

1 In Re:

2 Solutia, et al.,

3
4 Vs. Case No. CV-03-PWG-134-E.

5
6 McWane, et al.,

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11
12 September 29, 2004

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14 Videotaped Deposition of ROBERT GEORGE KALEY II,

15 Volume I
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1 In the United States District Court
2 For the Northern District of Alabama
3 Magistrate Judge Green
4

5 Solutia, et al.,
6 Plaintiffs
7

8 Vs. Case No. CV-03-PWG-134-E.
9

10 McWane, et al.,
11 Defendants.
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17 Videotaped Deposition of ROBERT GEORGE KALEY II, taken
18 on behalf of the Defendants, at the offices of Husch &
19 Eppenberger, LLC, 190 Carondelet Plaza, Suite 600, in
20 the County of St. Louis, State of Missouri, between
21 the hours of 9:13 A.M. and 5:02 P.M. on the 29th day
22 of September, 2004, before J. Bryan Jordan, Certified
23 Court Reporter No. 532 and Notary Public, State of
24 Missouri.

Kaley, Robert Ph.D.

MCWANE

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1 THE VIDEOGRAPHER: We're on the record at
2 9:13 A.M. Today's date is September 29th, 2004.
3 We're at the offices of Husch & Eppenberger The
4 address is 190 Carondelet Plaza Clayton Missouri my
5 name is Curt Shaw, legal videographer, along with
6 Jerry Jordan, Certified Court Reporter, here today for
7 the deposition of Robert Kaley II, to be taken in the
8 case of Solutia, et al., vs. McWane et al., currently
9 pending in the Northern District of Alabama, Cause
10 Number CV-03-PWG-134-E. At this time, would counsel
11 please identify themselves for the record?

12 MR. LANGLAIS: This is Jim Langlais,
13 representing Walter Industries, Inc., and the United
14 States Pipe & Foundry, Inc.

15 MS. O'NEAL: Lynne O'Neal, representing
16 Phelps Dodge.

17 MS. LAVEY: Wendy Lavey, with Squire
18 Sanders, & Dempsey, representing Mead Westvaco.

19 MR. NASSIF: Joseph Nassif of Husch
20 Eppenberger, representing Pharmacia, Monsanto, and
21 Solutia.

22 MR. LANGLAIS: And those on the phone?

23 MR. TAYLOR: Jarred Taylor, representing
24 McWane, FMC, and United Defense.

25 MS. McADAM: Allison McAdam, Resolution Law

1 Group, representing Southern Tool.

2 MS. RUTLEDGE: Stephanie Rutledge,
3 representing Huron Valley Steel.

4 MS. SMITH: Lynette Smith at Troutman
5 Sanders, representing Scientific-Atlanta, Inc.

6 MS. WIERY: This is Suzanne Wiery with
7 McMahon, DeGulis, representing Datron.

8 MR. LANGLAIS: Okay, Mr. Kaley, as you
9 heard, my name is Jim Langlais, and I represent two of
10 the defendants in this case.

11 ROBERT GEORGE KALEY II,
12 of lawful age, having been first duly sworn to testify
13 the truth, the whole truth, and nothing but the truth
14 in the case aforesaid, deposes and says in reply to
15 oral interrogatories propounded as follows, to-wit:

16 MS. WIERY: If the people on the phone can
17 make sure everybody is on mute, so there's not so much
18 interference.

19 EXAMINATION

20 QUESTIONS BY MR. LANGLAIS:

21 Q. Would you, please, state your full name for
22 the record?

23 A. Robert George Kaley, II.

24 Q. Joe, before we start, can we agree to
25 reserve objections until first use at trial except as

1 to form of the question, leading questions, and
2 responsiveness of the answers?

3 MR. NASSIF: If you ask a question that I
4 believe--Bob, Mr. Kaley, has quite a bit of contact
5 with attorneys over the years, and there's a high
6 likelihood that you could ask a question that would go
7 into a privilege issue with him, and if so, then I'm
8 going to have to reserve that objection and also
9 instruct him not to--potentially instruct him not to
10 answer. Without knowing what questions you are going
11 to ask,--

12 MR. LANGLAIS: Sure.

13 MR. NASSIF: --it's difficult for me to
14 agree to that in advance, but in terms of the other
15 objections you've raised, that's fine.

16 BY MR. LANGLAIS:

17 Q. Mr. Kaley, would you like the opportunity to
18 review and sign your deposition?

19 A. Yes, I would.

20 Q. And just, just so we're clear on the record,
21 Mr. Kaley is being presented as a fact witness and not
22 as a Rule 30(b) (6) witness.

23 MR. NASSIF: That is correct.

24 BY MR. LANGLAIS:

25 Q. And we've agreed to waive the seven-hour

1 time limitation? Is that correct?

2 A. Yes.

3 MR. LANGLAIS: And can we agree that an
4 objection by one defendant is good for all the
5 defendants?

6 MR. NASSIF: That's fine.

7 MR. LANGLAIS: Okay.

8 BY MR. LANGLAIS:

9 Q. Mr. Kaley, would you, please, state your
10 full name for the record?

11 A. Yes. Robert George Kaley, II.

12 Q. You are doing a good job so far, I know.
13 You've been deposed before. If you could just speak
14 clearly and give verbal responses, we can take it easy
15 on the court reporter, here.

16 A. I'll try to remember.

17 Q. Okay. If you would just let me finish my
18 questions, I'll let you finish your answers, and this
19 will go a lot smoother. If you don't understand a
20 question that I ask, would you please ask me to
21 clarify the question or repeat it?

22 A. Yes.

23 Q. If you need a break at any time, please let
24 us know; we'll take breaks routinely, but if, for some
25 reason, you need a break, just let us know.

1 A. That's fine.

2 Q. And you are being represented here, today,
3 by Mr. Nassif of Husch & Eppenberger; is that right,
4 sir?

5 A. That's my understanding, yes.

6 Q. And having been through this before, you
7 know that throughout the course of the deposition, you
8 may hear some of the attorneys make objections. You
9 are still required to answer the question posed
10 unless, of course, your attorney has a valid claim of
11 privilege and he advises you not to answer the
12 question. You understand that?

