

1 IN THE UNITED STATES DISTRICT COURT FOR
2 THE NORTHERN DISTRICT OF ALABAMA
3 EASTERN DIVISION
4

5 CASE NUMBER: CV-94-AR-778-E
6

7 GORDON AND RITTA SEWELL,
8 d/b/a Sewell's Fish Market,
9 Plaintiff,

10 vs.
11

12 MONSANTO COMPANY,
13 Defendant.
14

15 S T I P U L A T I O N

16 IT IS STIPULATED AND AGREED, by
17 and between the parties through their
18 respective counsel, that the deposition of
19 GERALD MILLER may be taken before Maurice
20 Lapidus, Commissioner and Notary Public, at
21 420 North 20th Street, Suite 3100,
22 Birmingham, Alabama, on March 15, 1995.

23 IT IS FURTHER STIPULATED AND

1 AGREED that the deposition to have the same
2 force and effect as if full compliance had
3 been had with all laws and rules of Court
4 relating to the taking of depositions.

5 IT IS FURTHER STIPULATED AND
6 AGREED that it shall not be necessary for
7 any objections to be made by counsel to any
8 questions, except as to form or leading
9 questions, and that counsel for the parties
10 may make objections and assign grounds at
11 the time of the trial, or at the time said
12 deposition is offered in evidence, or prior
13 thereto.

14 IT IS FURTHER STIPULATED AND
15 AGREED that notice of filing of the
16 deposition by the Commissioner is waived.
17
18
19
20
21
22
23

I N D E X

EXAMINATION BY: PAGE NUMBER:

MR. DAVIS 7

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GORDON AND RITTA SEWELL,
d/b/a Sewell's Fish Market,

Plaintiff,

vs.

MONSANTO COMPANY,
Defendant.

BEFORE: Maurice Lapidus,
Commissioner

A P P E A R A N C E S

BURR & FORMAN, by Mr. D. Frank
Davis, 3100 SouthTrust Tower, Birmingham,
Alabama, 35203, appearing on behalf of the
Plaintiff.

BURR & FORMAN, by Mr. Gary L.
Howard, 3100 SouthTrust Tower, Birmingham,
Alabama, 35203, appearing on behalf of the
Plaintiff.

BURR & FORMAN, by Ms. Pamela M.
Arenberg, 3100 SouthTrust Tower, Birmingham,
Alabama, 35203, appearing on behalf of the
Plaintiff.

LIGHTFOOT, FRANKLIN, WHITE &
LUCAS, by Mr. Adam K. Peck, 300 Financial
Center, Birmingham, Alabama, 35203,
appearing on behalf of the Defendant.

1 I, Maurice Lapidus, a Court
2 Reporter of Birmingham, Alabama, acting as
3 Commissioner, certify that on this date, as
4 provided by the Federal Rules of Civil
5 Procedure of the United States District
6 Court, and the foregoing stipulation of
7 counsel, there came before me at BURR &
8 FORMAN, 420 North 20th Street, Suite 3100,
9 Birmingham, Alabama, beginning at 9:05 a.m.,
10 GERALD MILLER, witness in the above cause,
11 for oral examination, whereupon the
12 following proceedings were had:

13
14 GERALD MILLER,
15 being first duly sworn, was examined and
16 testified as follows:

17
18 COURT REPORTER: Usual
19 stipulations?

20 MR. DAVIS: Yes, I guess.

21 MR. PECK: Yes. The only added
22 stipulation may be -- I was just thinking,
23 maybe we should put something in here that

1 although this is noticed as Sewell versus
2 Monsanto, it is being taken in Wilson versus
3 Monsanto and Dyer versus Monsanto as well.

4 Is that agreeable?

5 MR. DAVIS: Yes, that is
6 agreeable.

7
8 EXAMINATION BY MR. DAVIS:

9 Q. State your name for the record,
10 please sir.

11 A. Gerald W. Miller.

12 Q. And Mr. Miller, by whom are you
13 employed?

14 A. Self.

15 Q. Did you use to work for Monsanto?

16 A. That's correct.

17 Q. Can you tell us during what dates
18 you worked for Monsanto.

19 A. 1964 to 1971.

20 Q. I want to ask you some questions
21 about that. Before we do let me ask you
22 some general questions about your
23 educational background. What is it? What

1 I'm looking for is some kind of chemical
2 engineer out there. Are you some kind of an
3 engineer?

4 A. I'm a chemist.

5 Q. A chemist, well, I got close.
6 Tell me then about your educational
7 background.

8 A. I've got a BS and a master of
9 science from Mississippi State.

10 Q. Both in chemistry?

11 A. Yes.

12 Q. Summarize for us your work
13 experience prior to going to work for
14 Monsanto.

15 A. Spent approximately a year and a
16 half in Texas working for National Lead
17 Corporation. That was it.

18 Q. Then went to work for Monsanto?

19 A. Subsequently, yes.

20 Q. Did you say you worked there
21 between 1964 and '71?

22 A. Approximately.

23 Q. I don't want to spend a whole lot

1 of time with this, but it's been a long time
2 since you left Monsanto. Can you give us a
3 general idea what you've been doing since
4 you left Monsanto?

5 A. Been self-employed.

6 Q. Doing the same kind of thing ever
7 since you left?

8 A. Primarily during the ensuing years
9 I've been involved in a company called
10 Guardian Systems which provides analytical
11 chemistry services.

12 Q. What kind of chemical services do
13 y'all provide?

14 A. Commercial analytical chemistry.

15 Q. Do you have any employees -- how
16 big a company is it?

17 A. About 45.

18 Q. Done any work for Monsanto since
19 you left there?

20 A. We did a little work for them in
21 the late '70's.

22 Q. Hadn't done any work for them
23 since then?

1 A. Not to my knowledge.

2 Q. Since leaving Monsanto, have you
3 done any work in any way connected with
4 PCB's?

5 A. We routinely provide commercial
6 services of measuring PCB concentrations,
7 among other things.

8 Q. For what purposes?

9 A. Customer request.

10 Q. Can you give us some examples of
11 what would be a typical kind of request.

12 A. Please tell me the PCB content of
13 this oil, water, soil sample.

14 Q. Would this typically be in
15 connection with the sale of a piece of
16 property, or the cleanup of a piece of
17 property?

18 A. Very well could be.

19 Q. Since leaving Monsanto, have you
20 done any work or has your company done any
21 work, to your knowledge, concerning PCB's in
22 waterways, in streams and lakes, things like
23 that?

1 A. Not to my knowledge.

2 Q. What about PCB's present in any
3 landfills?

4 A. Quite probably.

5 Q. Do you remember personally being
6 involved in any of that?

7 A. No.

8 Q. I asked you whether y'all had done
9 any work for Monsanto. Let me ask you a
10 little bit broader questions on that. I
11 suppose it's possible that Monsanto could
12 place some PCB's somewhere else, in a city
13 dump, or community dump, or somebody else's
14 dump. Has your company done anything since
15 you left Monsanto in any way connected with
16 anything placed in anybody's dump by
17 Monsanto?

18 A. Not that I'm aware of.

19 Q. Had anything to do with any of
20 those dumps across the street from Monsanto?

21 A. No.

22 Q. Excluding Monsanto, do you know
23 anything about anybody putting any PCB's in

1 Logan Martin, or Choccolocco Creek, or Snow
2 Creek?

3 A. Not to my knowledge.

4 Q. When you started to work for
5 Monsanto, what was your job?

6 A. Laboratory chemist.

7 Q. When you left, what was your job?

8 A. Production supervisor of the
9 aroclor department.

10 Q. Did you have any other jobs
11 between those two?

12 A. I was chief chemist for awhile.

13 Q. Did you at some point become
14 involved in the question of discharges of
15 PCB's from the plant?

16 A. Yes.

17 Q. When was that?

18 A. When I was under their employ in
19 the late '60's.

20 Q. What was the first thing you heard
21 about those responsibilities? What do you
22 remember being told about what you were
23 supposed to do?

1 A. I don't remember the first thing I
2 was told.

3 Q. What responsibilities then did you
4 have with regard to the discharge of PCB's
5 from the plant?

6 A. What responsibility did I have
7 with regard to the discharge?

8 Q. Yes.

9 A. At that point in time I was in
10 charge of laboratory services, and most
11 probably we were requested to investigate
12 the concentration of PCB's in that
13 discharge. It goes without saying that my
14 memory from 25 years ago is not crystal
15 clear.

16
17 (Whereupon, Plaintiff's Exhibit 1 was
18 marked for identification and copy of
19 same is attached hereto.)

20
21 Q. I show you what's been marked
22 Exhibit Number 1 to your deposition. That
23 appears to be a document dated September 30,

1 1971. It says progress report on it, report
2 number one. Among other people, it appears
3 to have G.W. Miller's name at the top. Is
4 that you?

5 A. That's correct.

6 Q. Do you recall -- in the first
7 place you may be able to look at it and tell
8 -- do you know who created that report?

9 A. Signed by Bill Taffee.

10 Q. What was his job?

11 A. Bill Taffee was a supervisor in
12 the technical services department at that
13 time.

14 Q. That report appears to be dealing
15 with the question of how PCB's are getting
16 out of the plant. It appears to be dealing
17 with the sewer systems and things like
18 that. Were you ever -- I see your name on
19 that document, but I don't know how much
20 involvement you had in that. Were you ever
21 involved in investigating and remedying any
22 problem with PCB's being discharged by the
23 plant?

