to put its customers' minds at ease regarding PCB toxicity by playing down the medical reports of injuries caused by PCBs?

A. Not to --

MR. PECK: Object the form of the question.

A. Not to my knowledge.

Q. Okay. That's all I have on that document.

For identification purposes, Papageorge Thirty-three is a document bearing Bate's numbers NEV 027584

REGIONAL REPORTING SERVICE, INC.

1 through -- well, yeah -- through NEV
2 027591. My hesitation was apparently
3 one page doesn't have -- There it is.

4 MR. PECK: It is in the middle of
5 the page.

6 MR. ATKIN: Yeah, the middle of
7 the page.

8 (Plaintiffs' Exhibit Number
9 Thirty-three was marked for
10 identification.)

11 Q. Take your time to look at this. This is
12 a memo from Mr. Richard of the research
13 center to Mr. Wheeler, dated September
14 9th, 1969, regarding subject, defense of
15 Aroclor fluids.

16 A. I have scanned the exhibit.

17 Q. Okay. Part of the strategy that
18 Monsanto devised to defend PCBs was to
19 question the evidence that PCBs were
20 harmful to the environment and to fish;
21 isn't that right?

22 A. That's correct.

23 Q. The last sentence on the first page

REGIONAL REPORTING SERVICE, INC.

1 indicates that Monsanto decided that it
2 had to clean up as much PCBs as it
3 could, starting immediately, correct?

4 A. I don't know that I can -- This
5 represents a very rough draft of some
6 preliminary thoughts brought together by
7 a group. So it's a first pass attempt
8 to jot down all the thoughts that were
9 shared at the time. So when you use the
10 expression "this is Monsanto's
11 decision," at this point in time it
12 wasn't an official Monsanto program as
13 displayed in this document.

14 Q. Who was Mr. Richard?

15 A. Mr. Richard was the director of research
16 for the functional products business
17 group.

18 Q. And he wrote this memo to Mr. Wheeler?

19 A. He addressed it to Mr. Wheeler, but it
20 was intended for the recipients as well.

21 Q. Who were the recipients?

22 A. Mr. Hodges was the environmental person
23 in manufacturing. Dr. Farrar was

REGIONAL REPORTING SERVICE, INC.

1 Dr. Richard's counterpart in the
2 plasticizer business team.

3 Q. Okay.

4 A. And Mr. Bergen was Dr. Richard's
5 supervisor, the head of the functional
6 products business group.

7 Q. Well, Mr. Richard expressed the opinion
8 in this document that Monsanto would
9 have to clean up as much as we can,
10 starting immediately, correct?

11 A. I don't know if it is Dr. Richard
12 personally or whether copying from the
13 blackboard where the notes were jotted
14 down. Someone else might have offered
15 this as a thought.

16 Q. In any event, it is incorporated into a
17 document that is authored by
18 Mr. Richard?

19 A. Correct.

20 Q. And addressed to Mr. Wheeler?

21 A. Correct.

22 Q. Did Monsanto ever adopt the policy that
23 it had to clean up PCBs as much as it

REGIONAL REPORTING SERVICE, INC.

1 could?

2 A. Yes.

3 Q. Okay. How much of the PCBs in Anniston,
4 Alabama did Monsanto in fact clean up?

5 MR. PECK: Object to the form of
6 the question.

7 A. I don't think I understand your
8 question. Do you mean in terms of
9 pounds?

10 Q. Yeah.

11 A. I have no idea. I don't think anybody
12 does.

13 Q. In terms of pounds, how many pounds of
14 PCBs were put into the landfill on
15 Monsanto's property in Anniston,
16 Alabama?

17 A. I don't know.

18 Q. Have any idea?

19 A. No.

20 Q. How long did Monsanto manufacture PCBs
21 for in Anniston, Alabama?

22 A. Monsanto itself from early '30, '31 or
23 thereabouts, until 1971. Forty years.

REGIONAL REPORTING SERVICE, INC.

1 Q. In 1971, do you know how many pounds
2 approximately of PCBs Monsanto was
3 manufacturing?
4 MR. PECK: In Anniston or
5 anywhere?
6 Q. In Anniston, Alabama.
7 A. Was manufacturing in '71?
8 Q. Yes.
9 A. In '71 there was only about a five-month
10 operation. I don't recall the numbers.
11 It was a much reduced quantity for that
12 part year.
13 Q. How about in the 1960s, on average? Do
14 you know how many pounds per year
15 Monsanto was manufacturing?
16 MR. PECK: In --
17 MR. ATKIN: In Anniston, Alabama,
18 yes. Thank you.
19 A. They were approaching the thirty million
20 pound a year quantity.
21 Q. Is it accurate to say that there were at
22 a minimum millions of pounds of PCBs
23 manufactured by Monsanto in Anniston,

REGIONAL REPORTING SERVICE, INC.

1 Alabama from --
2 A. Yes.
3 Q. -- the 1930s through 1971?
4 A. Yes.
5 Q. And do you have any idea how many pounds
6 of PCBs manufactured in Alabama in
7 Anniston, were put by Monsanto into a
8 landfill on its property?
9 A. No, I don't.
10 Q. Okay. Did Monsanto ever ship PCBs from
11 other sites to the landfill in Anniston,
12 Alabama?
13 A. Not to my knowledge, no.
14 Q. If you turn to page NEV 027590 --
15 A. I have it.
16 Q. According to this page, the second full
17 paragraph specifically, it indicates
18 that part of Monsanto's plan in
19 September 1969 was to set up an
20 incinerator to handle Aroclor disposal,
21 correct?
22 A. Correct.
23 Q. Did Monsanto ever set up an incinerator

REGIONAL REPORTING SERVICE, INC.

1 in Anniston to dispose of PCBs?
2 A. No.
3 Q. Why not?
4 A. When the unit was installed, which was,
5 as I remember, the '71 period, 1971 or
6 thereabouts, the decision had been made
7 to limit the sale of PCB products to
8 many uses, which in turn required the
9 shutdown of one of the two U.S. plants.
10 And it was decided that the Anniston
11 plant would be the one to go out of
12 production. And the incinerator was
13 then put at the east St. Louis, Illinois
14 plant or Sauget, S-a-u-g-e-t, Illinois
15 plants because that is where the
16 operation was perceived to continue.
17 Q. Okay.
18 A. I'm sorry. I misunderstood.
19 Q. No. I guess what I'm trying to
20 understand is why did Monsanto not put
21 an incinerator in Anniston?
22 A. Because Anniston was no longer going to
23 be a PCB center of activity.

REGIONAL REPORTING SERVICE, INC.

1 Q. What about the millions of pounds of
2 PCBs that were in the landfill?
3 MR. PECK: Object to the form of
4 the question.
5 A. I think there is a definite
6 misunderstanding. The incinerator will
7 burn pumpable liquids. It was not
8 designed to incinerate solid material.
9 Q. Were all the materials in the landfill
10 at Anniston solids?
11 A. The vast majority were solidified or
12 absorbed on solids.
13 Q. What do you mean by the vast majority?
14 A. Let me put it a different way. At no
15 time were liquid PCBs put in drums and
16 hauled up to the landfill. If the
17 material was a liquid, it was introduced
18 back into the manufacturing process to
19 be recycled, to be recovered, because it
20 was a product. It had some value. The
21 only material sent to the landfill was
22 the material for which there was no
23 known use or no known way to make it

REGIONAL REPORTING SERVICE, INC.

1 useful. And it included the tars that
2 looked like road asphalt. It included
3 dirty rags. It included sawdust with
4 drippage on them, that kind of material.
5 And they in turn were put in sealed
6 containers. So it's erroneous to
7 conceive of leaking, oozing liquid out
8 of drums.

9 MR. ATKIN: Okay. I think this
10 might be a good place to
11 stop, because the tape is
12 going to run out in about a
13 minute.

14 (A lunch break was taken.)

15 Q. (By Mr. Atkin) Good afternoon,
16 Mr. Papageorge.

17 A. Good afternoon.

18 Q. Monsanto land-filled some returned
19 Aroclors in its own landfill, correct?

20 A. Yes.

21 Q. A little bit before lunch we were
22 talking about the incineration of PCB
23 contaminated solid waste?

REGIONAL REPORTING SERVICE, INC.

1 A. We referred to the solid waste and
2 incineration, yes.

3 Q. Yes. Incineration of PCB contaminated
4 solid waste was technically feasible for
5 Monsanto, wasn't it?

6 MR. PECK: Object to the form of
7 the question.

8 A. I don't know how to evaluate the
9 feasibility to Monsanto, sir. We made a
10 survey of such units throughout the
11 country of the service. They were not
12 available.

13 Q. What do you mean, they were not
14 available?

15 MR. PECK: Are you talking about
16 1970?

17 Q. Whenever. Tell me when.

18 A. I'm talking the period of 1970, yes.

19 Q. What do you mean, they weren't
20 available?

21 A. In order to safely destroy PCBs you have
22 to exceed, as I recall, sixteen hundred
23 degrees Fahrenheit and preferably reach

REGIONAL REPORTING SERVICE, INC.

1 two thousand degrees Fahrenheit. I
2 personally could never find any
3 technology that demonstrated that such
4 units could be built and operate
5 dependably.

6 Q. At any point in time or in the early
7 '70s? When are you referring to?

8 A. At any point, to this day.

9 Q. Okay. Let me mark this as Papageorge
10 Thirty-five for identification --
11 Thirty-four.

12 These are several pages of
13 deposition testimony that you gave in
14 the matter of the City of Bloomington,
15 et al., plaintiffs, versus Westinghouse
16 Electric Corporation, defendants.

17 (Plaintiffs' Exhibit Number
18 Thirty-four was marked for
19 identification.)

20 MR. PECK: This objection is
21 probably reserved, too. But
22 as a practical matter, I just
23 generally object to the

REGIONAL REPORTING SERVICE, INC.

1 admission of prior deposition
2 testimony as an exhibit,
3 whether this will be offered
4 at trial. It is an improper
5 way to use prior testimony.
6 But since this is a
7 deposition, I'll obviously
8 allow it to go forward.

9 Q. I refer you to page two thirty-nine,
10 sir, of that deposition, which I believe
11 is the last page.

12 A. It is.

13 Q. Okay. And the question reads: "Did you
14 ever develop a solid waste destruction
15 system?"

16 Answer: "Yes."

17 Question: "Is it in operation
18 now?"

19 Answer: "No."

20 Question: "Why not?"

21 Answer: "We could not find enough
22 support for the use of that unit to
23 justify building it."

REGIONAL REPORTING SERVICE, INC.

1 Question: "Not enough customer
2 base?"

3 Answer: "Correct."

4 Question: "But it is technically
5 feasible, is it not?"

6 Answer: "We demonstrated it,
7 yes."

8 Question: "So that the goal of
9 destroying solid waste through PCB --
10 through PCB contaminated solid waste
11 through incineration has been
12 demonstrated to be technically feasible;
13 isn't that correct?"