13 A. I do.

14 Q. Would you tell me what your date of birth
15 is?

16 A. November 28th, 1945.

17 Q. And what's your place of birth?

18 A. Litchfield, Illinois.

19 Q. Can I get your current address?

20 A. It's 1 Geyer, G-e-y-e-r, Wood Lane,
21 St. Louis, Missouri, 63131.

22 Q. And you also have prior addresses on
23 Schoettler Valley Drive and Lindbergh Boulevard?

24 A. The Schoettler Valley Drive was my home
25 address prior to this address. The Lindbergh

1 Boulevard address was my, one of my previous work
2 addresses, assuming it's 800 North Lindbergh.

3 Q. Yes.

4 A. That's a work address.

5 Q. And what work address was that for?

6 A. That was the Monsanto Company.

7 Q. Have you ever resided--did you ever reside
8 in Alabama?

9 A. No, I have not.

10 Q. Do you have any relatives in Alabama?

11 A. Not that I know of.

12 Q. Any, any family members employed by
13 Monsanto?

14 A. No.

15 Q. How about any family members employed by any
16 foundry operations?

17 A. None that I know of.

18 Q. Where did you attend high school?

19 A. South Bend, Indiana.

20 Q. When did you graduate?

21 A. 1964.

22 Q. And where did you go for college?

23 A. Undergraduate, Purdue University.

24 Q. And what degree did you receive from there?

25 A. A Bachelor of Science in chemistry.

1 Q. And you also have a graduate degree? Is
2 that correct?

3 A. Yes, I do.

4 Q. And where did you get your graduate degree?

5 A. University of Illinois.

6 Q. And that's a Ph.D. in chemistry?

7 A. Yes. I also have a Master's of Science in
8 analytical chemistry, and my Ph.D. is in analytical
9 chemistry.

10 Q. And where did you get your Master's?

11 A. That was also at Illinois, University of
12 Illinois.

13 Q. And your Bachelor of Science is in
14 chemistry, as well; correct?

15 A. Yes.

16 Q. During any of your studies, did you have any
17 course work related to PCBs?

18 A. No.

19 Q. Did you take, during your Bachelor of
20 Science, did you take organic chemistry?

21 A. Yes, I did.

22 Q. How about your Master's in analytical
23 chemistry? Did you take organic chemistry during that
24 time?

25 A. I do not believe so.

1 Q. Okay, and how about your Ph.D. work? Did
2 you take organic chemistry?

3 A. The same answer; I don't believe I did.

4 Q. Did you do a thesis for your Ph.D. in
5 chemistry?

6 A. I did.

7 Q. And what was your thesis topic?

8 A. It was a flame source for atomic fluorescent
9 spectroscopy.

10 Q. And did you have to do any kind of thesis or
11 paper for your Master's?

12 A. No, that was based on my course work.

13 Q. Did you do any fellowships?

14 A. No.

15 Q. Did you, did you--were you involved in a lab
16 at the--during your Ph.D. program, any particular labs
17 on campus?

18 A. I was in the east chemistry building.

19 Q. What kind of, what kind of work were you
20 doing there what kind of research?

21 A. Well, basically, research with regard to my,
22 my thesis process or project, which focused on atomic
23 spectroscopy.

24 Q. Now, when did you--when did you go to work
25 for Monsanto?

1 A. December of 1973.

2 Q. When did you finish your course work for
3 your Ph.D.?

4 A. Probably--I finished my course work probably
5 two years prior to actually receiving my Ph.D.

6 Q. So you continued to do your research
7 throughout the time that--from about 1971 or 1972
8 forward?

9 A. Yes, that was--

10 Q. And--okay, I'm sorry.

11 A. That was focused on my research project,
12 yes.

13 Q. And were you--you were still completing that
14 while you were working for Monsanto?

15 A. Actually, the work was--the work had been
16 completed, and I had taken my oral and written exams
17 when I went to work for Monsanto. The degree was
18 awarded in January of 1974, just in accordance with
19 their university schedule.

20 Q. I understand. Since that time, have you had
21 any specialized training with respect to PCBs?

22 A. Not, not outside my normal course of work,
23 no.

24 Q. Am I correct that your, your knowledge of
25 PCBs comes from your work with Monsanto?

1 A. Well, in voluminous, outside readings, and
2 attending scientific meetings and things like that,
3 but it's also, it's all been acquired while I was
4 working for--

5 Q. Sure.

6 A. --either Monsanto or Solutia.

7 Q. What is the American Chemistry Council?

8 A. What is the American Chemistry Council?

9 Q. Yeah.

10 A. It's a trade organization representing
11 largely chemical manufacturers.

12 Q. And at least while you were working for
13 Monsanto, they were a member of the American Chemistry
14 Council; is that correct?

15 A. I believe that's correct, yes.

16 Q. And do I understand that you no longer work
17 for Monsanto?

18 A. That's correct.

19 Q. When did you leave Monsanto?

20 A. I left Monsanto when Solutia, Inc., was spun
21 off in September of 1997.

22 Q. I'm sorry, you said--did you say September
23 1997?

24 A. I may have--that's what I meant to say. I
25 may have said '77--

1 Q. I think you said '77.

2 A. --but I meant 1997, yes. Thank you.

3 Q. And we'll talk in more detail about this
4 later, but after September 1997, did you continue to
5 have, did you continue to do any kind of work for
6 Monsanto either on a consulting basis or short-term
7 contract?

8 A. I did some very small amount of work for
9 Monsanto.

10 Q. As Monsanto--are you being paid for your
11 time here today?

12 A. No, I'm not.

13 Q. What was the--you said you did some work for
14 Monsanto after September 1997. What was that work?

15 A. It was some small amount of consulting work
16 focused on Agent Orange litigation.

17 Q. And where was that pending, if you remember?

18 A. I'm not sure there was any specific case
19 pending. The one I most recall is there was ongoing
20 litigation in Korea.

21 Q. Did you take a deposition that in lawsuit or
22 in connection with that work?

23 A. No.

24 Q. Am I correct that you are considered a PCB
25 expert?

1 MR. NASSIF: I'll object to the form.

2 BY MR. LANGLAIS:

3 Q. Well, the reason I'm saying that is the
4 American Chemistry Council identify you as a,
5 quote-unquote, "PCB expert." Do, do you understand
6 that?

7 A. Yes, I do.

8 Q. Okay. Why don't you tell me what, what they
9 mean, or if you know, what is meant by that
10 designation by the American Chemistry Council.

11 A. Well, largely, it is because I am currently
12 chair of the PCB panel at the American Chemistry
13 Council, and in the very rare occasions where they are
14 asked for comments on PCB issues, I am consulted
15 before they make those comments.