1 A. Yes.

2 Q. What involvement did you have in
3 that?

4 A. When I was in the laboratory
5 operation, I was involved in developing --
6 not developing, but implementing analytical
7 procedures for the detection and
8 determination of PCB and subsequent to that,
9 I was involved with operation of the PCB
10 production facility, and therefore, involved
11 with the control of discharge of PCB's from
12 that facility.

13 Q. Would it be fair to say at some
14 point during your employment there was a
15 greater emphasis over reducing the discharge
16 of PCB's from the plant?

17 A. Repeat that.

18 Q. Would it be fair to say that at
19 some point during your employment with
20 Monsanto, there was a greater emphasis on
21 reducing the discharge of PCB's from that
22 plant?

23 A. Than what?

1 Q. Than what you had had before?

2 A. Certainly.

3 Q. Do you remember about when that
4 was?

5 A. Began the late 1960's.

6 Q. Can you describe for us in general
7 what the situation was concerning the
8 discharge of PCB's from that plant prior to
9 that time.

10 A. From the standpoint of my
11 involvement, there had been no concerted
12 effort to measure nor determine the amount
13 of PCB discharge prior to this late '60's
14 period that we're talking about.

15 Q. Now, you say from the standpoint
16 of your involvement. I suppose if there had
17 been a concerted effort to measure or
18 determine the discharge of PCB, you would
19 have been aware of it in your position?

20 A. Quite probably.

21 Q. Do you have any recollection
22 concerning what the stimulus was for the
23 heightened interest in the late '60's in

1 looking at the discharges of PCB's?

2 A. I have some sketchy memory as to
3 what transpired.

4 Q. What do you remember?

5 A. In the mid to late '60's, a new
6 analytical technique was developed called
7 electronic chromatography detection. With
8 the advent of electronic capture, the
9 detection limit for many organic compounds
10 was lowered about three orders of
11 magnitude. Work that was published in the
12 late '60's indicated that -- as my memory
13 serves me -- D.D.T. ghost peaks were being
14 reported in the literature. This work was
15 being done in Scandinavia. These D.D.T.
16 ghost peaks were eventually identified as
17 PCB's.

18 Q. Some scientists in where, Sweden
19 you say?

20 A. I don't remember the country. I
21 know it was in Norway, the Scandinavians.

22 Q. Some scientists in some
23 Scandinavian countries were investigating

1 the presence of D.D.T. in wildlife; is that
2 the idea?

3 A. I don't remember.

4 Q. The equipment that you were
5 referring to permitted someone to measure
6 smaller amounts of PCB; is that the idea?

7 A. At lower concentrations.

8 Q. Did you participate then in
9 measuring the discharges from that plant?

10 A. Subsequently, yes.

11 Q. What did you find when you first
12 looked before you made any additional
13 remedial actions?

14 A. When we first looked, we didn't
15 have availability of analytical
16 instrumentation or methodology to employ
17 what we had become aware of from literature.

18 Q. What did you find when you first
19 looked? Might not have found everything you
20 ultimately would find, but what did you
21 find?

22 A. It was obvious that PCB had been
23 discharged from the plant.

1 Q. How was that obvious?

2 A. Very rudimentary analytical
3 procedures, visual observation.

4 Q. As far as visual observation, what
5 did you see?

6 A. PCB's in the discharge.

7 Q. You would actually look at the
8 discharge from the plant and see PCB's in
9 it?

10 A. Mixed with it.

11 Q. What would you see? I don't know
12 what PCB looks like, so what would you see?

13 A. Typically a PCB compound is a
14 heavy clear organic compound that's
15 admissible with water. Therefore, you can
16 see a separate phase with the water.

17 Q. So you were able to look at the
18 water coming out of the plant and tell by
19 looking at it that it contained PCB's?

20 A. At selected places at selected
21 times.

22 Q. Let's talk about at selected
23 places for example. Where could you see it?

1 A. In the plant discharge.

2 Q. You said selected places, so help
3 me out here.

4 A. It was not consistently present.
5 Therefore, a sample taken today, you may not
6 see any tomorrow, or you may see some.

7 Q. Where were you sampling it? Still
8 we're talking about before you did remedial
9 measures.

10 A. We were not sampling it at any
11 places, to my knowledge, other than the
12 plant discharge.

13 Q. When you say plant discharge,
14 where is that physically?

15 A. It's immediately in front of the
16 existing plant facility to the east.

17 Q. Where does that lead to?

18 A. Snow's Creek.

19 Q. Do you have any idea what the
20 approximate amount of PCB's being discharged
21 on a daily basis was prior to the time y'all
22 substituted additional remedial measures in
23 the late '60's?

1 A. I have no idea.

2 Q. Do you have any judgment at all on
3 that?

4 A. No idea.

5

6 (Whereupon, Plaintiff's Exhibit 2 was
7 marked for identification and copy of
8 same is attached hereto.)

9

10 Q. Show you now what's been marked as
11 Exhibit Number 2 to your deposition. It's
12 another one of these progress reports, this
13 one is report number two. The reason I hand
14 this one to you at this time is that this
15 one says in part, on the first page under
16 item summary, it says aroclor -- by the way,
17 aroclor is the same thing as PCB's?

18 A. Correct.

19 Q. "Aroclor losses from the Anniston
20 for the period April 15th through June 30th,
21 1970 averaged 16 pounds a day. This is a
22 considerable improvement over losses of over
23 250 pounds a day during a comparable period

1 during 1989".

2 MR. PECK: 1989?

3 Q. (BY MR. DAVIS) 1969, excuse me.

4 I don't know what the 250 pound number is.

5 It says actually over 250 pound number. I

6 don't know if that was before y'all started

7 some additional remediation numbers or after

8 y'all had already started them. Do you

9 remember anything about that?

10 A. No, I don't.

11 Q. Now, still -- and I know I'm

12 skipping around a little bit. But looking

13 back at Exhibit Number 1, there's some

14 references in Exhibit 1 to the condition of

15 some sewers. I wanted to ask you some

16 questions about that. What do you remember

17 about the condition of the sewers at the

18 plant prior to y'all doing some additional

19 things concerning PCB's in the late '60's?

20 A. The only memory I have of sewers

21 and the condition of sewers is in the

22 muriatic acid area of the plant, the sewers

23 were extremely corroded.

1 Q. Did those sewers carry PCB's?

2 A. It's possible they did, and
3 probable.

4 Q. Did the corrosion of those sewers
5 cause PCB's to leak into the ground?

6 A. I have no knowledge.

7 Q. Did y'all ever do any tests about
8 that?

9 A. Not to my knowledge.

10 Q. Did y'all ever look at the
11 question of whether any -- let me back up a
12 minute. Some of the sewers from the plant,
13 did some of the sewers go to the water
14 treatment plant -- sewage plant on
15 Choccolocco -- city sewage plant?

16 A. Some of the discharge from the
17 Monsanto facility in Anniston at this point
18 in time went to the city sanitary sewer
19 system which was subsequently treated again
20 by the City of Anniston.

21 Q. Did any of that discharge carry
22 PCB's?

23 A. Not to my knowledge.

1 Q. Did y'all ever look into that
2 question?

3 A. I don't remember having looked
4 into it. They were -- facilities that used
5 the city sewer system were separate and
6 remotely located from the production of
7 PCB's.

8 Q. Prior to the late 1960's, what
9 systems existed at Monsanto to keep PCB's--
10 or at least some PCB's from getting into
11 Snow Creek? Let me back up a minute. I
12 assume, as a general principal, that you
13 wanted to sell PCB's, not to release them
14 into Snow Creek. So I guess the system of
15 selling PCB's was a system that existed.
16 Were there other systems in place to prevent
17 PCB's from the plant getting into Snow
18 Creek?

19 A. The production facilities for PCB
20 were naturally designed and operated to
21 produce and contain the product which was
22 PCB. The wastes from that system, which
23 obviously contained PCB's, were treated for

1 acidity and solids removal prior to being
2 discharged.

3 Q. Did this treatment remove some of
4 the PCB's?

5 A. Certainly.

6 Q. Do you have any judgment on the
7 percentage?

8 A. No.

9 Q. Do you know whether we're talking
10 about 90 percent or ten percent?

11 A. I have no idea.

12 Q. What became of the solids that
13 were removed?

14 A. To the best of my knowledge, they
15 were transported to the plant landfill and
16 buried.

17 Q. What do you recall about how that
18 was done? Were they put in drums? Were
19 they put on a truck and taken over there and
20 dumped? How was that done?

21 A. Best of my memory, that was
22 accomplished with a backhoe and dump trucks.

23 Q. Where was that landfill located?

1 A. Immediately to the east and
2 perhaps a little south of the plant.

3 Q. What do you recall concerning that
4 landfill? By that, here's what I mean.
5 What do you remember -- was the landfill
6 lined with anything?

7 A. In the period of time I was
8 employed at Monsanto, I probably went to
9 that landfill one time. It looked like a
10 standard landfill. And to be honest with
11 you, I don't have any recollection of it
12 being lined, or unlined, or anything else
13 about it.

14 Q. Before we go too far, I want to
15 ask you a few questions about your knowledge
16 concerning PCB's. You had a chemistry
17 undergraduate degree, you had a master's in
18 chemistry. Did y'all study PCB's-- or did
19 you study PCB's in school?

20 A. No.

21 Q. When you came to work for
22 Monsanto, at the time you came to work for
23 Monsanto, had you ever dealt with PCB's

1 before in any way?