14 Answer: "Yes."

15 Do you recall giving that
16 testimony, sir?

17 A. Obviously, I did.

18 Q. And do you recall testifying that it was
19 technically feasible for the destruction
20 of solid waste through incineration?

21 A. I think what we're describing here is a
22 technology that is offered as more of a
23 theory rather than actually

REGIONAL REPORTING SERVICE, INC.

1 demonstrated. What disturbs me is where
2 I said yes to has it been demonstrated
3 as technically feasible.

4 What I had in mind there, in the
5 laboratory you can reach those
6 temperatures; you can show destruction;
7 you can show that the off gasses that
8 are generated don't contain PCBs.

9 When I answered your question
10 previously, I was talking about a
11 commercial unit, a full-size commercial
12 unit operating at the high temperatures
13 and not creating a pollution problem of
14 a different type.

15 Q. All right. Thank you. I'm done with
16 that exhibit.

17 Sir, do you recall whether in or
18 about April 1969 Monsanto spent more
19 than a million dollars to increase
20 production of solid Aroclors at
21 Anniston?

22 A. I recall the project. I don't recall
23 the total dollars involved, but it

REGIONAL REPORTING SERVICE, INC.

1 sounds appropriate.

2 Q. Okay. So in fact Monsanto did increase
3 production of solid Aroclors in Anniston
4 in or about April 1969? It took on a
5 capital project to do that, didn't it?

6 A. Yes, sir. But this is terphenyls. I
7 don't want to confuse you. This is --
8 Solid Aroclors are chlorinated
9 terphenyls.

10 Q. Okay. You would agree with me, sir,
11 wouldn't you, that Anniston, Alabama and
12 Sauget, Illinois should have been
13 treated with equal levels of concern and
14 precaution by Monsanto?

15 A. They were.

16 Q. And the same goes for the workers at the
17 two plants, right?

18 A. Yes.

19 Q. And were the workers at the two plants
20 protected with ventilation systems?

21 A. Certainly.

22 Q. And were they given gloves and booties
23 to wear?

REGIONAL REPORTING SERVICE, INC.

1 A. Yes, sir.

2 Q. And were they told to change their
3 clothes?

4 A. Yes, sir.

5 Q. And was there any medical monitoring
6 done?

7 A. Yes, sir.

8 Q. And they were given advice and warnings
9 about PCBs?

10 A. Yes.

11 Q. Okay. Did Monsanto ever conduct an
12 epidemiological or health study of its
13 Anniston workers, those who had worked
14 with the manufacture of PCBs?

15 A. Epidemiology? I don't recall any. That
16 doesn't mean it didn't happen.

17 Q. Okay. Did Monsanto ever conduct an
18 epidemiological or health study of the
19 residents of Anniston?

20 A. Not to my knowledge.

21 Q. Did Monsanto ever determine or attempt
22 to determine the body burdens of PCBs in
23 Anniston residents?

REGIONAL REPORTING SERVICE, INC.

- 1 A. Not to my knowledge.
- 2 Q. Did Monsanto ever tell the residents of
- 3 Anniston that they might have elevated
- 4 body burdens of PCBs?
- 5 A. Not that I know of.
- 6 Q. Did Monsanto analyze or determine the
- 7 body burdens of PCBs in the workers at
- 8 the Anniston plant?
- 9 A. I do not know of any.
- 10 Q. Okay. Or at the Krummrich facility?
- 11 A. I don't know that either.
- 12 Q. Sir, if you took your grandchildren to
- 13 church with you and the yard of the
- 14 church was contaminated with PCBs, would
- 15 you think it prudent to warn them at
- 16 all?
- 17 MR. PECK: Object to the form of
- 18 the question.
- 19 A. If I took them to church and they what?
- 20 Q. And the yard of the church was
- 21 contaminated with PCBs, would you think
- 22 it prudent to warn them at all?
- 23 MR. PECK: Object to the form of

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- 1 the question.
- 2 A. Well, sir, I'd have to know the degree
- 3 of contamination and the opportunity for
- 4 that contamination to expose my children
- 5 to levels that would result in harm. I
- 6 don't quite know how to -- I know
- 7 personally -- I took PCBs home in my
- 8 shoes. So you are talking about my
- 9 children being near PCBs, yeah, on the
- 10 garage floor and the kitchen as I walked
- 11 in the house. So they were exposed to
- 12 PCBs.
- 13 Q. That wasn't my question. My question is
- 14 would you think it prudent to warn your
- 15 grandchildren if you took them to church
- 16 with you and you knew that the church
- 17 was contaminated with PCBs?
- 18 MR. PECK: Object to the form of
- 19 the question.
- 20 A. Based on what I know of PCBs, I saw no
- 21 reason to mention PCBs, as any other
- 22 material that might be in that church.
- 23 Q. Did you ever examine the church for

REGIONAL REPORTING SERVICE, INC.

- 1 PCBs?
- 2 A. No.
- 3 Q. Did Monsanto ever examine the church for
- 4 PCBs?
- 5 MR. PECK: What church?
- 6 MR. ATKIN: The Mars Hill
- 7 Missionary Baptist Church.
- 8 A. No, sir. No church. Nobody examined
- 9 any church for PCBs or any other
- 10 chemical, cyanides or ammonia or on and
- 11 on.
- 12 Q. Okay. If your daughter was pregnant,
- 13 sir, you wouldn't want her dusting a PCB
- 14 contaminated room or gardening in PCB
- 15 contaminated dirt or eating PCB
- 16 contaminated fish, would you?
- 17 MR. PECK: Object to the form.
- 18 A. Sir, again, from what I know of the
- 19 health effects of PCBs on humans, I
- 20 don't find that a disturbing question in
- 21 terms of do I tell my pregnant daughter.
- 22 I'd have to know in particular the
- 23 levels of exposure to my daughter, not

REGIONAL REPORTING SERVICE, INC.

- 1 the levels present. There is a
- 2 difference.
- 3 Q. Would you let your daughter eat fish
- 4 that were contaminated with seventeen
- 5 hundred parts per million of PCBs?
- 6 MR. PECK: Object to the form of
- 7 the question.
- 8 A. Yes, because I have nothing that tells
- 9 me it is going to hurt her.
- 10 Q. Okay.
- 11 A. Nothing exists, can't find it anywhere,
- 12 and I suspect you can't either.
- 13 Q. Isn't it true, sir, that Monsanto has
- 14 not had any off-site contamination
- 15 problems at the Krummrich plant, PCBs?
- 16 A. Well, there have been allegations of
- 17 off-site PCB problems. I don't know
- 18 what you mean by Monsanto has no
- 19 problems.
- 20 Q. Off-site PCB contamination problems.
- 21 A. Yes.
- 22 Q. Is that true?
- 23 A. It has been -- The Monsanto plant in

REGIONAL REPORTING SERVICE, INC.

1 Sauget, Illinois has been accused of
2 being the source of off-site PCBs -- not
3 accused, alleged to be the source of.

4 Q. Now, sir, even if PCBs weren't
5 considered an environmental contaminant,
6 you would agree with me, wouldn't you,
7 that it wasn't prudent or responsible
8 for Monsanto to discharge PCBs or any
9 other materials straight into the
10 environment?

11 MR. PECK: Object to the form of
12 the question. It is unclear
13 as to time and a number of
14 other factors.

15 A. I'd like to make a clarification or a
16 distinction between the deliberate
17 introduction into the environment of a
18 stream resulting from a process as
19 compared to the occasional incident that
20 occurs due to a repair or maintenance
21 problem or a leak that was not
22 anticipated and was corrected. There is
23 a difference between the occasional

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1 introduction and the deliberate
2 continual introduction.

3 Q. Okay. We are going to mark as an
4 Exhibit, Number Thirty-five to your
5 deposition pages of testimony that you
6 gave in a case called Commonwealth of
7 Kentucky versus Rockwell International
8 Corporation and apparently several other
9 cases consolidated with that case on
10 September 3rd, 1993.

11 MR. PECK: Let me register the
12 same objection to this being
13 used as an exhibit. It is
14 improper use of prior
15 testimony.

16 (Plaintiffs' Exhibit Number
17 Thirty-five was marked for
18 identification.)

19 Q. I'm referring specifically to the
20 question and answer at the bottom of
21 page fifty-nine and the top of page
22 sixty. Or I will be referring to that
23 in a minute.

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1 A. Okay. I've read it.

2 Q. The question reads: "(By
3 Mr. Cunningham) I guess I'm curious as
4 to why you would have bothered putting
5 that stuff out in the lagoon, why you
6 wouldn't just let it get out into a
7 drainage ditch and go out to the creek
8 or whatever. Was it your perspective
9 that good engineering practices in the
10 '60s would have mandated that a waste
11 stream that potentially would have
12 contained PCBs should have been
13 segregated in the manner that you have
14 described that you all did in that
15 facility, at a minimum?"

16 The answer: "At a minimum, it is
17 just not prudent to discharge knowingly
18 any kind of industrial chemical, whether
19 it be PCBs or any other material, and
20 the sediment that collected in that pond
21 was just the type thing you wouldn't
22 want to discharge out into the
23 environment. It just wasn't a practice

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1 that was considered to be responsible.
2 That's all."

3 Do you remember giving that
4 testimony?

5 A. Yes. This is another way of describing
6 what I just described to you earlier,
7 the deliberate disposal continuously,
8 openly, as compared to the leak caused
9 by a mishap of some sort.

10 Q. Okay. We are done with that.

11 Let me mark Papageorge Thirty-six
12 for identification, which are copies of
13 photographs of the Anniston facility and
14 its environs in mid February 1982. And
15 these were supplied to us by Monsanto's
16 counsel.

17 (Plaintiffs' Exhibit Number
18 Thirty-six was marked for
19 identification.)