16 Q. How long have you been the chair of that
17 panel?

18 A. Seven years, seven to ten years, something
19 like that.

20 Q. So since about the mid Nineties?

21 A. That's correct.

22 Q. Did you become the chair of the panel
23 before, before leaving Monsanto?

24 A. Yes, I'm sure I did.

25 Q. Was that an elected position?

1 A. No. Well, I mean, I suppose it was, yes.

2 Yes, I suppose it was.

3 Q. Do you know why they chose you?

4 A. Not particularly, no.

5 Q. Do you know who the--do you know who the
6 chair of the panel was before you, or were you the
7 first?

8 A. No, no, I was not the first, and I do know
9 who the channel was--the chair was before me.

10 Q. What's that person's name?

11 A. Gary Mappes, M-a-p-p-e-s.

12 Q. Do you know if Mr. Mappes worked for
13 Monsanto?

14 A. Yes, he did.

15 Q. Do you know where he worked?

16 A. In St. Louis.

17 Q. What was his title, if you know?

18 A. Something like Manager of Product
19 Acceptability.

20 Q. Do you know how long he held that chair
21 position?

22 A. Several years.

23 Q. Do you know if there was a chair prior to
24 Mr. Mappes?

25 A. Yes, there was.

1 Q. And do you know that chair's name?

2 A. Yes.

3 Q. And what's that person's name?

4 A. John Craddock, C-r-a-d-d-o-c-k.

5 Q. Now, did Mr. Craddock work for Monsanto?

6 A. Yes, he did.

7 Q. Do you know when Mr. Craddock would have
8 served as the chair of the panel?

9 A. Primarily, from about 1981 to sometime in
10 the very early 1990's.

11 Q. Do you know if there was a chair prior to
12 Mr. Craddock?

13 A. I believe there was not.

14 Q. Okay, so you believe--do you believe that
15 Mr. Craddock was the first chair, and--is that
16 correct?

17 A. Yes.

18 Q. Am I, am I correct in assuming that the
19 panel formed around the same time that Mr. Craddock
20 started?

21 A. That is correct.

22 Q. Do you know why the panel formed?

23 A. Primarily, to deal with several issues
24 around the developing regulations on PCBs.

25 Q. What regulations are you referring to?

1 A. Well, there are a whole series of
2 regulations by the EPA regarding the manufacture, use,
3 distribution, et cetera, of PCB, and those have
4 continued to develop, basically, since the late
5 1970's.

6 Q. Did OSHA have regulations at the time this
7 panel was formed with respect to PCBs?

8 A. I don't know if they had anything
9 specifically called a regulation. They certainly had
10 what are called PELs, or permissible exposure levels
11 for PCBs, but other than that, I'm not aware of
12 anything of a regulatory nature by OSHA.

13 Q. Was the panel's role to inform its
14 member--its company members how to implement the
15 regulations or how to follow the regulations?

16 A. No, the primary role, I think, was to
17 provide a mechanism for the industry members to
18 interact with environmental groups and the regulators
19 to develop rules that, that made sense to accomplish
20 the, the end of the regulations, but that were
21 sensible from an implementation point of view to the
22 industry.

23 Q. Did the panel deal with health and safety
24 issues related to PCBs?

25 A. To some extent, yes.

1 Q. And what extent was that?

2 A. Well, in, in a number of cases, they
3 contracted with toxicological consultants to prepare
4 summaries of what was known in the literature about
5 the health effects of PCBs, and those were, some of
6 them, at least, in due course submitted to the
7 regulatory agencies.

8 Q. Do you know in what time frame they would
9 have first done that, hire the toxicologist/
10 consultant?

11 A. Again, primarily early in the 1980's, that
12 was largely when that was done.

13 Q. While you were chair, do you recall there
14 being any issues relating to the health and safety
15 that the panel addressed?

16 A. Yes, there have been some.

17 Q. And do you recall what those were,
18 specifically?

19 A. Well, under the, under the aegis of the
20 panel, there have been reports submitted to a number
21 of regulatory agencies on a variety of, of health,
22 potential health effects issues with regards to PCBs.

23 Q. Do you recall any of the specific issues?
24 You said there's a variety.

25 A. I mean cancer, potential cancer effects, the

1 carcinogenicity of PCBs, potential non-cancer health
2 effects, potential neurodevelopmental effects, those
3 are the major categories.

4 Q. Do you recall the substance of, of those
5 reports?

6 A. In general terms, yes.

7 Q. And did you, did you, um, assist in drafting
8 any of those reports?

9 A. Not in the drafting, no.

10 Q. Was your role in, in more of a reviewer of
11 those reports?

12 A. To the extent I had a role--and it was very
13 minor--it was a reviewer, yes.

14 Q. Who had the, who had the final--who had to
15 give the final okay on those reports before they were
16 sent to the various agencies?

17 A. Someone in the upper management of the
18 American Chemistry Council. I'm not sure what their
19 hierarchy is for approval of reports.

20 Q. Where did--do you know where did you fall
21 within the hierarchy of the American Chemistry
22 Council?

23 A. Very near the bottom.

24 Q. If you can--

25 A. If I was there at all.

1 Q. Could you kind of give me an idea of how the
2 structure is, at least at the time of the chair?

3 A. Well, the, the panels are--there are a
4 number of panels. PCBs is only one of many. They are
5 what are called Chemstar panels. That is a, a
6 specific designation for panels that are created with
7 a specific chemical or a specific interest that
8 companies feel would be useful to be able to get
9 together and discuss regulatory issues around those.
10 That is a division of the American Chemistry Council.
11 I believe there is someone at the, like,
12 vice-presidential level that manages that aspect of,
13 of the activities, and which are actually a very small
14 portion of the activities of the American Chemistry
15 Council, and then up through, through those lines.

16 Q. Okay. Before we get back to the reports,
17 did--does the American Chemistry Council, at least
18 while you were the chair, did they do any lobbying to
19 Congress with respect to PCBs?

20 A. I don't believe they've done any with
21 respect to PCBs.

22 Q. Okay. Have you done any lobbying to
23 Congress with respect to PCBs?

24 A. No, I have not.

25 Q. Okay, awhile ago, you mentioned generally

1 three, three reports that you said you were generally
2 familiar with, one being a report dealing with cancer,
3 one being non-cancer, and one being--dealing with
4 neural development; is that correct?

5 A. Yes, that's correct.

6 Q. Do you recall the substance of the report
7 dealing with cancer? Do you recall what the major
8 findings were of that report?

9 A. I do.

10 Q. Would you tell me what the findings were, if
11 you recall?

12 A. I think the general conclusion was that a
13 comprehensive, objective review of the literature
14 concerning the potential human carcinogenicity of PCBs
15 provides no evidence that PCBs are human carcinogens.

16 Q. And is that, is that still generally your,
17 your belief?

18 A. Yes, it is.

19 Q. Now, what the EP--does the EPA believe that
20 these are carcinogenic, PCBs?

21 A. PCBs are classified as probable human
22 carcinogens by the EPA, meaning that the animal
23 evidence is positive and the human evidence is
24 inadequate.