2 A. No.

3 Q. During the time you were employed
4 at Monsanto, did you receive any training of
5 any kind on the question of whether PCB's
6 are hazardous or not hazardous?

7 A. I'm sure I did.

8 Q. Do you remember anything about
9 that?

10 A. Primary things I remember about
11 PCB is that they were innocuous compounds,
12 they were persistent compounds. The primary
13 caution associated with them was to simply
14 wash them off of your body. In production
15 facilities most of the time you would
16 encounter it at very high temperatures,
17 therefore they presented a burn hazard -- a
18 physical burn hazard.

19 Q. By innocuous you were meaning to
20 say they were not hazardous materials?

21 A. That's correct.

22 Q. That's what you were told by
23 Monsanto during the time period you were

1 employed there?

2 A. That's correct.

3 Q. So if anybody in the general
4 public had asked you while you were employed
5 by Monsanto whether PCB's were hazardous,
6 you would have told them no?

7 A. That's correct.

8 Q. Did you in fact attend any
9 meetings of citizens around that area? Did
10 you go to any community meetings?

11 A. I don't recall having done so.

12 Q. During the time period you were
13 employed with Monsanto, did you ever talk to
14 any of the residents of the area around the
15 plant, or the areas around Snow Creek or
16 Choccolocco Creek about PCB's?

17 A. Not to my knowledge.

18 Q. Did you ever investigate any fish
19 kill on Choccolocco Creek?

20 A. I was involved to a very small
21 extent with a fish kill on Choccolocco
22 Creek.

23 Q. What caused the fish kill?

1 A. If memory served me, it was
2 associated with parathion production.

3 Q. Y'all let at least some parathion
4 into Snow Creek that had gone into
5 Choccolocco Creek?

6 A. I have no idea how it got there.

7 Q. Well, y'all made parathion; is
8 that correct?

9 A. Yes.

10 Q. You don't know anybody else in the
11 area that makes parathion do you?

12 A. Not to my knowledge. There were
13 other pesticide and herbicide manufacturers
14 in the area though.

15 Q. But your recollection is it was a
16 parathion product?

17 A. If it was associated with
18 parathion, and it came from Monsanto, it
19 would have been a parathion product.

20 Q. But isn't that your recollection
21 that the fish kill was associated with
22 parathion?

23 A. I don't remember the resolution of

1 that issue.

2 Q. In any event, in connection with
3 that fish kill, did you attend some meetings
4 about discharges by Monsanto?

5 A. I don't recall having done so.

6 Q. Did you ever talk to any citizens
7 about discharges by Monsanto? I'm not
8 talking about just PCB's, but about
9 discharges in general.

10 A. I don't recall anything with the
11 probable exception of light conversation
12 with friends.

13 Q. Would it be fair to say that
14 during the entire time you were employed by
15 Monsanto, the company line, so to speak, was
16 that there were no hazardous discharges by
17 Monsanto into Snow Creek, or Choccolocco
18 Creek?

19 A. I don't think that would be an
20 appropriate statement to make.

21 Q. So you do admit that there were
22 hazardous discharges into Snow Creek and
23 Choccolocco?

1 A. No, I don't admit that there were
2 hazardous discharges into Snow Creek.

3 Q. Okay. Well, while you were
4 employed by Monsanto, my question is what
5 was the company policy about what people
6 were to be told? If somebody asks, were
7 they to be told that yes, the PCB's being
8 discharged could be hazardous, might be
9 hazardous, or were they to be told no, it's
10 not hazardous? What was the policy?

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

13 WITNESS: Did you object?

14 MR. PECK: You can answer. I'm
15 just objecting for the record.

16 WITNESS: During the period of
17 time I was employed by Monsanto, there was
18 no company position, and you were not
19 instructed to say one thing or another thing
20 by the company. The position on the
21 possibility of a problem being associated
22 with PCB developed during the period of my
23 employment. And therefore, that's the

1 reason I answered your question by saying it
2 was possible that there were potentially
3 hazardous materials being discharged into
4 Snow Creek.

5
6 (Whereupon, Plaintiff's Exhibit 3 was
7 marked for identification and copy of
8 same is attached hereto.)

9
10 Q. (BY MR. DAVIS) I show you now
11 what's been marked Exhibit Number 3 to your
12 deposition, which appears to be a memoranda
13 dated December 31, 1968. It says, subject,
14 aroclor in fish tissue, and it has Mr.
15 Miller at the first line there. Is that
16 you?

17 A. That's correct.

18 Q. The only reason I asked you about
19 the parathion question was the second
20 sentence of this memorandum says this work
21 -- talking about fish tissue work -- was
22 done in connection with parathion studies
23 and fish kills in streams below the Anniston

1 plant. Does that refresh your recollection
2 -- I know it's been a long time -- does
3 that refresh your recollection about y'all
4 studying the fish kill and concluding that
5 they did have parathion in it?

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

8 WITNESS: I have no idea what was
9 going on at this point in time. I remember
10 a, quote, "fish kill". I remember an
11 investigation of same. That's about the
12 extent of my knowledge.

13 Q. (BY MR. DAVIS) Did you
14 participate, during your employment with
15 Monsanto, in any way in any fish studies,
16 analyzing the fish for PCB content?

17 A. Me personally, no.

18 Q. Was any done under your direction?

19 A. I'm sure there were some done, but
20 it was not under my direction.

21 Q. Did you participate in any effort
22 to gather fish? Direct anybody to do that?

23 A. No.

1 Q. Did you become aware of the
2 results of any fish studies of fish in Snow
3 Creek, or Choccolocco Creek, or Logan Martin
4 during your employment with Monsanto?

5 A. Not to my knowledge.

6 Q. Did you ever hear, while you were
7 employed with Monsanto, that fish had been
8 found with PCB levels in excess of the FDA
9 limits?

10 A. I probably was made aware of that
11 fact, yes.

12 Q. You remember learning that at some
13 time while you were with Monsanto?

14 A. Quite possibly.

15 Q. Do you recall how you became aware
16 of that information?

17 A. No, I don't. Probably in
18 correspondence I was copied on or something.

19 Q. You didn't have any direct
20 involvement in any fish studies, but you
21 might have been copied on some; is that the
22 idea?

23 A. Correct.

1 Q. Did you ever attend any
2 discussions where the subject was what
3 warnings, if any, should be issued in
4 connection with those results?

5 A. What warnings should be issued?

6 Q. Yes sir.

7 A. Not to my knowledge.

8 Q. Where was your residence located
9 during the time you were employed by
10 Monsanto? Was it in the Anniston city
11 limits?

12 A. Yes.

13 Q. Did you ever do any fishing on
14 Logan Martin or Choccolocco Creek?

15 A. Certainly.

16 Q. Choccolocco Creek in particular,
17 had you been fishing on Choccolocco Creek?

18 A. I don't remember.

19 Q. Do you recall ever having gone
20 fishing on Choccolocco Creek?

21 A. I went fishing with a friend of
22 mine a few times and he took me where he
23 wanted to fish. I had no idea where I was.

1 MR. DAVIS: Do you want to take a
2 break?

3
4 (Whereupon a brief recess was had in
5 the deposition.)

6
7 Q. (BY MR. DAVIS) Describe for me,
8 in as much detail as you can, how PCB's were
9 getting into the plant discharge.

10 A. Two sources of discharge come to
11 mind from the production facility. The
12 off-gas from the aroclor production facility
13 was hydrogen chloride gas which was
14 subsequently scrubbed down with water to
15 produce muriatic acid. This hydrogen
16 chloride off-gas contained vapors of PCB
17 which were subsequently scrubbed down with
18 water, and to some extent discharged through
19 the plant effluent.

20 Q. You scrubbed it down with water.
21 Describe for me how the water gets from
22 there to the creek.

23 A. The resultant muriatic acid was

1 either placed in storage and subsequently
2 sold. But as memory serves me, in many
3 instances the production of muriatic acid
4 exceeded market demand, therefore some
5 portion of it was sewerred. This material
6 was routed through the sewer system to the
7 area of the plant known as the limestone pit
8 or the neutralization pit where the muriatic
9 acid was subsequently neutralized, solids
10 collected, and discharged to the plant
11 outfall.

12 Q. When you say the production
13 exceeded demand, was that routinely, or on
14 one particular occasion, or what are you
15 talking about?

16 A. Suffice it to say I can only say
17 that frequently that situation occurred.

18 Q. Over the whole time you were
19 there?

20 A. Best memory serves me.

21 Q. Do you have any recollection about
22 what volume of muriatic acid we're talking
23 about?

1 A. No. Other than to say we're --
2 muriatic acid we're talking about in what
3 aspect? Being sewerer? Being sold?

4 Q. Being sewerer.

5 A. I have no idea.

6 Q. Can you give me any judgment on
7 that?

8 A. I have no recollection or idea.

9 Q. We've been talking about some
10 muriatic acid that was excess being
11 sewerer. We've been talking about some
12 stuff being washed down, right?

13 A. You just mentioned washed down. I
14 hadn't yet.

15 Q. I thought you had already. Tell
16 me the next source then. The first source
17 is some of it got sewerer because there was
18 excess supply of the muriatic acid?

19 A. Correct.

20 Q. And it contained some PCB's?

21 A. Correct.

22 Q. What's the second source?

23 A. The second source would be still

1 jets and plant wash-up or cleanup.

2 Q. Describe that for me.

3 A. Well, plant wash-up and cleanup is
4 routine housekeeping chores. Certainly
5 there had been spills on the floor of
6 production areas. Those were washed up,
7 cleaned up, and subsequently discharged into
8 the sewer. Still jets obviously contained
9 some degree of PCB vapor.