20 Q. I'd like you to look at the lower
21 photograph, if you could.

22 A. I'm looking at it.

23 Q. And I'll ask you, if you could, to

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1 identify, from this February 1982 photo,
 2 the Mars Hill Missionary Baptist Church.
 3 A. I believe I see it in the -- about a
 4 half inch from the upper edge.
 5 Q. Okay.
 6 A. And almost to the middle.
 7 Q. Can I ask you just to designate with an
 8 A what you believe to be the Mars Hill
 9 Missionary Baptist Church?
 10 A. I will put an A above it.
 11 Q. That will be great.
 12 Can you identify from this
 13 photograph the plant boundary on the
 14 east near Mars Hill?
 15 A. I am turned around. By east, are you
 16 talking about toward the bottom of the
 17 page?
 18 Q. Closest to the top, I guess.
 19 A. Close to the top.
 20 Q. Right, the plant boundary. Would it be
 21 right by that road (indicating)?
 22 MR. PECK: That photograph is a
 23 shot taken -- that photograph

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1 identified here near the upper
 2 right-hand corner.
 3 Q. Yeah. Okay.
 4 A. How should I designate it?
 5 Q. I guess you can put a B there.
 6 A. I will put a B in this upper right-hand
 7 corner.
 8 Q. Thank you. And do you see any ponds on
 9 the landfill?
 10 A. My eyesight is not quite that good.
 11 Q. Are those the ponds (indicating)?
 12 A. This looks like the pond, but I'm not
 13 positive.
 14 Q. Okay. Can you put a C next to what you
 15 think appears to be the pond?
 16 MR. PECK: Object to the form of
 17 the question.
 18 A. I will put a C right over that area.
 19 Q. Terrific. Now, sir, a lot of water runs
 20 off that landfill, doesn't it?
 21 A. I don't know what we mean by a lot. Do
 22 you mean during a cloud burst?
 23 Q. I mean during the course of a year. Do

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1 is a shot looking toward the
 2 east.
 3 A. I'm confused, sir. When you said plant
 4 boundary --
 5 Q. Right.
 6 A. I see that boundary is -- Are you saying
 7 Monsanto property line --
 8 Q. Yes.
 9 A. -- or the plant boundary? To me the
 10 plant boundary was the roadway there.
 11 Q. Okay. That's fine.
 12 A. Just below here.
 13 Q. Can you just draw a line and indicate
 14 where that is?
 15 A. On that one side of the plant.
 16 Q. That will be great.
 17 A. That was the plant as the terminology
 18 used by --
 19 Q. Right.
 20 A. That's the plant boundary.
 21 Q. Can you identify the south landfill for
 22 us on that photograph?
 23 A. The south landfill I believe I

REGIONAL REPORTING SERVICE, INC.

1 you know how many inches of rain fall on
 2 that landfill every year?
 3 A. I don't know. But what you are talking
 4 about is water created by rains?
 5 Q. Yeah.
 6 A. Okay. There is water obviously.
 7 Q. Do you know how much?
 8 A. No, I don't.
 9 Q. Well, the water that -- The amount of
 10 water, the rainfall that falls on that
 11 landfill, it runs down right through
 12 Mars Hill Missionary Baptist Church,
 13 doesn't it?
 14 A. I'm not a hydrogeologist, sir. I
 15 can't --
 16 Q. Well, looking at that photograph, would
 17 you agree that the rainwater that falls
 18 on that landfill runs down right through
 19 Mars Hill Missionary Baptist Church?
 20 MR. PECK: Object to the form of
 21 the question.
 22 A. I can visualize some of that water
 23 headed in that direction. I can also

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see other streams radiating down that hillside across the highway and so on.

Q. Okay.

A. It is not channeled directly to the area you described.

Q. Okay. We're done with that exhibit.

Let's mark for identification Papageorge Thirty-seven, which is another series of photographs provided by Monsanto's counsel.

(Plaintiffs' Exhibit Number Thirty-seven was marked for identification.)

Q. Okay. These series of photographs show pumps being used to empty the ponds on the landfill; is that right?

MR. PECK: Object to the form of the question.

A. I don't know. I see a pump on a platform, and one of the photographs shows a body of water next to it. I'm not familiar with the setup.

Q. Okay. That's fair enough.

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Let's mark this for identification as Papageorge Thirty-eight. This is just one photograph provided to us also by Monsanto's counsel.

(Plaintiffs' Exhibit Number Thirty-eight was marked for identification.)

MR. PECK: Wherever I put it, I'm going to cover up a slight portion of the photograph.

MR. ATKIN: Put it on the bottom, then.

Q. Now, from this last photograph taken around 1978, can you identify for us Mars Hill Missionary Baptist Church?

A. Yes, sir.

Q. I would put an A there, if you could.

A. (Executed by the witness.)

Q. Can you identify the old PCB production unit?

A. The old unit is gone.

Q. Is it gone already in this photograph?

A. Yes, sir.

REGIONAL REPORTING SERVICE, INC.

Q. Can you identify the pond on the landfill?

A. Yes.

Q. Okay. Could you put a B next to that?

A. (Executed by the witness.)

Q. And do you see -- Can you identify a waste pile uncovered on the landfill near the pond?

A. I see a difference in colors here. I don't know --

MR. PECK: I object to the form of the question.

A. I don't know what is a waste pile and what is --

Q. Okay. Fair enough.

Can you designate with a C the location where the old PCB production unit used to be?

A. I will put the C in the clear area. And of course the area was on each side of the position of that C.

Q. Okay. Can I see that?

(Witness hands document to

REGIONAL REPORTING SERVICE, INC.

counsel.)

MR. ATKIN: Thank you. I'm sorry to do this, but I have to take a second break.

(A break was taken.)

(Plaintiffs' Exhibit Number Thirty-nine was marked for identification.)

Q. Mr. Papageorge, we are going to hand you Exhibit Thirty-nine in a second. For identification purposes, this is a document bearing Bate stamp number -- It's two sets. I'll give you one set. The first set is -- The second set is FGL 0011379 through FGL 0011402. Okay?

A. I have it.

Q. Okay. This appears to be a rough draft, 11-10-69, of an outline for the PCB environmental pollution abatement plan, correct?

A. Correct.

Q. Do you know who drafted this?

A. There were several authors putting

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1 together portions.

2 Q. Can you tell me who put together what?

3 A. I don't know that I can do it quite that

4 precisely. I know that Mr. Elmer

5 Wheeler was involved and Dr. Richard.

6 Q. Doctor --

7 A. W. R. Richard.

8 Q. What was Dr. Richard's title?

9 A. He was director of research for the

10 functional products group.

11 Q. Okay. Anybody else?

12 A. And Dr. Farrar, who was Dr. Richard's

13 counterpart in the plasticizer group,

14 and Mr. Hodges, Paul Hodges.

15 Q. Okay. Have you ever seen this document

16 before?

17 A. Yes, I have.

18 Q. Can you turn to page FGL 011387, please?

19 A. I have it.

20 Q. Section A there is called "Legal

21 Liability." Do you see that?

22 A. I see it.

23 Q. It says, "Direct lawsuits are possible."

REGIONAL REPORTING SERVICE, INC.

1 one.

2 Q. Okay. Any other allegations?

3 A. I can't think of any right now.

4 Q. Were those allegations subsequently

5 borne out?

6 A. No.

7 Q. When you say no, do you mean that PCBs

8 were not shown to have effects on

9 reproduction of wild birds or other

10 creatures?

11 A. The allegations that it affected wild

12 bird reproduction were later attributed

13 by the leaders of the study groups that

14 published these reports, were attributed

15 to DDTs and its degradation product,

16 DDD.

17 Q. So to your knowledge, the effects that

18 you are talking about on reproduction of

19 animals has never been shown or proven

20 to be caused by PCBs?

21 A. The wild animals reported at that time.

22 Q. Which animals were those?

23 A. I recall the brown pelican off the coast

REGIONAL REPORTING SERVICE, INC.

1 The materials are already present in

2 nature, having done their alleged

3 damage." Do you know what the alleged

4 damage being referred to here is?

5 MR. PECK: Object to the form of

6 the question.

7 A. There were several allegations made

8 regarding the kinds of things that PCBs

9 could do in the environment. They were

10 all at that point in time unconfirmed.

11 This is why the expression "alleged

12 damages" in this document appears in

13 quotation marks.

14 They referred to effects on the

15 reproduction of wild birds in

16 particular. The other allegations were

17 suspected ailments, similar to the kinds

18 of things the DDTs were being accused of

19 at that time.

20 Q. What kinds of things were those?

21 A. Presence in wild creatures and the

22 possible effects on their ability to

23 reproduce properly. That's the primary

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1 of Southern California. I recall the

2 peregrine falcon in studies by the

3 Cornell University researchers. I

4 recall the allegation that was made that

5 as a result of a north sea storm in

6 which whales and birds were presumed

7 initially to have been affected by PCBs.

8 -- And later it was determined that it

9 was primarily a lack of sufficient food

10 as well as severe storms.

11 Q. Okay. At some point in time were PCBs

12 linked -- or PCBs shown, rather, to in

13 fact have reproductive effects on

14 certain animals?

15 A. Yes.

16 Q. Okay. Which ones?

17 A. There was the study sponsored by

18 Monsanto which demonstrated that some of

19 the PCBs had an effect on the

20 reproduction ability of chickens.

21 Q. And what do you mean by it had an effect

22 on the reproductivity of chickens?

23 A. The eggs would not hatch. I have

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1 forgotten the levels of PCB in the diet.
2 But there was a level before the effect
3 was noted.

4 Q. Okay. Other than the chickens, any
5 other animals or species that you recall
6 were shown -- that PCBs were shown to
7 have an effect, reproductive or
8 otherwise?

9 A. When you say otherwise, there was a
10 study made at a fisheries laboratory in
11 Gulf Shores, Alabama, I think it is. It
12 might be Florida, Gulf Shores, Florida.

13 MR. PECK: Gulf Shores is Alabama.

14 A. Alabama. But anyway --

15 MR. PECK: At least the one I'm
16 thinking of is.

17 MR. CUNNINGHAM: But I think he is
18 right. I think it was Gulf
19 Shores Laboratory in
20 Pensacola.

21 A. Off Pensacola, there is an island, a
22 laboratory in which they conducted a
23 study and determined that low levels of

REGIONAL REPORTING SERVICE, INC.

1 PCBs affected newly hatched shrimp,
2 juvenile shrimp, the very young.

3 Q. When you say affected, what do you mean
4 by affected?

5 A. Killed them.

6 Q. What levels of PCBs?

7 A. I don't remember the number. It is a
8 very low level.

9 Q. Okay. If you look at that paragraph we
10 were just looking at, the next sentence
11 says, "All customers using the products
12 have not been officially notified about
13 known effects, nor do our labels carry
14 this information."

15 Is it accurate to say that as of
16 November 1969 Monsanto's customers had
17 not been notified about the known
18 effects of PCBs?

19 A. In '69, no, because those effects were
20 recent news.

21 Q. So it is accurate to say that?

22 A. Yes.

23 Q. Okay. We can put that one away.

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1 I show you what will be marked as
2 Papageorge Exhibit Forty for
3 identification. This is a two-page
4 document bearing Bate's number DSW
5 014096 through 014097. It appears to be
6 a memo from Mr. Landwehr of the Anniston
7 plant to the medical department, dated
8 August 18th, 1970.

9 (Plaintiffs' Exhibit Number
10 Forty was marked for
11 identification.)

12 A. I'm confused, sir. You said to the
13 medical department --

14 Q. I'm sorry. From the medical department
15 to Mr. Landwehr. Thank you. Thank you
16 for clarifying that.

17 And I think you told us yesterday,
18 but could you just tell us who is
19 Mr. Landwehr?

20 A. Mr. Landwehr was the individual that
21 headed up the technical services
22 department at the Anniston plant.

23 Q. And this is written to him by

REGIONAL REPORTING SERVICE, INC.