25 Q. So there are different categories of

1 something? Is there--are there any other categories
2 besides probable carcinogenic?

3 A. Yes.

4 Q. I assume there's carcinogenic and then
5 there's probable carcinogenic?

6 A. Yes, there is, there--depending on how you
7 slice the pie, there is, or there are known human
8 carcinogens, then there are probable human
9 carcinogens, and I guess the last category is
10 not--either--I think there may be a category for known
11 not to be human carcinogens and then one for not
12 enough information to make a decision.

13 Q. And what does OSHA classify PCBs as?

14 A. I don't know.

15 Q. Okay. You don't know if they classify them
16 as a car--carcinogen?

17 A. I don't know what their classification
18 system is.

19 Q. Now, with respect to the non-cancer report,
20 could you tell me the general substance, if you
21 remember, of that report?

22 A. Yes, the general substance was that based on
23 a comprehensive, objective review of the scientific
24 literature regarding potential noncarcinogenic health
25 effects of PCBs, there is evidence that PCBs have

1 dermal effects, effects on the skin, and may have some
2 transient effects on serum enzymes. Other than that,
3 there are no scientifically supported human health
4 effects of PCBs.

5 Q. And is that still your opinion here, today?

6 A. Yes.

7 Q. You still believe that?

8 A. Yes, I do believe that.

9 Q. Just so we're clear, you are not a medical
10 doctor; correct?

11 A. That is correct.

12 Q. Are you an epidemiologist?

13 A. I am not trained as an epidemiologist, no.

14 Q. Are you a toxicologist?

15 A. I am not trained as a toxicologist, no.

16 Q. Industrial hygienist?

17 A. No.

18 Q. How about the report dealing with neural
19 development? Do you recall the general substance of
20 that report?

21 A. Yes, I do.

22 Q. Okay, and what is that? What are the major
23 findings of that report?

24 A. That an objective, comprehensive review of
25 that literature does not provide support for the claim

1 that PCBs have neurodevelopmental effects in young
2 children.

3 Q. And is that something you still believe
4 today?

5 A. Yes, I do.

6 Q. Now, you said objective, comprehensive
7 review of the literature; is that correct?

8 A. I believe those were my words or something
9 similar, yes.

10 Q. So am I to understand that, that the
11 American Chemistry Council didn't do any independent
12 studies with respect to PCBs and cancer, they just
13 reviewed existing literature or existing studies? Is
14 that correct?

15 A. Consultant to the American Chemistry Council
16 reviewed the existing literature; that is correct.

17 Q. And that was the same for all three?

18 A. That's correct.

19 Q. And this was an objective study by a
20 consortium of chemical companies; right?

21 A. Well, it was sponsored by a consortium of
22 chemical companies. The review, itself, was actually
23 done by a variety of consultants.

24 Q. Working for the Chemistry, the Chemistry
25 Council?

1 A. Sponsored by them, yes.

2 Q. Do you recall who the consultants were?

3 A. Some of them. I don't know all of them at
4 this point, sitting here.

5 Q. Which ones do you recall?

6 A. I know one was Ogden Scientific. I believe
7 a Dr. Kaufman at Yale University was involved in the
8 neurodevelopmental report. Those are the ones I can
9 recall sitting here right now.

10 Q. Do you know within the council if, if an
11 epidemiologist reviewed the reports?

12 A. I'm not sure I understand your question.

13 Q. Who within the council--I'm assuming that
14 the council hires these objective consultants to go
15 out and do these studies and then they prepare a
16 report and present it to the council; is that correct?

17 A. Essentially, that's the process, yes.

18 Q. Who, who would the report first go to?

19 A. Well, it would go to the member companies.

20 Q. Okay, and the member companies would then
21 submit comments?

22 A. Yes, they had the opportunity to do that.

23 Q. Who would they submit comments to?

24 A. To the preparers of the reports.

25 Q. Do you recall if Monsanto submitted comments

1 to any of these three reports?

2 A. I don't believe so.

3 Q. Did you submit comments to these consultants
4 with respect to any of these reports?

5 A. I don't recall doing so, no.

6 Q. Do you think you might have?

7 A. It's possible. I just don't recall
8 specifically. If I did, they were minor.

9 Q. In the course of your work with PCBs, have
10 you published in any of the scientific or medical
11 journals?

12 A. A little bit, yes.

13 Q. Can you--do you recall what, what journals
14 you've published in?

15 A. The one I can recall for sure is the
16 Bulletin of Environmental Contamination and
17 Toxicology.

18 Q. Okay.

19 A. I don't recall specifically any others.

20 Q. How about the Environmental Science and
21 Technology Journal?

22 A. I don't believe I've published in that one.

23 Q. Did you ever publish in the Journal of
24 Occupational Health?

25 A. No.

1 Q. Do you recall what your publication was in
2 the bulletin that you just discussed?

3 A. Yes. It had to do with a feeding study of
4 PCBs to rats.

5 Q. Do you recall the general--the major
6 findings of that study?

7 A. The major findings were that if you feed
8 PCBs to rats and stop feeding them, the levels of PCBs
9 in the rats go down.

10 Q. Now, did you--

11 A. Stunning, correct?

12 (Laughter.)

13 Q. Who did the experiments?

14 A. I believe it was done by a contractor to
15 Monsanto Company.

16 Q. So were you just--was this kind of like a
17 literature review? Were you critiquing a study that
18 had been performed?

19 A. No, I had actually done the analyses on the
20 tissues from the rats--

21 Q. Okay.

22 A. --to determine the levels of PCBs in those,
23 in those rats.

24 Q. And had you done similar work like that
25 before?

1 A. Well, that--not--before I came to Monsanto?

2 Q. Or at any time other than that, that one
3 time where you, where you analyzed the tissue samples,
4 have you, have you done that, that before?

5 A. Well, my, my first several years at Monsanto
6 were--all of my work involved doing analyses for PCBs
7 in a variety of samples.

8 Q. A variety of tissue samples?

9 A. And environmental samples.

10 Q. Now, you've been deposed before; correct?

11 A. I have been.

12 Q. Do you recall on how many occasions?

13 A. Probably twelve to fifteen.

14 Q. Of those twelve to fifteen depositions, how
15 many related to PCBs?

16 A. Probably all of them. No, that's not true.
17 There was one I can think of one that did not.

18 Q. Which one didn't relate to PCBs?

19 A. It had something to do with a Monsanto
20 herbicide.

21 Q. Do you recall where that, that herbicide
22 deposition, what, what state it was in?

23 A. I would--I think it was in Missouri, but I
24 don't recall specifically.

25 Q. When did you--do you recall the approximate

1 dates when you, when you took some of these
2 depositions?