10 Q. What is a still jet?

11 A. Vacuum producing device that
12 allows you to reduce pressure in a vessel.

13 Q. With regard to the wash-down, tell
14 me how physically -- I assume what you have
15 then on a wash-down would be water
16 contaminated with PCB's?

17 A. Correct.

18 Q. How would that contaminated water
19 then get from that location where the
20 wash-down occurred to Snow Creek?

21 A. I don't know the exact
22 configuration of the sewer system from the
23 production area that we're talking about.

1 Q. Were there drains in the floors of
2 the buildings?

3 A. There were floor drains and sewer
4 drains.

5 Q. So at least in substance, when you
6 washed down the inside of a building that
7 produced PCB's, the contaminated water would
8 go into floor drains and into the sewer
9 system?

10 A. Not a sanitary sewer system like
11 you're talking about. A plant sewer system.

12 Q. Pipes under the ground under the
13 plant?

14 A. Correct.

15 Q. And those pipes would eventually
16 result in the water from those pipes going
17 into Snow Creek?

18 A. I don't know that for a fact. I
19 presume that.

20 Q. You've never crawled in pipes I
21 suppose, but you at least did see reports
22 while you were there that that's where they
23 went?

1 A. Certainly.

2
3 (Whereupon, Plaintiff's Exhibit 4 was
4 marked for identification and copy of
5 same is attached hereto.)

6
7 Q. I show you now Exhibit Number 4 to
8 your deposition, which is entitled Monsanto
9 Anniston Plant Technical Services Department
10 Monthly Report, and there's a date on here
11 of May 1970. Ask you if you can identify
12 that? I assume that's a document you got in
13 the normal course of your employment while
14 you were at Monsanto; is that right?

15 A. Yes.

16 Q. That also, by the way, would be
17 true for Exhibits 1, 2, and 3, right?

18 A. Correct.

19 Q. With regard to Exhibit Number 4,
20 if you look at page five of that exhibit for
21 me for a minute.

22 A. (Witness complies.)

23 Q. There's a reference on page five

1 to a Mr. Crockett. Did you ever meet a Mr.
2 Crockett during your employment with
3 Monsanto?

4 A. Yes.

5 Q. Was that in connection with the
6 issue of PCB's being discharged by the
7 plant?

8 A. Yes, probably. Yes.

9 Q. Did you meet him in person?

10 A. Yes.

11 Q. Do you remember how many times you
12 met him?

13 A. Professionally or socially?

14 Q. Either one I suppose.

15 A. I have no idea.

16 Q. Do you remember professionally how
17 many times you met him?

18 A. Probably two or three times.

19 Q. At the plant, or in Montgomery, or
20 where?

21 A. I don't remember meeting Mr.
22 Crockett at the plant. I do remember
23 meeting him in Montgomery.

1 Q. Socially how many times did you
2 meet him while you were employed there?

3 A. Two or three times.

4 Q. What occasions were those?

5 A. Mr. Crockett and I were both
6 active in the Alabama Academy of Sciences.

7 Q. So how did you -- what kind of
8 social occasions then?

9 A. The Alabama Academy of Sciences,
10 as I remember, was a group of professionals
11 who tried to stimulate interest in technical
12 programs and technical degrees at various
13 colleges and universities around the state.

14 Q. Did any of them involve dinner?

15 A. Not to my knowledge. I have one
16 specific memory of presenting a program at
17 Montevallo with Mr. Crockett to a group of
18 entering freshmen in the school of science.

19 Q. Any other recollection --

20 A. Prior to that, that's it.

21 Q. Do you have any other
22 recollections of seeing Mr. Crockett while
23 you were employed by Monsanto, other than

1 the connection of business?

2 A. No.

3 Q. Do you remember why you first met
4 with Mr. Crockett in connection with
5 business?

6 A. No, I don't remember the first
7 contact with Mr. Crockett.

8 Q. What do you remember about
9 contacts with Mr. Crockett?

10 A. I remember an interchange with Mr.
11 Crockett relative to the new literature
12 concerning the existence of PCB's. I had a
13 conversation obviously referred to in this
14 document.

15

16 (Whereupon, Plaintiff's Exhibit 5 was
17 marked for identification and copy of
18 same is attached hereto.)

19

20 Q. You mentioned something about some
21 published information. I show you now
22 Exhibit Number 5, which appears to be a
23 memorandum on the subject of aroclor

1 pollution, AWIC contact, and it's dated May
2 7, 1970. It has Mr. G.W. Miller's name at
3 the top of it. Did you create that
4 memorandum?

5 A. Obviously.

6 Q. Now, in the second paragraph
7 there, it says in part Mr. Crockett and the
8 AWIC staff -- is that Alabama Water
9 Improvement Commission?

10 A. Yes.

11 Q. Staff were totally unaware of
12 published information concerning the
13 aroclors. Is that what you're referring to?

14 A. That's what I said, yes.

15 Q. Do you remember anything about why
16 y'all came to be talking to Mr. Crockett
17 about PCB's? Had there been a problem come
18 up about PCB's, or any issue over PCB's?
19 Did y'all just pick up the telephone and ask
20 if you could come down and talk to him? Do
21 you remember what it was? Do you have any
22 idea why it happened? The FDA perhaps been
23 doing some testing?

1 A. Substantially what I'm going to
2 say to you is conjecture because my memory
3 is not lucid.

4 Q. Okay.

5 A. As best I can remember, this
6 particular meeting that's referred to in
7 this document, we decided that it would be
8 in the best interest of Monsanto to address
9 the state with concerns that we had
10 developed over the past few several months,
11 maybe as much as a year, year and a half or
12 two, concerning PCB's. This letter recalls
13 to my memory that Mr. Crockett of the AWIC
14 was totally unaware of any concerns or
15 associations with PCB. We made him aware of
16 that at this meeting.

17 Q. Do you know what prompted
18 Monsanto's concerns?

19 A. Monsanto had had and continues to
20 have, to the best of my knowledge, a good
21 working relationship with regulatory
22 agencies. They are very up front about what
23 they are doing. They were during my employ,

1 let's put it that way.

2 Q. The plant had been there since the
3 1930's, right?

4 A. That's my understanding, yes.

5 Q. And so do you know of any prior
6 occasion that anybody had gone down to talk
7 to the state of Alabama about PCB's being
8 released?

9 A. Not to my knowledge.

10 Q. My question is do you remember why
11 they went on this occasion?

12 A. As I previously stated, the
13 literature began to report the persistence
14 of PCB's. Monsanto began to investigate the
15 persistence and potentials associated with
16 the persistence of PCB's. In all
17 likelihood, Monsanto elected to contact Mr.
18 Crockett and enlighten him and AWIC about
19 the potential issue.

20 Q. In any event, your recollection is
21 that Mr. Crockett basically said he didn't
22 know much about PCB's?

23 A. Which is understandable.

1 Q. Why is that understandable?

2 A. In the '60's and '70's, the
3 Alabama Water Improvement Commission
4 concentrated with existing rules and
5 regulations and was not involved in research
6 and development programs.

7 Q. Fair to say that they weren't as
8 active back then as they are now?

9 A. Certainly.

10 Q. Didn't have as much manpower back
11 then as they have now?

12 A. Correct.

13 Q. And actually probably didn't have
14 as much expertise back then as they have
15 now?

16 A. Probably.

17 Q. In the third paragraph,
18 referencing Mr. Crockett, it says his
19 recommendations were as follows. One of the
20 items listed there is, quote, "give no
21 statements or publications which would bring
22 the situation to the public's attention",
23 close quote. Is that the situation

1 concerning PCB's being released into Snow
2 Creek and going down to Choccolocco Creek?
3 Is that the situation that's being referred
4 to?

5 A. Apparently from this document,
6 that's the situation, yes.

7 Q. Did y'all all agree down there in
8 Montgomery that that was the best thing to
9 do at the time of that meeting in 1970, that
10 is don't tell the public about this release
11 of PCB's into Snow Creek and Choccolocco
12 Creek?

13 A. The situation relative to PCB and
14 its potential detrimental affects on the
15 environment was not understood at that point
16 in time. Memory serves to remind me that
17 both Monsanto and Mr. Crockett had agreed,
18 as this memo further states, to develop the
19 information and see where we were,
20 collectively. Obviously the statement was
21 made to give no statements or publications
22 to bring this to the public's attention at
23 that point in time.

1 Q. Y'all thought that the public
2 wasn't smart enough to understand it if you
3 told them about PCB's going into the creek;
4 was that the idea?

5 A. It wasn't a matter of the public
6 being able to understand it. We didn't
7 understand it.

8 Q. So you knew there was a chemical
9 going into Snow Creek and Choccolocco Creek
10 about which there had been reports about a
11 problem with, and y'all didn't understand
12 the chemical or the situation too well and
13 y'all decided not to tell anybody about it;
14 is that the idea?

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

17 WITNESS: We were aware there was
18 a chemical going into the creek.

19 Q. (BY MR. DAVIS) Which you didn't
20 understand?

21 A. We were unaware as to many of the
22 issues that have come forward since that
23 point in time.

1 Q. You knew you didn't understand it?

2 A. Correct. And does the paper say
3 we agreed not to talk about it? Yes.

4 Q. And not to communicate it to the
5 public that that chemical was being put in
6 Snow Creek and Choccolocco Creek, right?