1 Mr. Garrett of the medical department,
2 correct?

3 A. Correct.

4 Q. Have you ever seen this before?

5 A. Have I seen it, yes, sir.

6 Q. Okay. Do you recall when you last saw
7 it?

8 A. Just the other day.

9 Q. Is this -- What do you mean, just the
10 other day? When did you see it?

11 A. I was talking to our attorneys, as I
12 remember.

13 Q. And you reviewed this document with
14 them?

15 A. I believe I did. It looks very
16 familiar.

17 Q. Okay. In the last paragraph --

18 MR. PECK: Now we know he did
19 something with them.

20 Q. The last paragraph states, "Crockett
21 told me that if this PCB issue hits the
22 Alabama press, the Alabama Water
23 Improvement Commission would be forced

REGIONAL REPORTING SERVICE, INC.

1 to close Choccolocco Creek and the
2 Martin Logan Reservoir to commercial and
3 sport fishing unless we can prove that
4 the contamination level does not reach
5 the reservoir."

6 Were you aware that Crockett had
7 warned Mr. Garrett about the possible
8 closure of Choccolocco Creek in August
9 of 1970?

10 A. I was aware of it a few weeks after the
11 date of this memo.

12 Q. Did the AWIC close Choccolocco Creek at
13 any time?

14 A. Not that I'm aware of.

15 Q. Okay. Did Monsanto take any steps or
16 actions in response to this memo?

17 A. Well, certainly we were in the midst of
18 doing many things that would lead to
19 actions that would respond to this in
20 terms of how to sample, how to analyze,
21 where to sample, how to prevent further
22 generation of waste, all the -- The
23 whole program was aimed to this kind of

REGIONAL REPORTING SERVICE, INC.

1 end results.

2 Q. Okay. I'm done with that memo.

3 (Plaintiffs' Exhibit Number
4 Forty-one was marked for
5 identification.)

6 Q. I'm going to hand you two documents
7 together as the next exhibit and mark
8 them together as Exhibit Forty-one.
9 They are -- The first document -- It is
10 two pages. The first document bears
11 Bate's number DSW 013810. It appears to
12 be handwritten notes. And the second
13 document is page three of another
14 document. I don't have the first couple
15 of pages here with me. It is page three
16 of a document that is signed by
17 Mr. Landwehr, bearing Bate's number DSW
18 013776.

19 MR. PECK: These documents don't
20 originally go together, but
21 they are stapled now?

22 MR. ATKIN: They don't appear to
23 go together. Okay. The

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1 reason I put them together is
2 it appears that the
3 handwritten document -- the
4 text of that actually makes
5 its way into item 4(c) on
6 page DSW 013776.

7 Q. Do you see that?

8 A. I see some similarities, and yet it is
9 not exactly alike. I see a reference on
10 the handwritten copy of ten man days
11 compared to the typewritten on the
12 second page of twelve man days.

13 Q. Right. I was actually referring to the
14 first part, which states, "Clean up Snow
15 Creek." On the handwritten part it
16 states, "Clean up Snow Creek, PCB
17 removal from any specified area from our
18 fence to Choccolocco." And then it
19 says, "1971, avoid if possible, but
20 prepare for action."

21 And when you compare that to the
22 text under item 4(c) on page DSW 013776,
23 that states, "Clean up Snow Creek and

REGIONAL REPORTING SERVICE, INC.

1 area monitoring, PCB removal from any
2 area from our fence to Choccolocco,
3 avoid if possible, but be prepared for
4 action." That is the part I'm referring
5 to.

6 Does this indicate that this
7 handwritten document, DSW 013810, was in
8 fact written by Mr. Landwehr?

9 MR. PECK: Object to the form of
10 the question, speculation.

11 A. That I don't know, sir. It could be one
12 of Mr. Landwehr's staff.

13 Q. Do you recognize the handwriting on this
14 document?

15 A. No, I do not.

16 Q. Okay. Is it true, sir, that in 1971
17 Monsanto wanted to avoid cleaning up
18 Snow Creek if at all possible?

19 A. Not Monsanto, no.

20 Q. Well, Mr. Landwehr?

21 A. Somebody.

22 Q. Somebody at Monsanto?

23 A. Handwrote that thought on this first

REGIONAL REPORTING SERVICE, INC.

1 page.

2 Q. And that thought is actually also

3 expressed on the second page that is

4 signed by Mr. Landwehr, is it not?

5 A. That is true.

6 (Plaintiffs' Exhibit Number

7 Forty-two was marked for

8 identification.)

9 Q. Thank you. I hand you for

10 identification Papageorge Forty-two,

11 which is a one-page document bearing

12 Bate's number MONS 099126. It appears

13 to be a memo from W. R. Richard to N. W.

14 Farrar dated September 1st, 1971,

15 correct?

16 A. September 1st.

17 Q. September 1st. What did I say,

18 December?

19 A. December. You lost three months.

20 Q. I'm getting a little tired. I'm sorry.

21 September 1st, 1971. And you were a

22 recipient of this memo, correct?

23 A. I was.

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1 Q. Do you recognize this document?

2 A. I've seen it before, yes.

3 Q. Have you seen it recently?

4 A. No.

5 Q. Who was Mr. Farrar, again?

6 A. He was Dr. Richard's counterpart over in

7 the other business group involving PCBs.

8 Q. In the first paragraph -- Is it

9 Mr. Richard or Dr. Richard?

10 A. Doctor.

11 Q. -- Dr. Richard indicates the FDA was

12 asking for samples of Aroclor 5460, 1221

13 through 1262, 5060, and 5460.

14 Do you know why the FDA was asking

15 for samples of those Aroclors at that

16 time?

17 A. They were interested in the toxic

18 effects of these commercial chemicals.

19 Q. Did the FDA conduct any feeding studies

20 or teratogenic testing on these

21 Aroclors?

22 A. As best I recall, they started them, but

23 for some reason or other they were not

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1 deemed successful, and their results

2 were never published.

3 Q. Do you know why they weren't deemed

4 successful?

5 A. I do not.

6 Q. Was there a concern at Monsanto about

7 the FDA's request for Aroclor samples?

8 A. I don't think it's a concern, but it's

9 an observation that this is unusual for

10 the FDA to ask for industrial chemical

11 samples.

12 Q. Okay. In the second paragraph

13 Dr. Richard states, "This is a clear

14 signal that the chlorinated terphenyl

15 Aroclor 5460 is on the target list."

16 Do you know what Dr. Richard meant

17 by the "target list"?

18 A. I believe I do.

19 Q. Can you tell us?

20 A. Dr. Richard at that point in time

21 thought the target list was the

22 chlorinated biphenyls, the 1221 through

23 1262 types. That's his target list.

REGIONAL REPORTING SERVICE, INC.

1 And he is pointing out that now we see a

2 chlorinated terphenyl added to that

3 list.

4 Q. What did he mean by "target list"?

5 MR. PECK: Object to the form of

6 the question.

7 A. A list -- It's a list containing

8 materials of interest in this case to

9 the FDA, that they are going to conduct

10 some further studies on their own.

11 Q. So the terminology "target list," was

12 that the FDA's terminology?

13 A. No. It was Dr. Richard's terminology.

14 Q. Okay. At the end of the second

15 paragraph Dr. Richard states,

16 "Replacement products are indicated

17 unless you gentlemen think that the

18 above compounds will be medically

19 acceptable."

20 Do you know what Dr. Richard meant

21 when he said medically acceptable?

22 A. I can tell you my interpretation of

23 that, because when he says, "you

REGIONAL REPORTING SERVICE, INC.

gentlemen," I'm part of that group.

Q. Okay.

A. What it meant to me, I would consult with our medical department and get an opinion whether or not these industrial chemicals are hazardous or not; and if so, under what conditions and what uses should we continue making them.

Q. And was a determination made -- withdrawn. I'm sorry.

When he said replacement products, was he referring to replacement products for Aroclor 5460, or were all of the Aroclors mentioned in the memorandum?

MR. PECK: Object to the form of the question.

A. All of them, because it is plural, above compounds.

Q. And was a determination in fact made at some point in time as to whether or not these compounds were in fact medically acceptable?

A. Yes, it was made.

REGIONAL REPORTING SERVICE, INC.

Q. When was that determination made?

A. The animal studies conducted on the PCBs were completed in -- by 1972 and demonstrated that high levels of some of these materials could cause sicknesses. And it was not demonstrated that they were extremely toxic and hazardous. So medically speaking, not only within Monsanto but FDA, they were medically acceptable under proper usage conditions.

Q. In the notes, handwritten notes on the side of that memo --

A. I see them --

Q. Okay. Is it Dr. Farrar or Mr. Farrar?

A. Doctor.

Q. Dr. Farrar states that the marketing people told him that A1221 and A5460 are okay, perhaps this will change.

Do you know which marketing people Dr. Farrar was referring to?

A. These were the marketing individuals in the Monsanto group referred to as the

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plasticizer sales group.

Q. Okay. Do you know who they were?

A. There must have been thirty or forty of them. I don't propose to know them all. The field salesmen, their district managers, and the team leaders back in the St. Louis home office.

Q. Do you know who it was specifically that indicated that -- or gave the response that A1221 and A5460 were okay?

A. I don't know who he talked to.

Q. Okay. Do you know what Dr. Farrar meant when he said that 1221 and 5460 were okay?

A. I have an opinion.

Q. Could you offer it to us?

A. That it was okay because from his contacts with individuals and obviously conversations and what have you, he came back with the information that Aroclor 1221 and 5460 were not known to cause any kind of health problems by anybody. And if you recall, the 1221 was the

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monochloro biphenyl and the 5460 is a chlorinated terphenyl.

Q. Okay. And did Monsanto's position that 1221 and 5460 were okay ever change?

A. No. It stays the same.

Q. Okay. I'm done with that. And that brings us to Papageorge Exhibit Number Forty-three.

(Plaintiffs' Exhibit Number Forty-three was marked for identification.)

MR. PECK: It looks like

Plaintiffs' Exhibit

Forty-three is kind of -- the Bate's numbers just don't run together. It looks like an amalgamation. It looks like the first Bate's number is FGL 0100442, and the next stapled page is FGL 02406 - that is four maybe -- five, which is obviously not an exact consecutive page.

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MR. ATKIN: Right. Okay. Well,
why don't we do this:

We'll keep them together.

Q. You could look specifically at the last two pages.

A. I have glanced at them.

Q. Okay. Thank you. Do you know what this document is?

A. Yes.

Q. What is it?

A. This is a copy of a special undertaking between General Electric and Monsanto regarding the continued supply of polychlorinated biphenyls to General Electric Company.

Q. This is a hold harmless agreement?

A. That is an expression that is used to describe it, yes.

Q. Especially by lawyers. Were you involved at all in drafting this document?

A. No.

Q. Do you know who was?

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A. Not specifically. It was a legally developed document.