3 A. Well, it's been--I mean fairly well spread
4 out over the years.

5 Q. When was the last time you were deposed
6 prior to today?

7 A. I don't--probably two or three months ago.

8 Q. And was--were those in connection with the
9 suit filed by residents of Anniston against Monsanto?

10 A. No, it was a suit to which Monsanto was not
11 a party.

12 Q. Okay. What kind of, what kind of lawsuit
13 was it?

14 A. It had to do with a dispute over a cleanup,
15 as I recall.

16 Q. And why were you deposed?

17 A. One of the parties had asked Monsanto to
18 provide a witness to discuss certain information.

19 Q. Okay, and what information was that?

20 A. Primarily, to validate sales records that
21 had been produced in that litigation by Monsanto in
22 response to a request by one of the parties.

23 Q. Okay, so you were essentially authenticating
24 documents for, for that lawsuit that Monsanto had
25 provided?

1 A. That was largely the, the role, yes.

2 Q. Okay, prior to that deposition, do you
3 recall when, when your--when the next most recent
4 deposition was?

5 A. Probably six months before that; same
6 situation; non-party.

7 Q. Now, when was the last time prior to today
8 that you were deposed when Monsanto was a party?

9 A. It's probably been three or four years ago.

10 Q. And who was Monsanto sued by, if you recall?

11 A. In that case?

12 Q. Yes.

13 A. That was related to the Anniston situation.

14 Q. Okay, so they were--Monsanto was sued by
15 Anniston residents?

16 A. Yes.

17 Q. Is that your understanding?

18 A. That's correct.

19 Q. And do you recall how that lawsuit turned
20 out?

21 A. Well, there were several. They had various
22 outcomes.

23 Q. Okay, what were the various outcomes?

24 A. There were--well, maybe they didn't have
25 various--there were settlements in those lawsuits, I

1 guess.

2 Q. And do you recall any other--what year would
3 that have--you said three to four years ago. It would
4 have been in 2000, around there?

5 A. I don't really--I don't recall specifically.
6 That's the best guess I can give.

7 Q. Do you, do you retain copies of testimony
8 that you've given, deposition testimony?

9 A. No.

10 Q. Have you ever been deposed as a corporate
11 representative of Monsanto?

12 A. Yes.

13 Q. When were you deposed as a corporate rep for
14 Monsanto?

15 A. Again, I don't, I don't recall all the
16 specific dates. Probably seven or eight years ago.

17 Q. And do you recall the issues that you
18 testified about?

19 A. Vaguely, yes.

20 Q. Okay, what do you recall?

21 A. It was primarily--well, there were issues
22 around health and safety and Monsanto's position on
23 health and safety, and there was also issues around
24 the use of PCBs as plasticizers and, I believe, in a
25 sealing coating.

1 Q. Did that deposition involve the Anniston
2 Plant?

3 A. No, it did not.

4 Q. Have you ever, besides the, the litigation
5 where you--where Monsanto was sued by Anniston
6 residents, have you had any other depositions that
7 have involved the Anniston Plant?

8 A. Well, I've been deposed in several of the
9 lawsuits involved where Monsanto was sued by
10 residents.

11 Q. Okay.

12 A. Other than that, I believe I have not been
13 deposed in any other kind of litigation.

14 Q. Okay, have you ever been deposed as a
15 corporate rep in connection with the Anniston Plant?

16 A. I don't believe so.

17 Q. Okay. Have you ever had OR have you ever
18 testified before the United States Congress with
19 respect to PCBs?

20 A. No, I have not.

21 Q. Have you testified before Congress with
22 respect to anything?

23 A. No.

24 Q. How about any state or federal agencies?
25 Have you ever--did you ever provide testimony to state

1 or federal agencies?

2 A. I have made statements to--I don't know what
3 you mean by "make statements," I guess. I mean, I've
4 been in meetings where I have said things, so I'm
5 not--I guess I have made one or two more formal
6 presentations to the U.S. EPA, primarily as a
7 representative of the American Chemistry Council PCB
8 panel.

9 Q. Okay, that was probably a bad question. Let
10 me ask it this way. Have you ever, have you ever
11 provided testimony to any state or federal agencies
12 where you were under oath, like you are here today?

13 A. No, I don't believe so.

14 Q. Do you maintain any personal files with
15 respect to PCBs?

16 A. I have some, yes.

17 Q. Any of those documents mention or discuss
18 Monsanto?

19 A. They may.

20 Q. When was the last time you put anything
21 related to PCBs in those files? If you recall.

22 A. Probably several weeks ago, but they're
23 primarily literature. I mean, they're files of
24 publicly available literature, primarily.

25 Q. Do your files contain any other types of

1 documents?

2 A. Well, there are documents related to various
3 litigation that Monsanto has been involved in, yes.

4 Q. Okay. Have you ever, have you given any
5 affidavits in connection with any of the lawsuits?

6 A. Yes, I have.

7 Q. Do you recall how many?

8 A. Well, there was--there's the one that
9 springs to mind has been filed a number of times and
10 updated, primarily with regard to the Anniston
11 situation.

12 Q. Do you maintain copies of those affidavits?

13 A. I certainly have a copy of one or more
14 versions of that particular affidavit, yes.

15 Q. And do you have electronic copies of those
16 affidavits?

17 A. No, I do not.

18 Q. Are those affidavits something that you, you
19 created, or did you sit down and discuss with someone
20 and someone else drafted it?

21 A. Primarily, I created them.

22 Q. You said, you said "primarily." Can you
23 explain that?

24 A. Well, I would--I created the draft and, and
25 various, obviously, attorneys commented on the draft

1 and suggested that there were other points that I may
2 want to cover, and then I would draft comment or draft
3 statements to address those points.

4 Q. Do you recall any specific points that
5 weren't included in your drafts that the attorneys
6 wanted you to include?

7 A. No, I--

8 MR. NASSIF: Objection.

9 A. (Continuing) No, I don't recall any.

10 MR. NASSIF: Bob, give me a chance to make
11 my objection.

12 THE WITNESS: Yes, sir.

13 BY MR. LANGLAIS:

14 Q. When did you learn that Defendants wanted to
15 take your deposition in this lawsuit?

16 A. I would say four to six weeks ago.

17 Q. What did you do in preparation for your depo
18 here, today?

19 A. I had a very brief meeting with, with
20 Mr. Nassif and with one other attorney in his firm.

21 Q. When was that meeting?

22 A. Yesterday afternoon.

23 Q. And was that the only meeting you had with,
24 with Plaintiffs' counsel after you were informed we
25 wanted to make your depo?