7 A. Mr. Crockett was a public
8 official.

9 Q. Yes sir, and you weren't, and
10 Monsanto wasn't, and Monsanto agreed that
11 they weren't going to tell the public about
12 it, right?

13 A. Mr. Crockett apparently made the
14 suggestion.

15 Q. But is it fair to say that
16 Monsanto's officials agreed on that date not
17 to tell the public about it?

18 A. That's fair to say.

19 Q. Okay.

20 A. Beyond the notification to AWIC as
21 to what the situation was.

22 Q. Did that -- what's the date of
23 that memo?

1 A. May 7, '70.

2 Q. When did you leave?

3 A. The next year, '71.

4 Q. Do you remember when in '71?

5 A. Toward the end of '71, I don't
6 remember.

7 Q. Did that decision that was made
8 then in May 1970 ever change while you were
9 employed at Monsanto? In other words, did
10 y'all ever decide, hey, we really ought to
11 tell somebody about it, like those people
12 downstream?

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

15 WITNESS: I'm not aware of a
16 change in Monsanto's position, or a
17 continuance of same.

18 Q. (BY MR. DAVIS) Are you sure you
19 don't remember anybody ever making an effort
20 to tell people downstream, do you?

21 A. I didn't, and I'm not aware of
22 anyone who did.

23 Q. Y'all in fact kept it a secret,

1 even after you became aware that the levels
2 of PCB's in fish in Choccolocco Creek
3 exceeded the FDA standards, right?

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

6 WITNESS: I don't personally have
7 knowledge of when the levels in fish flesh
8 exceeding FDA limits became public knowledge
9 or knowledge to the employees of the
10 company, nor do I have a recollection of
11 when announcement of same was made to the
12 public.

13 Q. (BY MR. DAVIS) Well, you found
14 out that fish in Snow Creek -- excuse me,
15 well, you found out that fish in Choccolocco
16 Creek were exceeding the FDA limits during
17 the time period you were still employed at
18 Monsanto, right?

19 A. I agree that I heard that, or was
20 told that, or saw that during my employment
21 period, yes.

22 Q. And nevertheless, during your
23 employment with Monsanto, y'all never told

1 the public that information? And by the
2 public, I mean people downstream. People
3 who lived downstream or people who fished
4 downstream.

5 MR. PECK: Object to the form.

6 WITNESS: I can only restate that
7 we did inform the public by contacting Mr.
8 Crockett.

9 Q. (BY MR. DAVIS) And y'all agreed
10 in Montgomery to keep it a secret, right?

11 A. That's what the documentation
12 says.

13 Q. Okay. What about the public who
14 was fishing downstream and the people who
15 lived downstream. Y'all never told them
16 during the time period you were employed
17 there, right?

18 A. I did not nor do I have knowledge
19 of anyone who did.

20
21 (Whereupon, Plaintiff's Exhibit 6 was
22 marked for identification and copy of
23 same is attached hereto.)

1
2 Q. Show you now what's been marked as
3 Exhibit Number 6 to your deposition, and ask
4 you if you can identify that for us? What
5 is that, sir?

6 A. It's a letter from Mr. Paul Hodges
7 to Mr. H.S. Bergen dated 7 August, 1970.

8
9 (Whereupon, Plaintiff's Exhibit 7 was
10 marked for identification and copy of
11 same is attached hereto.)
12

13 Q. And I also show you what's been
14 marked as Exhibit Number 7 to your
15 deposition. Exhibit Number 7 appears to be
16 a memorandum. It says at the top, medical
17 department, August 17, 1970. Has a
18 signature line for Mr. Jack Garrett. Who is
19 Mr. Garrett?

20 A. I don't have any idea.

21 Q. With respect to Exhibit 7, Exhibit
22 7 says in part, "Crockett told me that if
23 this PCB issue hits the Alabama press, the

1 Alabama Water Improvement Commission would
2 be forced to close Choccolocco Creek and the
3 Martin-Logan reservoir to commercial and
4 sports fishing unless we can prove the
5 contamination level does not reach the
6 reservoir". Do you recall Mr. Crockett
7 saying that in substance in the meetings you
8 were at?

9 A. No.

10 Q. Do you know whether Mr. Crockett
11 formed that opinion after he had gotten the
12 publications y'all sent him and after he had
13 gotten information on fish sampling?

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

16 WITNESS: I have no knowledge.

17 Q. (BY MR. DAVIS) With regard to
18 Exhibit Number 6, Exhibit Number 6 has, in
19 part, a reference at the bottom, it says,
20 "Joe Crockett, Secretary of the Alabama
21 Water Improvement Commission, will try to
22 handle this problem quietly without release
23 of the information to the public at this

1 time". And I see at the top the notation,
2 confidential, for your information, FYI, and
3 destroy. Do you see that at the top of that
4 memo?

5 A. Yes.

6 Q. Have you ever seen a notation like
7 that on a Monsanto document relating to
8 pollution before, that is the notation at
9 the top of that document where it says
10 confidential, for your information, and
11 destroy?

12 A. I don't recall having seen it.

13 Q. Were your meetings and discussions
14 with Mr. Crockett considered to be
15 confidential as that document says there at
16 the top?

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

19 WITNESS: I don't remember what
20 the atmosphere of those conversations -- or
21 that conversation that I attended in
22 Montgomery with Mr. Crockett was, whether it
23 was considered to be confidential.

1 Q. (BY MR. DAVIS) Can you explain to
2 me why a document exists concerning Mr.
3 Crockett and the information about keeping
4 it away from the public with a notation at
5 the top "for your information and destroy"?

6 A. Sir, this was a correspondence
7 between two gentlemen, obviously Monsanto
8 employees. I have no knowledge of and I
9 wasn't copied on it, so I don't have any
10 idea as to why it was marked in such a
11 manner.

12 Q. After some of the meetings with
13 Mr. Crockett, did y'all send him information
14 concerning the levels of PCB's in
15 discharges?

16 A. I don't have specific recall of
17 that, but in all probability we did. I
18 think we agreed to in this document.

19
20 (Whereupon, Plaintiff's Exhibit 8 was
21 marked for identification and copy of
22 same is attached hereto.)
23

1 Q. Show you now what's been marked as
2 Exhibit Number 8 to your deposition, which
3 appears to be a memoranda dated October 26,
4 1970 from a Mr. Landwehr. Do you know who
5 Mr. Landwehr is?

6 A. Yes.

7 Q. Who is he?

8 A. At this point in time, Mr.
9 Landwehr was the superintendent of the
10 technical services department at Monsanto
11 Anniston.

12 Q. This memorandum from Mr. Landwehr
13 dated October 26, 1970, and marked
14 confidential, it says in part, it says, "In
15 conjunction with this information, a lengthy
16 discussion of the technical complexity of
17 Aroclor or PCB numbers resulted in Mr.
18 Crockett's agreeing that any written
19 effluent level reports would be held
20 confidential by the technical staff, and
21 would not be available to the public until
22 or unless Monsanto released it". My
23 question is did y'all also get an agreement

1 from Mr. Crockett that the information you
2 would send him on the levels of PCB's in
3 discharges would be kept confidential by
4 him, until y'all told him it was okay to
5 release it?

6 A. That's apparently what's stated in
7 this correspondence.

8 Q. Do you remember that?

9 A. No.

10
11 (Whereupon, Plaintiff's Exhibit 9 was
12 marked for identification and copy of
13 same is attached hereto.)

14
15 Q. Show you now what's been marked as
16 Exhibit Number 9 to your deposition, which
17 appears to be a memorandum dated May 12,
18 1969. The subject of aroclors cleanup from
19 plant effluents. Call your attention to
20 page three of that, which says in part
21 this. It says definition of problems
22 external to the plant, "that a problem
23 exists at Anniston is evident because,

1 quote, "free", close quote, globules of
2 aroclors can be seen in Snow Creek". Do you
3 see that? Take a minute and look at that
4 memorandum. The reason I was going to ask
5 you that is you had said earlier that you
6 could look at the discharges and see PCB's
7 in it, and I was curious as to whether you
8 also observed globules of PCB's in Snow
9 Creek?

10 A. I don't specifically remember
11 having been on Snow Creek and observing
12 globules. I did observe globules in the
13 discharge from the plant.

14 Q. Did you ever work in any other
15 Monsanto plant?

16 A. No.

17 Q. Did you ever investigate any
18 pollution or discharges from any other
19 Monsanto plant?

20 A. No.

21 Q. Did you ever investigate or look
22 into in any way problems related to PCB's at
23 any locations other than Anniston? Let me

1 restate that. While you were employed by
2 Monsanto, did you ever go to any customer
3 location and look at any PCB problems,
4 discharge problems, pollution problems,
5 anything like that?

6 A. Not to my recollection.

7 Q. Did you ever do any investigation
8 concerning any PCB problems by any customers
9 at all that you recall?

10 A. As far as discharge problems?

11 Q. Right.

12 A. Not to my knowledge.

13 Q. Were there ever any large spills
14 of PCB's while you were employed by
15 Monsanto?

16 A. Define large.

17 Q. A bunch of PCB's.

18 A. I don't remember any unusual or
19 unusually large spills of PCB's.

20
21 (Whereupon, Plaintiff's Exhibit 10
22 was marked for identification and
23 copy of same is attached hereto.)

1
2 Q. I show you now what's been marked
3 as Exhibit Number 10 to your deposition that
4 actually includes several memos, one dated
5 November 20, 1969, subject, samples from
6 Snow Creek. One dated November 20, 1969,
7 subject, aroclor spill of November 6, 1969.
8 The third dated November 14, 1969, aroclor
9 spill on March 6, 1969. Ask you to look at
10 those for me.