Q. Okay. Do you know when Monsanto first requested that its customers sign hold harmless agreements in connection with their purchase of PCBs?

A. It started in December of 1971, when they were first approached.

Q. Did Monsanto begin asking its customers to sign hold harmless agreements because it was concerned about being held liable for PCB-related injuries?

MR. PECK: Object to the form of the question.

A. Well, that was one of the concerns, but there were other concerns that were deemed much more important.

Q. What were the other concerns?

A. For example, it was sincerely believed that if a high official of vice president level in the customer's organization signed off a document like this, it's more likely that the customer

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and its people would be monitored by the top officials of the company in terms of what was being done to prevent PCBs from being misused, mishandled, on and on.

And also it was believed that if a vice president signed a document like this and his plants or his organization needed funding, like more doctors or more industrial hygienists or more environmental analysts, they would see to it that the funds and authority was given to pursue these projects that would be required to control PCBs. So it was at least a two-fold purpose. One was to get it in writing, a commitment, and the other one is to prod for the right kind of action.

Q. Okay. At the bottom of the first page -- Not the first page of that exhibit, the first page of the hold harmless agreement. It states that the buyer of PCBs will hold Monsanto harmless from any adverse effect of PCBs on humans.

REGIONAL REPORTING SERVICE, INC.

Do you see that?

A. I do.

Q. What adverse effects of PCBs on humans was Monsanto insisting it be held harmless for?

MR. PECK: Object to the form of the question.

A. Anything that would be alleged, real or imagined.

Q. Okay. I'm done with that. Thank you.

I hand you what will be marked as Papageorge Forty-four for identification. It's a document bearing Bate's number DSW 014379 through DSW 014382, which is a three-page document with a cover memo, a document written by Mr. D. B. Hosmer, H-o-s-m-e-r, and numerous recipients, including Mr. Papageorge.

(Plaintiffs' Exhibit Number Forty-four was marked for identification.)

A. That is correct.

REGIONAL REPORTING SERVICE, INC.

1 Q. Do you recall seeing this memo before?
 2 A. Yes, sir.
 3 Q. Okay. Do you recall when you last saw
 4 this memo?
 5 A. About a week ago.
 6 Q. Okay. Is that when you met with your
 7 attorneys?
 8 A. Yes, sir.
 9 Q. This is one of the documents that you
 10 reviewed in connection with the
 11 preparation for your deposition today?
 12 A. Yes, sir.
 13 Q. Who is Mr. Hosmer?
 14 A. At that point in time Mr. Hosmer was the
 15 individual in the organic chemicals
 16 division manufacturing unit that
 17 addressed, among several things, the
 18 environmental issues for that organic
 19 chemicals division.
 20 Q. Is he still with the company; do you
 21 know?
 22 A. No. He is deceased.
 23 Q. On the first page of text, which is DSW

REGIONAL REPORTING SERVICE, INC.

1 014380 --
 2 A. I have it.
 3 Q. -- Mr. Hosmer indicates that John White
 4 of the EPA requested a meeting with
 5 Monsanto. Do you know why?
 6 A. Do I know Mr. White?
 7 Q. No. Do you know why he requested a
 8 meeting?
 9 A. As best I recall, it had something to do
 10 with the FDA and its interest in PCBs in
 11 fish. And the Atlanta EPA was involved
 12 because this source of PCBs was presumed
 13 to be environmental as distinguished
 14 from animal feeds.
 15 Q. Okay. Now, subparagraph one on that
 16 page --
 17 A. I see it.
 18 Q. -- states that Mr. White had recommended
 19 that a suit be initiated against the
 20 Anniston plant for PCB emissions under
 21 the Federal Refuse Act, correct?
 22 A. That's what it states, yes.
 23 Q. And had emissions been detected at the

REGIONAL REPORTING SERVICE, INC.

1 Anniston plant that were in fact in
 2 violation of the Federal Refuse Act?
 3 A. Not to my knowledge.
 4 Q. Well, did Mr. White represent that
 5 emissions had been detected from the
 6 Anniston plant that were in violation of
 7 the Federal Refuse Act?
 8 MR. PECK: Object to the form,
 9 lack of foundation.
 10 A. Yes, he did represent that.
 11 Q. In the next paragraph -- Withdrawn.
 12 Okay. In the first full paragraph
 13 on the second page, DSW 014381, do you
 14 see that?
 15 A. The first full paragraph?
 16 Q. The first full paragraph.
 17 A. The one that starts with, "There was
 18 considerable"?
 19 Q. Yes.
 20 A. I see that.
 21 Q. It states, "There was considerable
 22 discussion concerning the limiting level
 23 of PCB that should be permitted in the

REGIONAL REPORTING SERVICE, INC.

1 discharge. Mr. White suggested no
 2 detectable amounts." And it also
 3 indicates that Mr. Crockett and the
 4 Monsanto personnel pointed out that this
 5 was an undesirable approach.
 6 Were you -- You weren't at the
 7 meeting, were you?
 8 A. I was not.
 9 Q. Why did Monsanto and Mr. Crockett feel
 10 that no detectable amount of PCBs was an
 11 undesirable approach?
 12 MR. PECK: Object to the form of
 13 the question.
 14 A. I can --
 15 MR. PECK: Go ahead.
 16 A. One can reach the no detectable amount
 17 by introducing extreme volumes of water,
 18 diluting the concentration down to the
 19 point where the instrumentation will
 20 show no detectable amount. This does
 21 not reduce the amount of PCBs that are
 22 there and escaping the system.
 23 So it was suggested, if you read

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1 further on, there is a better way to
2 control the PCBs to the environment,
3 which would include reducing the water
4 volume and also reduce the concentration
5 down to a detectable amount so you can
6 manage it and you know what you are
7 losing rather than losing it because the
8 technology can't detect it.

9 Q. In the paragraph that is paragraph one
10 on that page --

11 A. Yes.

12 Q. It says, "As a result of the meeting the
13 following agreements were reached: One,
14 Mr. Crockett and Mr. White will agree
15 upon an interim permissible level for
16 PCB emissions to be provided in the
17 Refuse Act permit. Obviously,
18 Mr. Crockett will press for a number in
19 excess of our zero point three pounds
20 per day current level." Do you see
21 that?

22 A. I do.

23 Q. How did Monsanto know that Mr. Crockett

REGIONAL REPORTING SERVICE, INC.

1 was going to press for an emission limit
2 above Monsanto's then existing emissions
3 limit?

4 A. Since I wasn't there, sir, I don't know
5 personally.

6 Q. Okay. Did you ever have any discussions
7 with anyone about that, about what is
8 written right here?

9 A. I have had discussions, yes. And I was
10 led to believe that Mr. Crockett was
11 preferring starting at a higher level in
12 case he was forced to drop it.

13 Q. Okay. Did Monsanto coordinate its
14 strategy regarding this meeting with
15 Mr. Crockett before the meeting took
16 place?

17 MR. PECK: Object to the form of
18 the question.

19 A. Did Monsanto do what, sir?

20 Q. Coordinate its strategy regarding this
21 meeting with Mr. Crockett before the
22 meeting took place?

23 MR. PECK: Object to the form of

REGIONAL REPORTING SERVICE, INC.

1 the question.

2 A. That is normal procedure, sir. If there
3 is a group of individuals representing
4 Monsanto, they kind of get together and
5 describe what they are expected to do
6 when they get to a meeting and what each
7 of them knows about the issue and what
8 each one can contribute. So there is
9 coordination of a team effort, if you
10 will.

11 MR. PECK: He is asking you

12 whether or not --

13 Q. I'm asking you whether or not they got
14 together with Mr. Crockett, not whether
15 they got together themselves.

16 A. I didn't understand your question.

17 MR. ATKIN: Thank you for
18 clarifying that.

19 A. Oh, that I don't know.

20 Q. The subparagraph three on that page
21 states, "A summary report outlining our
22 past work and future plans will be
23 written and sent to the EPA office via

REGIONAL REPORTING SERVICE, INC.

1 Mr. Crockett's office." Do you see
2 that?

3 A. I do.

4 Q. Do you know if such a summary was ever
5 sent?

6 A. I know a summary was sent to
7 Mr. Crockett's office.

8 Q. Do you know why it was sent to
9 Mr. Crockett's office before going to
10 the EPA? Why wasn't it sent directly?

11 A. Well, we got the impression that
12 Mr. Crockett was representing the PCB
13 activity in the state, and he's the one
14 that had the contact with EPA. And we
15 felt that we would continue that
16 procedure of working through
17 Mr. Crockett's office.

18 Q. Okay. Do you know if Mr. Crockett
19 reviewed or commented on the summary
20 before it actually went to the EPA?

21 MR. PECK: Object to the form of
22 the question.

23 A. I do not know.

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1 Q. Do you know if Mr. Crockett made any
2 suggestions, any suggested changes to
3 the summary before it was sent to the
4 EPA?
5 A. I do not know.
6 Q. Paragraph -- subparagraph four states
7 that Monsanto's monthly reports on PCB
8 effluents would be sent to Mr. White via
9 Mr. Crockett.
10 Were such monthly reports ever
11 sent to Mr. White? Do you know?
12 A. I do not.
13 Q. And obviously you don't know whether
14 Mr. Crockett ever reviewed or commented
15 on monthly reports before they were sent
16 to the EPA?
17 A. I do not.
18 Q. Or made any suggested changes to the
19 reports before they were sent to the
20 EPA?
21 A. I don't know that.
22 Q. Okay. On the last page of the document,
23 the third to last paragraph, it states

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1 -- Mr. Hosmer is writing -- "It was
2 suggested by Mr. White that it might be
3 desirable to dredge Snow Creek. I
4 believe we convinced him that this is
5 undesirable."
6 Do you know why Mr. White believed
7 that Snow Creek should be dredged?
8 MR. PECK: Object to the form of
9 the question.
10 A. As I understood it at the time,
11 Mr. White was really just beginning to
12 understand the PCBs and how they be
13 behave in the environment. And he
14 assumed that PCBs were like most other
15 materials, you just scoop them up and
16 you can get rid of them. Well, PCBs are
17 not that -- What is the word I want?
18 They are not that easy to deal with.
19 And the concern amongst those who had
20 experienced PCBs to a greater extent, it
21 appeared to be a case of if one went in
22 there with bulldozers and shovels and
23 what have you, you would stir up those

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1 PCBs and create further problems, and
2 you ended up with a collection of
3 diggings that had to be taken somewhere
4 else. So all you would do is transplant
5 your problem rather than solve it.
6 Q. So this -- Withdrawn.
7 And that is why in your view
8 Monsanto believed that dredging Snow
9 Creek was undesirable; is that right?
10 A. Dredging Snow Creek with the technology
11 known at the time, it was perceived to
12 be undesirable and preferably leave it
13 alone, don't disturb it, and you won't
14 hurt anything.
15 Q. Was Snow Creek ever dredged?
16 A. I'm not so informed. I don't know.
17 Q. I'm done with that.
18 (Plaintiffs' Exhibit Number
19 Forty-five was marked for
20 identification.)
21 Q. I'm going to hand you what is being
22 marked as Papageorge Forty-five for
23 identification. This is a document

REGIONAL REPORTING SERVICE, INC.