1 A. I believe there was one meeting about two
2 weeks ago with, with another counsel, yes.

3 Q. How long was that meeting?

4 A. How long? Probably four hours.

5 Q. Did you review any documents in preparation
6 for your depo here today?

7 A. A couple, yes.

8 Q. What did you review?

9 A. Well, I, I have written in the past a letter
10 to the Alabama Department of Environmental Management
11 on questions with use of lead at the Monsanto or at
12 the former Monsanto plant. I reviewed that document.

13 Q. Was that, was that a letter where you
14 discussed the lead pot process that was performed at
15 the Anniston Plant?

16 A. Yes, it was.

17 Q. And we'll get into that later, but the lead
18 pot process was the process used at Anniston to make
19 biphenyls? Is that correct?

20 A. For a period of time, yes.

21 Q. Am I correct that there is, there is no
22 distinction between diphenyl and biphenyl?

23 A. That's correct.

24 Q. Those words are used interchangeably?

25 A. They are by me, yes.

1 Q. What other documents do you recall reviewing
2 for your depo here, today?

3 A. I think there was a subsequent follow-up to
4 that letter by Craig Branchfield, who works for
5 Solutia. I reviewed that follow-up letter to aid
6 them, and the attachments. I should--I briefly
7 thumbed through the attachments to my letter.

8 Q. Did you speak with any Monsanto employees
9 with respect to your deposition here, today?

10 A. No.

11 MR. LANGLAIS: Do you want to take a five-
12 minute break? This is a decent time to, to do that.

13 MR. NASSIF: Yeah. You need a break?

14 THE WITNESS: I could use one, just stand up
15 for a minute.

16 MR. NASSIF: Okay, fine.

17 THE VIDEOGRAPHER: We're off the record at
18 9:53 A.M.

19 (Recess.)

20 THE VIDEOGRAPHER: We're back on the record
21 at 10:00 A.M.

22 BY MR. LANGLAIS:

23 Q. Mr. Kaley, I understand--do I understand
24 correctly that you currently work for Solutia?

25 A. No, that's not correct.

1 Q. Okay, and where do you, where do you
2 currently work?

3 A. I'm self-employed.

4 Q. Do you do any consulting work for Solutia?

5 A. Very little.

6 Q. Do any work for Pharmacia?

7 A. Yes.

8 Q. Are you currently employed by Pharmacia?

9 A. No.

10 Q. We'll get into the, the details later, but
11 for purposes of this deposition, can we come to some
12 kind of agreement that when I say "Monsanto," it's
13 meant to cover Monsanto, Pharmacia and Solutia?
14 However, if your answer requires a specific, some
15 specific clarification, certainly that's something
16 that can be made, but otherwise, I'm going to be
17 asking the question three times.

18 MR. NASSIF: That's okay.

19 MR. LANGLAIS: It's okay for me to answer
20 the question three times, or--

21 MR. NASSIF: It's okay for you to do it
22 either way.

23 BY MR. LANGLAIS:

24 Q. Okay, let's--can we come that to an
25 agreement then that when I say "Monsanto," I'm

1 referring to Pharmacia or Solutia, and if there's
2 certain clarification that's required, you can give
3 that in your answer?

4 A. I believe that--

5 Q. Is that acceptable?

6 A. I believe that's acceptable, yes.

7 Q. Now, you went to work for Monsanto in 1973;
8 correct?

9 A. That's correct.

10 Q. And you stayed with Monsanto, the entity
11 known as Monsanto, until September nineteen
12 seventy--1997, when Solutia spun off from Monsanto?
13 Is that correct?

14 A. When Solutia was spun off from Monsanto,
15 yes.

16 Q. Okay, and you continued to work after that
17 time for Solutia?

18 A. That's correct.

19 Q. And how long did you work for Solutia?

20 A. Until January 31st, 2003.

21 Q. And did you retire from Solutia or did you
22 resign?

23 A. I retired.

24 Q. Since that time, you've said you've done
25 some consulting work for Solutia?

1 A. I have.

2 Q. Did any of that consulting work relate to
3 the PCB issues in Anniston?

4 A. Yes.

5 Q. How about, how about outside of Anniston?
6 Have you done any work for, for Solutia with respect
7 to PCB issues anywhere, anywhere else in the country?

8 A. Yes.

9 Q. Could you give me those areas?

10 A. Um, I did some work on a case that was
11 pending in Binghamton, New York. I'm also doing some
12 work using the term "Solutia"--the way you defined it
13 is any one of those three companies--for some
14 litigation that's pending in Mississippi.

15 Q. And those all relate to Anniston,
16 Birmingham, or--what did you say? Binghamton?

17 A. Binghamton, yes.

18 Q. New York and Mississippi, those relate to
19 PCB lawsuits?

20 A. Yes, they do.

21 Q. And are those lawsuits personal injury
22 claims? Do they involve personal injury claims
23 relating to the PCBs?

24 A. Yes, they do.

25 Q. What was your position when you first worked

1 for Monsanto in 1973?

2 A. I was a [Senior Research Chemist.

3 Q. And how long were you a Senior Research
4 Chemist?

5 A. I'll say three years.

6 Q. And then what was your next title?

7 A. Senior Research Specialist.

8 Q. And how long did you hold that title?

9 A. Probably another two to three years.

10 Q. And then what was your next title?

11 A. Um, Senior Research Group Leader.

12 Q. And what year did you hold that title until?

13 A. Approximately 1980 or 1981.

14 Q. And then what was your next title?

15 A. I went back to Senior Research Specialist.

16 Q. And that second time around, how long were
17 you a Senior Research Specialist?

18 A. Probably about four years.

19 Q. And your next title?

20 A. Manager of Product Acceptability or
21 something like that.

22 Q. And how long did you hold that title?

23 A. Uh, I'm saying two to three years.

24 Q. So approximately what year does this take
25 you up to?

1 A. I'm up to about 1987 or '88.

2 Q. Okay, when what was your next title?

3 A. I believe it was Director, Environmental
4 Affairs.

5 Q. And is that a title you held through the
6 spinoff date?

7 A. Yes, that's correct.

8 Q. And did you continue on as Director,
9 Environmental Affairs, for the newly formed Solutia
10 entity?

11 A. Yes, I did.

12 Q. And how long did how old that position?

13 A. Until my retirement in 2003.

14 Q. And we'll get into details on what your
15 responsibilities were, but just generally, did
16 your--did anything change with your work with respect
17 to that spinoff date besides the name on your check?

18 A. Not particularly, no.

19 Q. What did you do as a--well, let me back up a
20 second. When was the first time that you visited the
21 Anniston Plant?