11 A. (Witness complies.) Okay.

12 Q. The last page of that exhibit
13 refers to a failure of an aroclor still
14 receiver and the resulting loss of some 1500
15 gallons of PCB's in the sewer. Would you
16 consider that to be a large loss?

17 A. Substantial.

18
19 (Whereupon, Plaintiff's Exhibit 11
20 was marked for identification and
21 copy of same is attached hereto.)
22

23 Q. Do you know if you would still --

1 I know you said you left in -- I'm sorry, I
2 withdraw that. Substantial. 1500 gallons.
3 Some of the 1500 gallons I assume would have
4 been recovered either in the limestone area
5 or else where?

6 A. I'm sure.

7 Q. But would it be fair to say that
8 nevertheless, a large amount of PCB's would
9 have ended up at Snow Creek?

10 A. A substantial spill of material
11 would result in the increase of a discharge
12 level.

13 Q. What would you consider to be a
14 large spill of PCB's?

15 A. What would I consider to be a
16 large spill of PCB's?

17 Q. Sure.

18 A. Obviously our thinking is tempered
19 by what we live with today, and in no way
20 reflects my opinion on PCB's. But large
21 spills are tankers -- ocean going tankers.

22 Q. Let me ask you this question.
23 Would you at least agree that that spill was

1 resulted in more than a negligible amount of
2 PCB's entering into Snow Creek?

3 A. Certainly. I classified it as
4 substantial.

5
6 (Whereupon, Plaintiff's Exhibit 12
7 was marked for identification and
8 copy of same is attached hereto.)

9
10 Q. I show you next Exhibit Number 12
11 to your deposition, which appears to be -- I
12 show you now a document which we've marked
13 as Exhibit Number 12 to your deposition,
14 which appears to be a news release, it says
15 for release immediately, 1970. Ask you to
16 look at that.

17 A. (Witness complies.) Okay.

18 Q. Would you agree with me that the
19 statement contained in the final page of
20 that document as follows -- I read you the
21 statement -- it says quote, "Although loss
22 of PCB from our manufacturing plants has
23 been negligible", close quote. Would you

1 agree with me that that statement is
2 inaccurate?

3 A. In the context of 1970, the amount
4 of material that was produced, it was
5 negligible.

6
7 (Whereupon, Plaintiff's Exhibit 13
8 was marked for identification and
9 copy of same is attached hereto.)

10
11 Q. I now show you Exhibit Number 13,
12 which is a copy of a newspaper article from
13 the Anniston Star dated November 22nd,
14 1970. This article reports FDA findings in
15 Choccolocco Creek and Logan Martin, stating,
16 among other things that samples from
17 Choccolocco Creek tested as high as 277
18 parts per million, and in carp in Logan
19 Martin showed 39.6 parts per million and
20 references the FDA standard of five parts
21 per million. Does that refresh your
22 recollection of when the FDA results came
23 out?

1 A. It obviously came out prior to
2 November 22nd of '70.

3 Q. Now sir, do you say then that PCB
4 releases from a plant sufficient to -- let
5 me restate it. Before that article came
6 out, y'all knew those PCB's were in that
7 creek, didn't you, Monsanto knew?

8 A. Is that a statement or question?

9 Q. It's true, isn't it? That's a
10 question. Isn't it true, sir, that those
11 reports were no surprise to Monsanto, that
12 Monsanto already knew PCB's were in
13 Choccolocco and Logan Martin, and were there
14 in excess of the five in million limit?

15 A. By this point in time Monsanto was
16 probably aware of the fact that PCB's were
17 in Snow Creek and Choccolocco Creek. But as
18 far as Logan Martin, I don't know.

19 Q. By what date were you aware of it?

20 A. I have no recollection of the
21 information being distributed to me except
22 for this Anniston Star article and perhaps
23 some other written correspondence that I may

1 have seen.

2 Q. Monsanto had two manufacturing
3 plants for PCB's in this country; is that
4 right?

5 A. That's correct.

6 Q. So when somebody is putting out a
7 press release talking about manufacturing
8 plants for PCB's, one of the only two they
9 must be talking about would have to be
10 Monsanto's plant in Anniston, right?

11 A. One of the two would have to be,
12 yes.

13 Q. And this news release says, quote,
14 "Although loss of PCB's from our
15 manufacturing plant has been negligible",
16 close quote. Do you think it's fair to be
17 putting out press releases saying the loss
18 of PCB's has been negligible when you know
19 that there are hazardous levels -- let me
20 restate it. I'll restate the question. Do
21 you think it's fair, when you know about
22 levels of PCB's in excess of the FDA limits,
23 to be putting out press releases saying the

1 release from the plants has been
2 negligible?

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

5 WITNESS: Do I think it's fair?

6 Q. (BY MR. DAVIS) Yes sir.

7 A. I don't know exactly when this
8 press release was put out in 1970. And I
9 don't know -- it's the 16th of July -- and I
10 don't know when the FDA promulgated a
11 regulation. I can't speak to the issue of
12 whether or not it was fair. If I knew that
13 there was a regulation, and I knew that the
14 company that prepared this information knew
15 about the regulation, knew about the levels
16 that they had, if there was an attempt to
17 dupe the public, it was unfair. I can only
18 assure you from having been there, that
19 things were moving quite rapidly in all
20 fronts in 1969 and '70.

21
22 (Whereupon, Plaintiff's Exhibit 14
23 was marked for identification and

1 copy of same is attached hereto.)

2

3 Q. Show you now what's been marked as
4 Exhibit Number 11 to your deposition, which
5 appears to be a memorandum dated December 7,
6 1970. Call your attention to page ten,
7 which references the Anniston plant PCB
8 levels in sewer. I would ask you to look at
9 that.

10 A. (Witness complies.) Okay.

11 Q. That paragraph references a single
12 day that had a substantial impact on the PCB
13 discharge numbers for the month of November
14 or October -- I'm not sure, but whatever --
15 do you have any recollection of that?

16 A. No.

17 Q. Does the document refer to a
18 single day's -- a problem on a single day
19 resulting in something like an 18 pound a
20 day average?

21 A. The document states losses during
22 November averaged 25 pounds per day. One
23 high value accounted for 18 pounds per day.

1 Neglecting this November average would be
2 seven pounds per day. So obviously there
3 was one excursion day that exacerbated a
4 seven pounds per day average up to a monthly
5 average basis of 25 pounds per day.

6 Q. All right. What I've done quickly
7 is take 18, multiply it times 30. 540
8 pounds on one day. Does that seem to be
9 what that document refers to to you?

10 A. That's apparently correct.

11 Q. You said an excursion. What do
12 you mean by that?

13 A. Any value that's substantially
14 different than the norm of a population.

15 Q. Do you think a discharge of 540
16 pounds on a single day would be a large
17 spill into the creek?

18 A. It would be substantially
19 different from the rest of the days of that
20 month.

21 Q. See, the reason I asked you that
22 question was, I refer you back to Exhibit
23 Number 13. Exhibit Number 13 contains in

1 part a statement -- it says this, "Although
2 the equipment devised is designed to keep
3 any gross amounts of material from leaving
4 the plant by accident, large spills of
5 material apparently never occurred". Do you
6 think that's at all misleading, to say a
7 large spill has never occurred, when we are
8 looking at documents on the table, one of
9 which references a 540 pound discharge in
10 November 1970, or October 1970, whenever it
11 was, and another of which we looked at a few
12 minutes ago talked about a 1500 -- I guess
13 it was -- was it pounds or gallons on that
14 occasion?

15 A. Gallons or pounds. I've
16 forgotten.

17 Q. Either way. Do you think it's at
18 all misleading to say there's never been a
19 large spill, or do you think that's just
20 fine and dandy?

21 A. I'll make the comment again that I
22 made before. The context of 1970, which was
23 25 years ago, 400 or 500 pound spills were

1 negligible, insignificant.

2 Q. At least Monsanto regarded them as
3 negligible and insignificant?

4 A. Industry standards.

5 Q. The only people who made PCB's in
6 this country was Monsanto, right?

7 A. As far as I know, yes.

8 Q. Monsanto was the industry, right?

9 A. Right.

10 Q. And Monsanto regarded those kind
11 of spills as negligible; is that right?

12 A. Obviously.

13 Q. Show you now what's been marked as
14 Exhibit Number 14 to your deposition, which
15 appears to be a memorandum dated January 29,
16 1971 on the subject of PCB's in plant
17 effluent. Second paragraph of which states
18 as follows, "During the year as the plants
19 gained tighter control of known sources of
20 PCB pollution, it became increasingly
21 obvious that high levels would continue
22 because of the PCB's trapped in the soil and
23 in the sewer systems". I'll try to read it

1 one more time. "It became increasingly
2 obvious that high levels would continue
3 because of PCB's trapped in the soil and in
4 the sewer systems. Cleanup of these sources
5 can be economically impractical". Do you
6 see that?

7 A. Yes.

8 Q. Did y'all determine that the
9 cleanup of those sources was economically
10 impractical?

11 A. I wasn't involved in the decision.

12 Q. What efforts were made to solve
13 any problems of PCB's trapped in sewers and
14 the soil while you were there?

15 A. To remove PCB's trapped in soils
16 and sewers. I have a vague recollection of
17 some sewer repair being done.

18 Q. We looked earlier at a document
19 concerning the acid sewer, and the condition
20 of the acid sewer. Did y'all replace that
21 sewer?