1 bearing Bate's number ACM 002501 through
2 ACM 007294.
3 MR. PECK: Well, the document --
4 The Bate's number --
5 MR. ATKIN: There aren't that many
6 pages. That would have to be
7 two hundred pages, right?
8 MR. PECK: Yeah. The page numbers
9 take a jump, it looks like,
10 at ADM -- It looks like you
11 have got ADM 002501 through
12 ADM 002504, and then we
13 change to a new Bate's number
14 set that goes from ADM
15 007275, it looks like,
16 successively to 007295.
17 MR. ATKIN: Right. It looks like
18 there are two documents
19 again.
20 MR. PECK: Did you want to keep
21 them together?
22 MR. ATKIN: Well, I think so,
23 because I think that the

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latter documents are
 attachments perhaps that
 Mr. Papageorge forwarded on,
 but I guess we'll ask him and
 see if it becomes clear.

MR. PECK: Okay.

Q. Let me ask you first about the first
 document, which is a January 18th, 1974
 letter that you wrote to the hearing
 clerk of the U.S. EPA.

A. Yes.

Q. Do you recognize this letter?

A. I do.

Q. Do you recall writing it?

A. Yes, sir.

Q. Is that your signature on page four?

A. It is.

Q. Why did you write this letter?

A. It was in response to a proposal in the
 federal register in which they solicited
 comments from interested parties.

Q. On page one, in the third paragraph, you
 state that Monsanto felt that the EPA

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proposals were unrealistically
 restrictive, not supported by currently
 available data, and not warranted under
 the present conditions of manufacture
 and use. Do you see that?

A. Yes, I do.

Q. Which EPA proposals were you objecting
 to?

A. I'd have to see the federal register to
 read this subpart one referred to. I
 don't remember the details on that.

Q. Okay. Do you recall -- Without getting
 into all the specifics, do you recall
 what it was about the proposal that you
 felt was unrealistically restrictive?

A. Not specifically. I recall their
 attempt to define what PCBs are, and it
 was not scientifically accurate, as I
 remember. And then there was, as best I
 recall, a proposal regarding the amount
 of PCBs which would be tolerated in
 water samples. And it appeared that the
 -- that requirement couldn't be met with

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the technology of analytical chemistry
 available. Those are the -- some of the
 thoughts that came out. But I'd have to
 see the write-up to be able to be more
 specific.

Q. Okay. Do you recall what then existing
 conditions of manufacture and use made
 the proposals objectionable to Monsanto?

A. Not, again, in detail. I'd have to see
 the listing. As I recall, they were in
 a way discounting the beneficial
 characteristics of the PCBs, like fire
 resistance and how effective they were,
 for example, in electrical uses, without
 explosions and the like.

Q. How does that relate to Monsanto's then
 existing conditions of manufacture and
 use?

A. Well, the use here is for Monsanto and
 its customers. The manufacture would
 apply to Monsanto. There are two
 populations involved here.

Q. Do you recall how the proposal was

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deemed objectionable because of the
 conditions of manufacture by Monsanto?

A. What about the proposal?

Q. I'm sorry.

A. As best as I recall, it had to do with
 the requirement that any water
 associated with the process would have
 such a level of PCBs that the analytical
 methodology would not be able to detect.
 That is just one example of the kinds of
 things they were referring to.

Q. Okay. At the bottom -- Rather, at the
 top of page two, you state that Monsanto
 wanted to testify regarding its
 objections to the EPA proposals,
 correct?

A. It does.

Q. Okay. Did Monsanto ever testify at a
 hearing on those proposals?

A. Yes, sir.

Q. Who testified on behalf of Monsanto?

A. If I recall correctly, I think I was the
 one.

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- 1 Q. Okay. Do you recall when?
- 2 A. No, I don't.
- 3 Q. Do you recall what the substance was of
- 4 your testimony?
- 5 A. Again, not in detail. But I do recall
- 6 proposing the ten parts per billion
- 7 level of detection and the -- I'm trying
- 8 to also recall -- I think we commented
- 9 on the analytical methodology and
- 10 offered copies of Monsanto's
- 11 methodology.
- 12 Q. Do you recall what the EPA's response
- 13 was to your testimony?
- 14 A. Not in detail, but it was favorable.
- 15 They listened.
- 16 Q. Did they change their proposals in any
- 17 way?
- 18 A. To a degree, yes, they did. They did
- 19 not go back to their original. They did
- 20 modify it as a result of these hearings;
- 21 not just Monsanto, but others that were
- 22 there. So I'm under the impression that
- 23 some of what we said impressed them

REGIONAL REPORTING SERVICE, INC.

- 1 enough for them to reconsider.
- 2 Q. Do you recall specifically which aspects
- 3 of the proposed regulations were
- 4 changed?
- 5 A. Not really. I'd have to see the final
- 6 regulations.
- 7 Q. Now, attached to this letter, the second
- 8 document, is a -- Not that letter the
- 9 next document. I'm sorry. Keep going.
- 10 No. The other way. Right -- are
- 11 minutes of meeting on proposed PCB
- 12 effluent standards.
- 13 A. I see it.
- 14 Q. You were the chairman of that meeting,
- 15 correct?
- 16 A. I was.
- 17 Q. Did Monsanto organize that meeting?
- 18 A. No. The National Electrical
- 19 Manufacturers Association was the host
- 20 group.
- 21 Q. Was Monsanto a member of that
- 22 organization?
- 23 A. No.

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- 1 Q. On page four of the minutes, which is
- 2 Bate's number ADM 007284 --
- 3 A. I have it.
- 4 Q. -- Dr. Tucker of Monsanto indicates that
- 5 "Researchers other than Monsanto have
- 6 found bacterial degradation of PCBs and
- 7 that PCBs have been found to undergo
- 8 metabolism in both avian and
- 9 mammalian animals." Do you see that?
- 10 A. I do.
- 11 Q. Do you know what other research
- 12 Dr. Tucker was talking about when he was
- 13 talking about researchers other than
- 14 Monsanto?
- 15 A. Not at the moment. I don't recall.
- 16 Q. Okay. Do you recall whether the
- 17 degradation and metabolism effects that
- 18 Dr. Tucker was talking about were found
- 19 for all of the PCB products that
- 20 Monsanto was manufacturing?
- 21 A. Well, portions of all the products.
- 22 Q. What do you mean by that?
- 23 A. There are components within these

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- 1 commercial mixtures that were affected,
- 2 but not all of the PCBs that were
- 3 present were affected.
- 4 Q. Okay. We can go on to the next
- 5 document.
- 6 MR. PECK: Can we take a break?
- 7 MR. ATKIN: Absolutely. Take a
- 8 break.
- 9 (A break was taken.)
- 10 MR. ATKIN: We are going to mark
- 11 Papageorge Forty-six for
- 12 identification. That is a
- 13 document bearing Bate's
- 14 numbers -- well, I'm sorry --
- 15 a document bearing Bate's
- 16 numbers -- beginning 11 --
- 17 I'm sorry -- 1006 --
- 18 MR. PECK: I think what is wrong
- 19 is there is a number cut off,
- 20 a number of numbers cut off.
- 21 MR. ATKIN: Right. Why don't we
- 22 use the other Bate's
- 23 designation? There is

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another designation of smaller numbers, a document -- This is an affidavit of Mr. Papageorge bearing Bate's numbers 175 through 189. And the affidavit is sworn to on March 14th, 1974. (Plaintiffs' Exhibit Number Forty-six was marked for identification.)

THE WITNESS: I have briefly reviewed the documents.

Q. Okay. Do you recognize it?

A. I do.

Q. Do you recall making this affidavit?

A. I do.

Q. Did you draft it yourself?

A. I had help.

Q. Who helped you?

A. Dr. Tucker for the analytical portions, Elmer Wheeler with the toxicity data.

Q. Did you have any help from legal

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drafting this document?

A. I let them see drafts of it as I was developing and asked for their comments. I don't recall any sections that they modified.

Q. Did they give you their comments?

A. Yes.

Q. Okay. The primary purpose of this affidavit was for Monsanto to set forth objections to the proposed federal regulations on PCBs, correct?

A. The primary purpose was to comment, and they turned out to be objections.

Q. Okay. On the bottom of page two, the last sentence on page two, you state, "We recommend studies be conducted to obtain the relevant data and that effluent standards be established which are appropriate for the unique conditions existing at each point source."

Were studies ever undertaken to obtain the data to which you were

REGIONAL REPORTING SERVICE, INC.

referring?

A. In 1974 there were no further studies by anyone.

Q. Okay. Were effluent standards set for the unique conditions existing at each point source?

A. No.

Q. On page four of the document, in the third paragraph, you point out that as of 1974 there were forty million pounds of PCB being manufactured in the U.S., compared to eighty million pounds prior to 1971. And you state that, in quote, "This lends perspective to the current debate over modest losses of PCBs to waterways." Do you see that?

A. Yes.

Q. What did you mean by that?

A. The reference -- The inference here is that the forty million pounds still being sold at that point in time were contained in systems that were considered to be closed systems. By

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closed systems, it was understood that the PCBs in the system would not be permitted to enter the environment. So with that kind of application, it does lend itself to a perspective regarding losses to waterways that didn't exist when PCBs were used in paints and sealants and on and on.

Q. Okay. And what did you mean when you said there were modest losses of PCBs to waterways?

A. Well, that is the realistic way to describe industrial chemical. You can't say zero losses. By modest losses, it indicates small amounts.

Q. Which waterways were you referring to?

A. No particular type. If you mean lakes or rivers, it is just in general.

Q. Okay. Let me ask you this: Did you believe that the PCB contamination of Choccolocco Creek and Snow Creek were modest?

MR. PECK: Object to the form of

REGIONAL REPORTING SERVICE, INC.

the question.

A. In that day and age, yes.

Q. What do you mean by that?

A. I associate the PCBs in Choccolocco Creek with the PCBs that were generated, created, produced over decades from the 1930s to the 1960s. With the understanding that existed in that period, the PCBs that were introduced into the environment were still perceived to be modest since no effects were noted. They were perceived to be innocuous industrial chemicals out there in the river.

Q. Okay. That's all I have on that document, which brings us to Papageorge Forty-seven.

(Plaintiffs' Exhibit Number Forty-seven was marked for identification.)

MR. PECK: Are you going to identify it?

MR. ATKIN: Yes. I'm sorry.

REGIONAL REPORTING SERVICE, INC.