22 A. I'm going to say 1984, 1985.

23 Q. When was the last time you were at the
24 Anniston Plant?

25 A. Probably March of this year.

1 Q. So you were there as a consultant for
2 Solutia?

3 A. Yes.

4 Q. Between your first visit and this past March
5 of 2004, on how many occasions do you believe you
6 visited the Anniston Plant, if you know?

7 A. I don't know. A significant number.

8 Q. Was it hundreds?

9 A. No, it wasn't hundreds. It was, maybe,
10 dozens. Probably less than 50.

11 Q. Certainly, something more--you said dozens,
12 so it's something more than 24, somewhere between 24
13 and 50? Somewhere in there?

14 A. That's as good as I can do, yeah.

15 Q. That was over that twenty-year period?

16 A. Yes.

17 Q. What did you do as a Senior Research Chemist
18 for Monsanto?

19 A. I primarily did gas chromatographic analyses
20 of samples for PCBs.

21 Q. Now, when you say "samples," you are not
22 talking about--you weren't doing GC, gas chromatograph
23 on, on products, now, were you?

24 A. Some, yes.

25 Q. Okay, so what were you testing?

1 A. I was testing products, I was testing
2 research samples, I was testing water, I was testing
3 soil, I was testing fish tissue, I was testing rat
4 tissue, I just--you know, any number of matrices.

5 Q. What, what soils were you testing as a, as a
6 senior research chemist?

7 A. I don't recall specifically. I mean, I'm
8 sure some of them were soils from plant areas. I, you
9 know, it's been forty years ago, thirty years ago.

10 Q. Right.

11 A. I don't really recall specifically.

12 Q. Right. Did you do any--did you test any
13 soils from the Anniston Plant?

14 A. Uh, I don't recall any. By the time I had
15 come to Monsanto, the Anniston Plant had quit making
16 PCBs, so I don't recall specifically any soil samples
17 from Anniston.

18 Q. Do you recall doing any testing as a Senior
19 Research Chemist for the Anniston Plant with respect
20 to PCBs?

21 A. Not specifically to Anniston, not that I
22 recall.

23 Q. What, um, what, what areas--do you recall
24 what plants you were doing soil and water testing for,
25 as a Senior Research Chemist?

1 A. Well, to the extent I was doing it for any
2 plant, it would have been for the Sauget plant, the
3 plant in East St. Louis, but a lot of the samples of
4 that type were generated in our laboratory as part of
5 our research program.

6 Q. Okay, and what were you, what were you
7 looking at? You are saying that your research program
8 would, would create soil samples that contained PCBs
9 and then they could give them to you to determine the
10 levels?

11 A. Yes.

12 Q. What were they trying to--what were they
13 trying to determine?

14 A. Primarily, the biodegradation of PCBs or the
15 biodegradation rates of PCBs.

16 Q. And having done that work, what can you tell
17 me about the biodegradation rates of PCBs in soil?

18 A. They vary significantly, depending on the
19 level of chlorination of the PCBs.

20 Q. Am I correct that the more it's chlorinated,
21 the more persistent it is in soil?

22 A. That's generally true, yes.

23 Q. And by "persistent," you understand that I
24 mean it's not biodegradable?

25 A. Yes, I understand that's what you mean.

1 Q. And am I also to understand that someone was
2 giving you fish tissue that someone at Monsanto had,
3 had, I guess, for lack of a better term, spiked with
4 PCBs?

5 A. Well, you are getting into much more detail
6 than I recall with regard to that.

7 Q. What I'm trying--

8 A. I do not--yes, I do, I do recall some
9 testing that--where PCBs were put in the water and
10 fish were exposed to them, yes.

11 Q. Okay, and what, what did you determine, what
12 did you determine with respect to the PCBs in the fish
13 tissue, if you recall?

14 A. That they were there or not there. I don't
15 recall specifically what the findings of those studies
16 were.

17 Q. Okay, I just want to make sure that I, I
18 understand it correctly that it wasn't Monsanto going
19 out and just plucking fish out of the water and having
20 you test it, these were samples that Monsanto created
21 for you so you could--so they could study the various
22 biodegradability in different medias, correct?

23 A. Not totally, no. I'm sure there were some
24 samples where someone, not necessarily Monsanto, but
25 someone had taken fish from the environment and we

1 were asked to do those analyses.

2 Q. Okay, and they would have taken them on
3 behalf of Monsanto?

4 A. Certainly possible, yes.

5 Q. Was it--do you recall if there were any
6 state agencies asking you to perform testing on fish
7 tissue?

8 A. I don't recall that, no.

9 Q. And then 19--you said approximately three
10 years later, you became a Senior Research Specialist.
11 How did your responsibilities change as a Senior
12 Research Specialist?

13 A. Well, primarily, I developed expertise in
14 combined gas chromatography, mass spectrometry, and
15 my--the area of samples that I analyzed broadened
16 considerably.

17 Q. Let's go back to your work as a Senior
18 Research Chemist. Who did you report to at, at
19 Monsanto?

20 A. My first supervisor was Dr. Scott Tucker.

21 Q. Am I correct that at that time, you didn't
22 have anyone reporting to you?

23 A. That's correct.

24 Q. During your time as a Senior Research
25 Chemist, did you have any involvement with the

1 Anniston Plant?

2 A. Not that I recall specifically, no.

3 Q. You said you don't recall specifically, but
4 would someone in, in your position as a Senior
5 Research Chemist have had conversations with the
6 chemists at the various plants?

7 A. It's possible, but I was focused on PCBs,
8 and as I said, Anniston was no longer making PCBs at
9 that time, so it's unlikely. I don't have any
10 recollection of talking to anyone at the Anniston
11 Plant--

12 Q. Sure. I understand.

13 A. --in that time frame.

14 Q. Okay, and I understand that Monsanto wasn't
15 making PCBs at the time, but they--am I correct that
16 they had PCBs in the soils at the Anniston Plant at
17 that time?

18 A. Well, that's a broad, general statement. I
19 mean--

20 Q. Well, they, they either--

21 A. I mean they--as far as I know, there was no
22 active research program going on to measure PCBs in
23 soils at the Anniston Plant at that time.

24 Q. Okay, as a Senior Research Specialist, who
25 did you report to?

1 A. Dr. Martin Dietrich.

2 Q. And at that time, did you ever anyone
3 reporting to you?

4 A. No.

5 Q. And am I correct that all this work was here
6 in St. Louis?

7 A. That's correct.

8 Q. The first time you were a Senior Research
9 Specialist, did you have any involvement with the
10 Anniston Plant?

11 A. Not that I recall.

12 Q. And did you continue to do the same kinds of
13 samples that you would do, that you were testing for
14 PCBs levels as a Senior Research Chemist?