22 A. I have a recollection of some work
23 being done on the acid sewer system.

1 Q. Does that mean y'all patched it up
2 or y'all replaced it?

3 A. I don't remember.

4 Q. Do you recall any work ever being
5 done on the soils while you were there?

6 A. The substantial portion of the
7 work on the, quote, "soil sewer system" was
8 directed toward enhancing the neutralization
9 pit at a settling collecting facility in the
10 front of the plant. I remember that that
11 facility was more than doubled in size. If
12 memory serves me, there were parallel
13 systems to allow you to operate on one side
14 while you cleaned the other side. Some of
15 these documents refer to controlling spills
16 with absorbent materials. Obviously that
17 practice was underway.

18 Q. Were you ever in the position of
19 making recommendations on what ought to be
20 done to solve problems of PCB discharge?

21 A. My position was more one of
22 execution.

23 Q. In particular with reference to

1 like budgeting, and asking the question of
2 devoting funds. Were you ever involved in
3 that?

4 A. No.

5 Q. Would you have any idea one way or
6 the other whether money was made available
7 as needed to do things or not, whether money
8 was tight or money was plentiful?

9 A. There was a lot of money expended
10 on this issue. As to whether or not it was
11 borrowed money or front pocket money, I have
12 no idea.

13 Q. Do you have any idea how much
14 money was spent?

15 A. It would be strictly a guess. A
16 quarter of a million dollars, a half million
17 dollars.

18
19 (Whereupon, Plaintiff's Exhibit 15
20 was marked for identification and
21 copy of same is attached hereto.)
22

23 Q. A quarter to a half million

1 dollars is your best judgment?

2 A. It's a guess. Not being privy to
3 the financial information, I really have no
4 idea.

5 Q. I show you now what's been marked
6 as Exhibit Number 15 to your deposition,
7 which appears to be in part some minutes
8 from a board of directors meeting for the
9 Monsanto corporation from May 1969. It
10 references expending \$1.1 million for
11 expansion of the solid aroclor facilities at
12 the Anniston plant. Do you have a
13 recollection of substantial money being
14 spent to expand those facilities in that
15 time period?

16 A. A substantial money was spent. I
17 don't have any idea how much.

18 Q. We were talking a minute ago to
19 about money being spent for the cleanup.
20 What I'm asking you now is money being spent
21 to expand the aroclor operations?

22 A. It had been expanded. At what
23 cost I don't know.

1 Q. Is it fair to say that a whole lot
2 more money was spent expanding the
3 production capacity and the operations in
4 general than was ever spent on any remedial
5 cleanup operation?

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

8 WITNESS: I can't comment on that
9 because I don't have any dollar value
10 associated with either one. I simply
11 guessed for you on what I saw.

12 Q. (BY MR. DAVIS) During the time
13 period you were with Monsanto, were there
14 ever any efforts made to clean up Snow
15 Creek? Get any of the PCB's that had been
16 discharged into Snow Creek out of Snow
17 Creek, or the sediment of Snow Creek, or
18 anything like that?

19 A. I don't remember physical methods
20 being applied on Snow Creek to remediate,
21 remove.

22 Q. I want to distinguish and be sure
23 we're distinguishing efforts to reduce the

1 amounts of PCB's going into Snow Creek from
2 efforts to clean up those that were already
3 there. You don't recall there ever being
4 any effort made while you were at Monsanto
5 to cleanup PCB's that had previously been
6 discharged into Snow Creek, do you?

7 A. I have no recollection of that.

8 Q. That would be the same with
9 respect to Choccolocco Creek, correct?

10 A. Yes.

11 Q. Were you ever involved in any way
12 in responding to inquiries about the hazards
13 of PCB's received in writing? For example,
14 somebody wrote the plant and said I'm
15 worried?

16 A. I don't recall ever having done
17 so. Perhaps I did, but I don't recall it.

18 Q. Well, I'll ask somebody else about
19 that then.

20 A. Okay.

21 Q. Did you say you did a little work
22 for Monsanto after you left there?

23 A. Yes.

1 Q. What was that about?

2 A. As recollection serves, in the
3 late 1970's, Guardian calibrated some SO2
4 monitors for them -- Monsanto.

5 Q. While you were involved with
6 Monsanto, did you ever have any involvement
7 with PCDF?

8 A. With who?

9 Q. PCDF. Instead of PCB's, PCDF?

10 A. What are PCDF?

11

12 (Whereupon, Plaintiff's Exhibit 16
13 was marked for identification and
14 copy of same is attached hereto.)

15

16 Q. Show you now what's been marked as
17 Exhibit Number 16 to your deposition. It
18 appears to be a memorandum dated October 26,
19 1970, from a Mr. Papageorge. Do you know
20 who Mr. Papageorge is?

21 A. Yes.

22 Q. Who is he -- was he -- I guess he
23 still is?

1 A. At that time Papageorge was in the
2 general office in St. Louis.

3 Q. There's a reference in the first
4 paragraph there to dibenzofurans in
5 aroclors. That's really what I was
6 referring to.

7 A. I'm not aware of it.

8 Q. Did you ever become -- did you
9 ever learn anything about PCDF being present
10 in PCB's while you were at Monsanto -- do
11 you have any knowledge of that subject one
12 way or the other?

13 A. No knowledge.

14 Q. With your present company, you all
15 don't do any work with PCDF's? Y'all don't
16 test for PCDF?

17 A. To my knowledge we've never had a
18 request to do it.

19 Q. Y'all's position generally is that
20 if folks pay you, y'all will test for
21 anything I suppose?

22 A. We will try.

23 Q. Are you aware of any PCB

1 contaminated solid waste from the Monsanto
2 plant at Anniston going anywhere other than
3 to the landfill across the street?

4 A. No.

5 Q. I ask you in particular about the
6 concept of putting any of that on dirt roads
7 to keep down dust or anything like that?
8 Have you ever heard of anything like that
9 happening at Anniston?

10 A. The best of my knowledge, all
11 solid waste was disposed of in the plant
12 landfill.

13 Q. At least that's your recollection
14 during the time period you were there?

15 A. That's correct.

16 Q. Do you have any recollection of a
17 dead pig being found at the landfill --
18 being sent off for analysis of PCB's?

19 A. I missed the pig.

20 Q. Sometimes around chemicals I see
21 glass containers, and ceramic items, and
22 things like that. With regard to PCB and
23 their effect on metal, or plastic, or

1 whatever, how are PCB's in that regard? We
2 talked about acid corroding pipes awhile
3 ago. What about PCB's? Do they corrode
4 pipes? Do they mess up rubber and plastic?

5 A. PCB's-- address metals first.
6 Well, there are attributes of a noncorrosive
7 nature. They are put in things like
8 transformers and capacitors and leave them
9 there for literally decades without any
10 difficulty being associated of corrosion.
11 Once you get past metals and you get into
12 plastics and rubbers and glass, they can sit
13 there forever with PCB's in it, no problem.

14 Glass and rubbers -- rubbers and
15 plastics, you're into a plethora of
16 different compounds. It would be very
17 difficult to make a comment as to the
18 longevity of a particular plastic or a
19 particular rubber contact with PCB's.

20 Q. Will some kind of PCB's that were
21 manufactured at Anniston effectively mess up
22 rubber gloves or rubber boots?

23 A. Would it mess it up?

1 Q. Mess up may not be the best word
2 in the world.

3 A. I've heard of PCB's being used as
4 a plasticizer.

5 Q. What does that mean?

6 A. That's what makes a rubber glove
7 bend and not break.

8 Q. What does that mean? Does it mean
9 it will damage a rubber glove or won't
10 damage a rubber glove?

11 A. In correct concentration it's what
12 you want. Too much, quote, "damages" it.

13 Q. I see what you're saying. In the
14 right concentration, it might give the
15 flexibility to the rubber glove you wanted,
16 but in too much concentration, it might, in
17 effect, melt it?

18 A. It's possible.

19 Q. You had mentioned sort of -- I
20 don't know if settling pond is a fair way to
21 describe it, or limestone, whatever they
22 are. Can you describe what was there when
23 you got there and what was there when you

1 left, and what the differences were, if any?

2 A. I don't know exactly what was
3 there when I got there. When I left, I do
4 know the size and capacity and settling
5 phenomenon associated with that facility had
6 been greatly enhanced. Now, as to whether
7 or not it was lined or it wasn't lined, I
8 don't remember.

9 Q. Do you know who did the work on
10 that expansion?

11 A. I do remember that there was an
12 elderly gentleman who had a contracting
13 company. And he frequently was called in to
14 assist in excavation, hauling kinds of
15 phenomenon.

16 Q. With regard to that settling pond,
17 let's talk about rubber boots for a minute.
18 Were there also things in there that might
19 damage rubber boots in addition to PCB's or
20 not? I don't know whether --

21 A. I don't know either.

22 Q. The settling ponds, while you were
23 there, what was contained in them? I assume

1 there's a liquid contained in them?

2 A. Correct.

3 Q. Was it -- I'm trying to get an
4 idea about what that liquid was like. Did
5 y'all ever do any testing on it?

6 A. The majority of the liquid
7 contained in it was water.

8 Q. Did y'all ever do testing on it?

9 A. I'm sure that there was testing
10 done on it. In fact, if you will permit
11 your man to go off the record, I'll tell you
12 a funny incident. It has no bearing on this
13 case.