Two-page document bearing Bate's number DSW 018254 and DSW 018255. It is a letter from Mr. Papageorge to Mr. D. E. Cavanaugh dated July 6, 1970.

Q. Do you recognize this document, sir?

A. I do, yes.

Q. Do you remember writing it?

A. Yes.

Q. What prompted you to write this letter?

A. In the summer of 1970 I visited plants that used PCBs in electrical equipment manufacture. And while visiting this particular company plant, Espey Manufacturing Company in Saratoga Springs, New York, I was requested to put in writing a summary of the topics we discussed. And this was my attempt to do so.

Q. When you say you were requested to prepare a summary, who requested that?

A. I don't recall if it was Mr. Cavanaugh

REGIONAL REPORTING SERVICE, INC.

himself or one of his associates. I don't know.

Q. If the first paragraph it states, "Last month when Randy Graham and I visited your plant to discuss the PCB problem, we did not intend to cause undue alarm or create any panic concerning the use and handling of polychlorinated biphenyls."

Did you have a sense from Mr. Cavanaugh that you had in fact caused undue alarm or created panic concerning the use and handling of PCBs?

A. I don't recall if it was Mr. Cavanaugh, but somebody in his organization expressed this concern.

Q. In the second paragraph you state that Aroclors do affect some species of birds and marine life. Do you see that?

A. Yes.

Q. Was that information ever conveyed by Monsanto to the residents of Anniston, Alabama?

REGIONAL REPORTING SERVICE, INC.

A. No.

Q. On page two of the letter, in the second paragraph, you state that unusable Aroclors should be disposed of by incineration. Do you see that?

A. Yes.

Q. Is incineration the most effective method of disposing of PCBs?

A. Under the proper conditions, yes.

Q. In that same paragraph you caution that improper incineration of PCBs can result in the production of highly toxic materials. What types of highly toxic materials can be produced by the improper incineration of PCBs?

A. Well, as I understood it, there are many chemicals that could be formed when you have of course carbon, hydrogen, chlorine, and oxygen. And depending of course on the rates of destruction and the amount of oxygen present and the temperatures, one could get a real mixture of chemicals.

REGIONAL REPORTING SERVICE, INC.

- 1 Q. Are you talking about chemicals such as
2 furans?
3 A. That is an example, yes.
4 Q. And dioxins?
5 A. Dioxins, yes.
6 Q. Okay.
7 A. And in this instance, at that point in
8 time, I was -- I'm going to call it
9 overly conservative in terms of guessing
10 that the worst would happen in order to
11 avoid anything happening.
12 Q. Now, you also indicate in this letter it
13 is also important that contamination of
14 the atmosphere be eliminated, correct?
15 A. Certainly.
16 Q. Jumping back for a second, when you
17 talked about the types of the certain
18 highly toxic materials can be produced
19 by improper incineration of PCBs, does
20 that also hold true that certain highly
21 toxic materials can be created during
22 the production of PCBs?
23 A. First let me correct something. I don't

REGIONAL REPORTING SERVICE, INC.

- 1 know that I said they can be produced --
2 will be produced. I said may yield
3 materials.
4 Q. Okay.
5 A. Because it was a theory rather than a
6 fact at this point in time.
7 Now, you asked if highly toxic
8 materials can be produced during
9 manufacture?
10 Q. To use your terminology, why don't we
11 say "may be yielded."
12 A. May be yielded. It is possible if the
13 operation isn't controlled properly, too
14 much time is taken, and the temperature
15 is too high, again, all the factors that
16 should be controlled are not, you are
17 going to end up with something other
18 than the PCB you are looking for.
19 Q. Okay. That's fine. The next document,
20 this is Papageorge Forty-eight for
21 identification. It bears Bate's numbers
22 GSW 009731 through DSW 009734.
23 (Plaintiffs' Exhibit Number

REGIONAL REPORTING SERVICE, INC.

- 1 Forty-eight was marked for
2 identification.)
3 A. I have looked at it, scanned it, yes.
4 Q. This is a 1970 press release issued by
5 Monsanto?
6 A. Yes.
7 Q. Do you recognize this?
8 A. Yes.
9 Q. Did you participate in the drafting or
10 approval of this press release?
11 A. Yes.
12 Q. What was the nature of your
13 participation?
14 A. It was accomplished really by my
15 person-to person discussion with Mr.
16 E. V. John.
17 Q. Who was Mr. John?
18 A. He was the public relations
19 representative with Monsanto.
20 Q. Is he still with the company?
21 A. No.
22 Q. Do you know when he left?
23 A. Oh, about the mid '70s.

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- 1 Q. Do you know if he is still alive?
2 A. I don't know.
3 Q. Okay. On page two it indicates that,
4 "Commenting on a recent report that PCB
5 can induce birth defects in animals,
6 Minckler said" -- By the way, who is
7 Mr. Minckler?
8 A. He was the general manager and was a
9 vice president of the organic chemicals
10 division of Monsanto Company.
11 Q. "Mr. Minckler said, 'Monsanto is not
12 aware of any scientific data that
13 indicates polychlorinated biphenyls may
14 cause birth defects.'" Was that a true
15 statement --
16 A. Yes.
17 Q. -- at that time?
18 A. Yes.
19 Q. And on page four of the press release it
20 states that Monsanto's incineration
21 system could break down PCBs into
22 harmless materials, correct?
23 A. Correct.

REGIONAL REPORTING SERVICE, INC.

1 Q. In the next to last paragraph it
2 indicates Monsanto stated that the loss
3 of PCB from our manufacturing plants has
4 been negligible.

5 That wasn't a true statement, was
6 it?

7 A. Why not? It was not a storm of PCBs
8 flowing down the city streets. I don't
9 know what you mean by not negligible.

10 Q. What do you mean by negligible?

11 A. An amount that doesn't result in any
12 known harm.

13 Q. Do you know what the total amount of
14 PCBs that were lost in Anniston over the
15 years was?

16 A. I thought we answered that earlier. I
17 don't know.

18 Q. I'm done with that. How did I refer to
19 it, Forty-eight -- Let's call that --

20 (Discussion held off record.)

21 (Plaintiffs' Exhibit Number

22 Forty-nine was marked for
23 identification.)

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1 Q. This is Bate's numbers NEV 003895
2 through 003896, a two-page document, a
3 letter, from Mr. Papageorge to
4 Mr. Viland, V-i-l-a-n-d, dated October
5 1st, 1970, with CCs to -- with BCs to
6 Mr. Benignus and Mr. Graham.

7 Do you recognize this?

8 A. I do, yes, sir.

9 Q. Do you remember writing it?

10 A. Yes, sir.

11 Q. When was the last time you saw this
12 letter?

13 A. I'm sorry?

14 Q. I'm sorry. When was the last time you
15 saw this letter?

16 A. I don't know specifically.

17 Q. It wasn't in the last week, was it?

18 A. No. A half a dozen years ago. I just
19 don't recall.

20 Q. That's fine. In the second paragraph,
21 you mention a Dr. Loughry,

22 L-o-u-g-h-r-y. Do you know who he was?

23 A. He was a scientist with the Pennsylvania

REGIONAL REPORTING SERVICE, INC.

1 Department of Health, I believe, or some
2 regulatory agency that had to do with
3 water and landfills and the like.

4 Q. Now, is it accurate to say that Monsanto
5 was interceding with Mr. -- that you
6 were attempting to intercede with
7 Dr. Loughry on behalf of Westinghouse to
8 obtain permission for Westinghouse to
9 dispose of PCB wastes in a Pennsylvania
10 landfill?

11 A. I was asked to.

12 Q. Who asked you to do that?

13 A. Mr. Viland.

14 Q. At the bottom of the first page and on
15 to the top of the second page, you
16 discuss a study that was undertaken by
17 Monsanto of soil in which PCBs were
18 deposited approximately thirty years
19 earlier. Actually, it is thirty-two
20 years earlier, correct?

21 A. Yes.

22 Q. The results show on page two -- the
23 results shown on page two indicate that

REGIONAL REPORTING SERVICE, INC.

1 after thirty years the Aroclor 1242 was
2 still present in the soil, correct?
3 A. Correct.
4 Q. Isn't it fair to say, Mr. Papageorge,
5 similarly, that the PCBs that are
6 present at Mars Hill Missionary Baptist
7 Church in the soil will be present there
8 for decades?

9 MR. PECK: Object to the form of
10 the question. It calls for
11 speculation.

12 A. You can't draw a direct analogy because
13 the environment is different in terms of
14 what microbes are in the soil, what
15 plant growth is involved, and all the
16 other factors. So I cannot predict how
17 long it will last. I don't think
18 anybody can.

19 Q. Okay. The last sentence, you state,
20 "Apparently we do not have anyone within
21 the Monsanto organization who can talk
22 Dr. Loughry's language." Do you see
23 that?

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1 A. I do.
 2 Q. What did you mean by that?
 3 A. It meant that I couldn't communicate
 4 with Dr. Loughry in a way that I
 5 believed he understood what our needs
 6 were and how he could cooperate, nor did
 7 I get from him any indication he was
 8 willing to try.
 9 Q. You found him to be very opinionated
 10 regarding the types of wastes he would
 11 tolerate in the landfill, correct?
 12 A. He was -- Yes, he was very opinionated.
 13 Q. And he insisted that he had to have
 14 research data on the behavior of PCBs on
 15 various Pennsylvania soils over long
 16 periods of time before he would allow
 17 them to be introduced to a landfill in
 18 Pennsylvania, correct?
 19 A. That is correct.
 20 Q. Let me give you what will be marked as
 21 Papageorge Fifty for identification.
 22 For identification purposes, this
 23 is a memo or a letter from D. B. Hosmer

REGIONAL REPORTING SERVICE, INC.

1 to Mr. Papageorge, dated August 11th,
 2 1971, with a cc to Mr. John. Have you
 3 had a chance to look at that?
 4 (Plaintiffs' Exhibit Number
 5 Fifty was marked for
 6 identification.)
 7 A. I have.
 8 Q. Do you recognize this document?
 9 A. I do.
 10 Q. Do you recall receiving it?
 11 A. Yes.
 12 Q. Have you reviewed it any time in the
 13 recent past?
 14 A. No.
 15 Q. In the first paragraph, Mr. Hosmer
 16 states that he was contacted by a John
 17 Piccorello of *Science Magazine*
 18 concerning PCBs?
 19 A. Yes.
 20 Q. And that Piccorello had asked about the
 21 incident at East Coast Terminals.
 22 What was the incident at the East
 23 Coast Terminals that was being referred

REGIONAL REPORTING SERVICE, INC.

1 to here?
 2 A. East Coast Terminals is a facility
 3 located in North Carolina, as I
 4 remember, which received fish meal.
 5 Q. I'm sorry. Received what?
 6 A. Fish meal from Peru and introduced it
 7 into a heat treating system to
 8 pasteurize it. The system was heated
 9 with PCB type fluid.
 10 The material, as it was processed,
 11 was conveyed by screw conveyers in
 12 troughs that were jacketed. And between
 13 the trough and the outer jacket the
 14 heated PCB fluid would circulate. And
 15 the material as it traversed through
 16 this system would be heated long enough
 17 to pasteurize out the other end.
 18 A leak developed between the outer
 19 jacket and the trough, and PCBs were
 20 introduced into the fish meal. The
 21 operators of the unit continued to
 22 operate. The fish meal of course
 23 contained PCBs now. It was eventually

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1 sold to poultry feed formulators, and in
 2 turn the poultry feed was sold to the
 3 poultry operators, and it got into the
 4 poultry. That is in general the
 5 situation that occurred.
 6 Q. What happened to the poultry?
 7 A. There were several symptoms noted. For
 8 one, the eggs wouldn't hatch. Another
 9 was the -- as I recall, that the
 10 chickens showed symptoms of illnesses,
 11 like water accumulation. I believe it's
 12 called edema by medical people.
 13 Q. Swelling?
 14 A. Swelling, because of water retention.
 15 In fact, I believe some of the poultry
 16 actually died. That's what happened to
 17 the poultry.
 18 Q. Do you know how many died?
 19 A. I don't recall anymore.
 20 Q. Okay. In the second paragraph of this
 21 memo --
 22 A. Yes.
 23 Q. It states as follows: "Finally,

REGIONAL REPORTING SERVICE, INC.

Mr. Piccorello brought up the testimony about PCBs in Washington. He said he understood that fish in a river in Alabama contained a great deal more PCBs than was permitted and our plant discharged to this river. Three hundred parts per million were quoted." Do you see that?

A. I do.

Q. Do you know what river in Alabama was being referred to here?

MR. PECK: Object to the form of the question.

A. Right or wrong, I assume he was referring to the Coosa River.

Q. Okay. And Hosmer states, "I said the stream was a creek, not a river. And there were many other discharges to it and doubted if I would want to wade in the creek for many reasons."

Is the Coosa River a creek?

A. Not in my understanding.

Q. What difference, if any, does it make if

REGIONAL REPORTING SERVICE, INC.

the body of water being referred to as being contaminated by PCBs was a creek or a river?

MR. PECK: Object to the form of the question, calls for speculation.

A. It doesn't.

Q. It doesn't make any difference?

A. In my way of thinking, there could be differences. Not all creeks are capable of supporting fish, for example; whereas a river is more capable of supporting several species. So when they are talking here about contaminated fish, I tend to think of a river as distinguished from a creek. That doesn't make it right, but that is the way it struck me.

Q. Okay. He refers to the fact that there were many other discharges to this -- what he calls a creek. Do you know what other discharges he is talking about?

A. I believe I do, yes.

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MR. PECK: Object to the form of the question.

Q. What are they?

MR. PECK: Object to the form of the question.

A. In the area in which the Anniston plant -- Monsanto's plant is located, it is an industrial area and had several foundries, for example, that spewed all kinds of materials, quench waters, acids, fires blazing with fumes going out in the atmosphere. It was quite a site at night at that time, a lot of industrial activity. So I can understand why Mr. Hosmer, who incidentally used to be a plant manager at Anniston, was aware of the conditions in that industrial area.

Q. Okay. And Mr. Hosmer indicated that he doubted if he would want to wade in the creek for many reasons, correct?

A. Yes, he did.

Q. And is that because the creek was so

REGIONAL REPORTING SERVICE, INC.

contaminated that he believed it was dangerous?

MR. PECK: Object to the form of the question, calls for speculation as to what Hosmer thought, whatever he did.

A. I can't speak for Mr. Hosmer, but it was an industrial area with many materials present in that neighborhood.

Q. Did you ever ask -- Did you ever discuss the contents of this letter with Mr. Hosmer?

A. Yes, I did. I don't remember the specifics any longer.

Q. Do you remember whether or not you discussed that specific statement about doubting whether he would want to wade in the creek?

A. He said, "Oh, man, there is all this stuff in there, Bill. It would chew the skin off of my legs." That kind of talk.

Q. Okay. Thank you. I hand you what will be marked for identification as

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Papageorge Fifty-one.

(Plaintiffs' Exhibit Number Fifty-one was marked for identification.)

Q. I hand you for identification what will be marked as Papageorge Fifty-one. And for identification purposes, this is a letter dated August 15th, 1971, with two pages of attachments. The designation -- the Bate's designation on the letter -- Here we go. The designation is MONS 0N899 -- 089995 through 089999. And I'd ask you to take a look at that, please, sir, if you could.

A. I have scanned the exhibit.

Q. Thank you. Do you recognize this letter?

A. I do.

Q. Did you receive a copy of this letter?

A. I don't believe I did.

Q. Okay. How do you recognize it?

A. I saw it the other week, last week.

Q. When you met with the attorneys?

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A. Yes.

Q. Okay. This letter appears to be a summary of a study of PCB levels in fish in Choccolocco Creek, the Coosa River, and its tributaries, correct?

A. Correct.

Q. And at the time, at the bottom of the first page, Dr. Buttkus indicates that --

MR. PECK: Suttkus.

MR. ATKIN: I'm sorry?

MR. PECK: Suttkus.

MR. ATKIN: Oh, Suttkus. Thank you.

Q. Dr. Suttkus indicates that fish exposed to PCBs did not show a decrease in PCBs in their system, is that correct, compared with the controls?

A. At the very bottom of the first page?

Q. Yes. The part that states, "This comparison shows that the fishes in the experimental area do not show a corresponding decrease in PCB residue

REGIONAL REPORTING SERVICE, INC.

levels, as Aroclor 1254, compared with the controls. There is a seventeen percent difference." Do you see that?

A. Yes.

Q. On page two of the letter, in the middle section, Dr. Suttkus refers to a second test in which fish exposed to PCBs similarly did not show a reduction in their PCB levels compared to the controls. Is that correct?

A. Yes. The word "similar" is your word. I was looking for it in the text.

Q. Okay.

A. That's correct.

Q. In fact, it indicates and states specifically, "However, the results are not good since both analyses show us that Aroclor 1254 residues have not reduced as we had hoped they would," correct?

A. That's what it states, yes.

Q. It then goes on to refer to analysis three, correct?

REGIONAL REPORTING SERVICE, INC.

A. It does.

Q. Okay. And the final sentence in that section states, "At this point we would have to say that the data are detrimental to Monsanto," correct?

A. It does say that, yes.

Q. Okay. On the last page of this letter it indicates that the fish in the Anniston area not only had high levels of PCBs but also were deformed, sick, and listless, correct, referring to the --

A. I do see it, yes.

Q. In the first paragraph?

A. That is correct.

Q. Specifically it states, "Of course visual observations won't tell us what caused these fishes to become deformed or sick, but we must consider the total observations as a crude indication that something is indeed wrong in these areas," correct?

A. Yes.

REGIONAL REPORTING SERVICE, INC.

1 Q. On the last page he also indicates that
 2 he understands that Monsanto's discharge
 3 of PCBs was decreased as compared to
 4 previous years, correct?
 5 A. Yes.
 6 Q. Do you know how much more extensive
 7 Monsanto's PCB releases to the river
 8 were before this period of time?
 9 MR. PECK: Object to the form of
 10 the question.
 11 A. I don't know how far back he goes, sir,
 12 to make his comparison.
 13 Q. Okay. In that same paragraph -- Well,
 14 hold on. In that same paragraph, he
 15 states -- Dr. Suttkus states, "Certainly
 16 you would not want to give the discharge
 17 figures" -- Well, he doesn't say -- "you
 18 would not want to give the figures in a
 19 news release," correct?
 20 A. It does say that, yes.
 21 Q. Were the discharge figures, the
 22 discharge levels that he is referring
 23 to, ever released publically in a news

REGIONAL REPORTING SERVICE, INC.

1 release?
 2 A. I think the local newspaper had
 3 reference to them, but I don't recall
 4 the specifics anymore.
 5 Q. Okay. That's all I have on that.
 6 We'll mark this for identification
 7 as Monsanto Exhibit Fifty-two.
 8 (Plaintiffs' Exhibit Number
 9 Fifty-two was marked for
 10 identification.)
 11 MR. PECK: Can we take a short
 12 break?
 13 MR. ATKIN: Sure.
 14 (A break was taken.)
 15 MR. ATKIN: Just for the record,
 16 we are going to adjourn the
 17 deposition of Mr. Papageorge
 18 at this time to be continued
 19 at another date upon
 20 agreement of counsel, given
 21 the hour of the day and the
 22 fact that counsel and
 23 Mr. Papageorge have to catch

REGIONAL REPORTING SERVICE, INC.

1 some planes and the fact that
 2 I have more questioning. We
 3 are going to pick this up at
 4 another time.
 5 (At 4:20 p.m. the deposition
 6 was continued to an
 7 unspecified date and time.)
 8
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1 I do hereby certify that the witness
 2 whose attached deposition was taken before me
 3 was by me first duly cautioned and sworn to
 4 tell nothing but the truth in the cause
 5 aforesaid; that the testimony contained herein
 6 was by me reduced to writing in the presence
 7 of said witnesses by means of stenography and
 8 afterwards transcribed by means of computer
 9 aided transcription. The foregoing is a true
 10 and accurate transcript of the whole of the
 11 testimony given by said witness, as aforesaid.
 12 I do further certify that I am not
 13 connected by blood or marriage with any of the
 14 parties or their attorneys or agents and that
 15 I am not an employee of any of them, nor
 16 interested in the matter of controversy.
 17 IN WITNESS WHEREOF, I have hereunto set
 18 my hand and affixed my notarial seal at
 19 Gadsden, Alabama, County of Etowah, this 15th
 20 day of April 1998.
 21
 22 Deborah Salers Garrett
 23 Certified Shorthand Reporter
 Registered Professional Reporter
 Notary Public, Alabama-at-Large
 My Commission expires: 3-7-2001

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-----	013384 147:23;	056671 60:20	2,5; 137:21;
'	149:8	056672 60:23;	141:5,11;
-----	013395 145:22;	61:22; 62:14	150:10,16;
'30 196:22	146:13	056673 59:3;	164:15;
'31 196:22	013408 140:20	64:1	295:1,18
'51 11:13	013409 140:20	089995 293:12	1260 151:5,15
'60s 215:10	013422 137:8	089999 293:12	1262 238:13;
'68 33:16,22;	013424 137:9	093668 152:2	239:23
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'86 19:9	014277 27:23	101 3:10	185:5; 269:8
'88 135:18	014281 28:1	103 3:10.5	152 3:15.5
'89 135:18	014284 28:19;	108 3:11	154 3:16
'96 126:10	36:9	10th 62:21;	157 3:16.5
'Monsanto	014289 40:8	171:21	15th 60:1;
280:11	014295 28:19	11 3:3.5;	62:15; 88:14;
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