14 MR. DAVIS: It's fine with me if
15 it's okay with Adam.

16 MR. PECK: Fine with me. Off the
17 record.

18

19 (Whereupon, a discussion was held off
20 the record.)

21

22 Q. (BY MR. DAVIS) Did you ever see
23 anybody walk in one of those ponds, on the

1 edges of the pond in the water?

2 A. Walk, no.

3 Q. Of course I don't know, there may
4 have been a drop off ten feet or it might've
5 been shallow. Was it shallow enough you
6 could walk?

7 A. It was primarily an excavated area
8 that was filled with limestone. I presume,
9 based on my recollection, that you could
10 have walked across it.

11 Q. But you don't remember seeing
12 anybody do that?

13 A. No.

14 Q. Before the pond was expanded, did
15 you ever see anybody put a little small boat
16 on it?

17 A. No.

18 Q. And before it was revised, did you
19 ever see anybody walk on it -- walk around
20 the edges of it?

21 A. I have no memory of anybody
22 walking on it, period.

23 Q. I know I asked you about other

1 locations. I'll ask you specifically about
2 Escambia, Pensacola, and their PCB problem
3 down in there. Did you ever have anything
4 to do with a PCB problem in that area?

5 A. No.

6 Q. I ask you specifically about the
7 other manufacturing plant in Illinois. Did
8 you ever have anything to do with PCB's
9 being discharged up there?

10 A. Nothing.

11 Q. Did you ever have any
12 communications with anybody from the other
13 plant concerning whether they had any
14 problems with the release of PCB's?

15 A. No.

16 Q. Did you ever talk to anybody at
17 Monsanto about a problem at Escambia or
18 Pensacola?

19 A. No.

20 Q. Do you know anything concerning
21 any source for PCB's in Choccolocco Creek or
22 Logan Martin, other than the Monsanto
23 plant? In other words, did y'all ever do

1 any investigation, ever look into anything
2 like that? Any conclusions at all that
3 somebody else may have contributed to it
4 that you can recall?

5 A. I don't know of any investigation,
6 but it's obvious that many users of PCB
7 containing products were contained in that
8 water shed -- or existed in that water shed.

9 Q. I understand you might -- in
10 general, I suppose, lots of people -- let me
11 restate the question. Withdraw that
12 question. Do you know -- while you were
13 with Monsanto, did you ever do any
14 investigation and reach any conclusions
15 about any particular people that might have
16 put any PCB's into that -- into Snow Creek,
17 Choccolocco Creek, or Logan Martin?

18 A. No.

19 Q. Since you have dealt some with PCB
20 kind of questions perhaps since you've been
21 gone from there, I ask you the same question
22 about since you left Monsanto. Do you know
23 anything about anybody putting PCB's into

1 Snow Creek, Choccolocco Creek, or Logan
2 Martin that you learned since you left
3 Monsanto?

4 A. I have no knowledge.

5 Q. Have you ever owned, leased, or
6 rented a lake house on Logan Martin?

7 A. Have I?

8 Q. Yes.

9 A. Yes.

10 Q. When was that?

11 A. Late '70's I guess.

12 Q. Ever eaten any fish out of Snow
13 Creek, Choccolocco Creek, or Logan Martin?

14 A. Certainly.

15 Q. You have?

16 A. Certainly.

17 Q. Which one of those?

18 A. Which one of those sources?

19 Q. Yes.

20 A. As I explained to you earlier, the
21 only one I can assure you of is it was out
22 of Logan Martin. Now, whether it was out of
23 Choccolocco Creek I have no idea.

1 Q. When is the last time you ate any
2 fish out of Logan Martin?

3 A. Probably a year ago.

4 Q. Can you give me any idea how many
5 times we're talking about you've eaten fish
6 out of Logan Martin? Total times. How many
7 times a year? How many fish? Have you
8 eaten a few fish out of Logan Martin?

9 A. I have a friend who is a fisherman
10 who consistently, with some degree of
11 frequency, but not regularity, brings me
12 fish. I am suspicious that the predominance
13 of his fishing is done in Logan Martin.

14 Q. But you're not certain; is that
15 the idea, where it comes from one way or the
16 other?

17 A. I'm reasonably certain it comes
18 from Logan Martin.

19 Q. Do you know where in Logan Martin
20 he fishes?

21 A. I have no idea. I receive wrapped
22 filets.

23 Q. Give me your best judgment on how

1 many times a year we're talking about and
2 over how many years.

3 A. Three or four times a year.

4 Q. Three or four times a year, and
5 over how many years?

6 A. 15, 20.

7 Q. I suppose it would be fair to say
8 you've never eaten any fish out of Snow
9 Creek?

10 A. I'm not aware of ever having eaten
11 any out of Snow Creek.

12 MR. DAVIS: Let's take a break for
13 a minute.

14

15 (Whereupon a brief recess was had in
16 the deposition.)

17

18 Q. (BY MR. DAVIS) Referring you back
19 for a moment to Exhibit Number 16 and the
20 question about dibenzofurans or PCDF's,
21 there's a sentence in that memorandum,
22 actually the last sentence says, "The
23 Anniston plant should design and execute a

1 program for determining the source of these
2 contaminants". And there are two or three
3 contaminants listed. One is PCDF's. I just
4 wanted to be sure that I really fully
5 covered that area. That is that you don't
6 remember anything at all about any
7 investigation into PCDF's at the Anniston
8 plant?

9 A. I think I demonstrated to you
10 earlier in this conversation I had never
11 heard of it until you mentioned it.

12 Q. In order to -- let me ask you a
13 couple of specific questions. You don't
14 recall then, for example, anybody at
15 Anniston ever doing any testing about how
16 much PCDF's were contained in PCB's, or any
17 form of PCB's?

18 A. No.

19 Q. You don't recall then any analysis
20 of the discharge into Snow Creek to
21 determine whether there were any PCDF's in
22 it?

23 A. No.

1 MS. ARENBERG: Either
2 contaminants, anything that made aroclors
3 impure, or that y'all had to look out for?
4 Were there any contaminants like that?

5 Q. (BY MR. DAVIS) Let me ask another
6 question. She's not supposed to be asking
7 questions in the middle of my deposition.
8 One of these days Adam will get upset about
9 it. So let me ask you, let's talk about
10 other kinds of contaminants in PCB's. Do
11 you remember any investigation into other
12 kinds of contaminants in PCB's at all,
13 whether it be PCDF's or anything else?

14 A. No.

15 Q. You were head of the lab during
16 what time period at Monsanto Anniston plant?

17 A. About '66, '67.

18 Q. After that, you were -- and you
19 told me, I've forgotten?

20 A. Production supervisor.

21 Q. For aroclors, for PCB's?

22 A. For PCB's.

23 Q. If anybody at Anniston had been

1 looking into the question of PCDF's, do you
2 think you would have known about it?

3 A. I'm reasonably sure I would have
4 known about it.

5 Q. With regard to the production of P
6 -- with regard to the production of PCB's
7 at Anniston, we looked at Exhibit 15, which
8 appears to be part of some minutes of a
9 board of directors meeting talking about
10 spending \$1.1 million for expansion of the
11 solid aroclor facilities. By the way, that
12 says solid aroclor facilities. You got
13 liquid aroclor facilities and solid aroclor
14 facilities?

15 A. Correct.

16 Q. Had you had solid aroclor
17 facilities for a long time?

18 A. They were there when I got there,
19 yes.

20 Q. Can you tell me what the uses are
21 for liquid aroclors versus solid aroclors in
22 general? How come y'all made each?

23 A. The primary function -- or primary

1 use for liquid aroclors was electrical
2 insulating fluids, extremely high
3 temperatures and stable E-transfer fluids.
4 The solid aroclors were primarily used as
5 extenders and modifiers to other compounds
6 to enhance them with fire retardants or
7 plasticity.

8 Q. Like some kind of rubber product
9 --

10 A. To be add mixed with something
11 else to produce some final product. They
12 themselves were not the final product.

13 Q. Could you give me a couple of
14 examples?

15 A. No, I don't remember any.

16 Q. But things other than transformers
17 anyway?

18 A. Solid aroclors were solid crystal
19 in materials.

20 Q. What you needed to transform them
21 was a liquid?

22 A. A liquid.

23 Q. After these board minutes dated

1 May 1969, referring to spending the \$1.1
2 million for expansion of the solid aroclor
3 facility at the Anniston plant, after that
4 date, and before you left there, were those
5 facilities in fact being expanded?

6 A. Yes.

7 Q. Was the production of those solid
8 aroclors increasing? More solid aroclors
9 being produced than had been produced
10 before?

11 A. Correct.

12 Q. More solid aroclors being produced
13 than had ever been produced by Monsanto, at
14 least during the time period you had been
15 there?

16 MR. PECK: Object to the form.
17 Foundation.

18 WITNESS: As far as I know, yes.

19 MR. DAVIS: That's all the
20 questions I have. Thank you, sir.

21 MR. PECK: He would like to read
22 and sign it.

23 FURTHER DEPONENT SAITH NOT

C E R T I F I C A T E

STATE OF ALABAMA)

JEFFERSON COUNTY)

I hereby certify that the above and foregoing deposition was taken down by me in stenotype, and the questions and answers thereto were transcribed by means of computer-aided transcription, and that the foregoing represents a true and correct transcript of the testimony given by said witness upon said hearing.

I further certify that I am neither of counsel, nor of kin to the parties to the action, nor am I in anywise interested in the result of said cause.

MAURICE LAPIDUS

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