15 A. Much more limited amount of time spent on
16 PCBs issues at that point.

17 Q. What was your, what was most of your time
18 spent on?

19 A. Other product lines that Monsanto had.

20 Q. You said the area, you mentioned earlier the
21 area of samples broadened. Is that what you mean
22 by--well, tell me what you mean by that.

23 A. It's what I just said,--

24 Q. Okay.

25 A. --that instead of focusing on PCBs, I, I

1 had responsibilities for a much broader range of, of
2 products, or for analytical testing on a much broader
3 range of products.

4 Q. Do you recall whether you tested any
5 products, any non-PCB products from the Anniston
6 Plant?

7 A. I don't recall doing that, no.

8 Q. Did the Anniston Plant have senior research
9 chemists at the plant location?

10 A. I don't know. I doubt it, because I was in
11 a research organization, and the plants were in plant
12 organizations, so I doubt if they had anyone with that
13 title but I, I could be wrong.

14 Q. Okay, but, but your--you don't recall that
15 they had a laboratory, there, at the plant, do you?

16 A. Yes, I know they did have a laboratory at
17 the plant.

18 Q. Okay, what did the, what did the plant
19 laboratories do different from what you did?

20 A. They primarily did quality control testing
21 on the products being manufactured at that plant.

22 Q. Sure. They determined if the products were
23 within the specifications that were identified in the
24 spec sheets, right?

25 A. That's my understanding, yes.

1 Q. So if they needed, if they needed anything
2 done beyond that, they would have to go to St. Louis
3 for that work; correct?

4 A. Or other laboratories, depending on the
5 particular product line.

6 Q. Did Monsanto use any outside laboratories to
7 do the work, or was it all done in-house?

8 A. I believe the plants occasionally might use
9 outside laboratories, but I don't know that
10 specifically.

11 Q. Why do you believe they might have done
12 that?

13 A. Well, because I know they do it now.

14 Q. Okay.

15 A. So it's likely that if they had fairly
16 routine testing to be done, that they could use
17 contract laboratories.

18 Q. And by failing routine testing, I guess you
19 mean testing beyond just the standard determination of
20 whether they meet their product specs?

21 A. Yes.

22 Q. If, if someone at the Anniston Plant wanted
23 fish tissue tested, would that be something that they
24 would send to St. Louis or would they get an outside
25 contractor?

1 A. In the time frame I was there, I have no
2 idea.

3 Q. Okay. Then around 1978, you became a Senior
4 Research Group Leader?

5 A. Yes.

6 Q. Is that correct? And who did you report to
7 at that time?

8 A. Dr. James Mieure, M-i-e-u-r-e.

9 Q. Do you know if Mr. Mieure is still alive
10 today?

11 A. I believe he is.

12 Q. Have you spoken to Mr. Mieure since--or when
13 was the last time you spoke with Mr. Mieure?

14 A. Probably two years ago.

15 Q. Do you recall what, what you spoke to
16 Mr. Mieure about?

17 A. I probably said "Good morning."

18 Q. How did your responsibility change as a
19 Senior Research Group Leader?

20 A. Well, at that point, I had people reporting
21 to me.

22 Q. You, you became more of an, an
23 administrator, looking over the work of, of the
24 research chemists and the specialists?

25 A. It was probably 50-50 supervisory and still

1 active laboratory work.

2 Q. And at that time, when you were doing the
3 active laboratory work, what was the breakdown of
4 your, of your testing with respect to PCB material
5 versus non-PCB media?

6 A. It went back up some. It was probably 25
7 percent or so may have been related to PCB issues.

8 Q. Do you know why it increased, why it went
9 back up?

10 A. Because I went to a group that had more
11 environmental responsibilities rather than product
12 responsibilities.

13 Q. Okay, what group were you with with the
14 Senior--as a Senior Research Chemist?

15 A. It was called Applied Sciences.

16 Q. And how about as a Senior Research
17 Specialist?

18 A. Called Environmental Sciences.

19 Q. And how about as the group leader?

20 A. No, wait. Wait. I'm sorry, I misspoke.

21 Q. That's okay.

22 A. As a Senior Research Specialist, it was
23 still Applied Sciences, then when I became a group
24 leader, it went to Environmental Sciences.

25 Q. And then sometime around '80 or '81, you

1 went back to being a Senior Research Specialist; is
2 that correct?

3 A. Yes.

4 Q. Within which group?

5 A. That was, that was within our corporate
6 research organization. The other, to clarify a little
7 bit, the other responsibilities were all within the
8 Industrial Chemicals Company, and at that point, I
9 transferred to the corporate research laboratories.

10 Q. And what did you do as a Senior Research
11 Specialist with the corporate research laboratories?

12 A. I did primarily mass spectroscopy on a
13 variety of Monsanto research products and projects.

14 Q. Any of those projects related to PCBs?

15 A. Very few; very small PCB responsibility in
16 that time frame.

17 Q. Okay. As a Senior Research Group Leader in
18 1978, in the time frame that you were the group
19 leader, did you have any involvement with the Anniston
20 Plant?

21 A. Not that I recall.

22 Q. How about when you went back to being a
23 Senior Research Specialist? Did you have any
24 involvement with the Anniston Plant?

25 A. That, I'm more certain that I did not.

1 Q. Why did you make the decision to go from
2 being a group leader back to a research specialist?

3 A. Frankly, I was probably not the best
4 administrator of people working for me. I didn't
5 enjoy that as much as I enjoyed working in the
6 laboratory.

7 Q. Were you asked to step down, or was that a
8 decision you just made on your own?

9 A. It was a joint decision with me and
10 management.

11 Q. And then I understand that you became a
12 Manager of Product Acceptability.

13 A. That's correct.

14 Q. And what year was that?

15 A. 1985.

16 Q. And again, that was, that was here in
17 St. Louis?

18 A. Yes.

19 Q. What does a Manager of Product Acceptability
20 do?

21 A. Well, that's a very broad, general question.
22 I can tell you what I did.

23 Q. What did you do?

24 A. I went to work for--with Mr. Craddock, who I
25 spoke of earlier, primarily to help deal with issues

1 involving PCBs on a corporate level.

2 Q. What PCB issues did you assist Mr. Craddock
3 with?

4 A. There were issues regarding implementation
5 of regulations, issues regarding development of
6 regulations, issues involving customer requests for
7 information on PCBs. A number of things.

8 Q. As a Manager of Product Acceptability, did
9 you have any involvement with the Anniston Plant?

10 A. Yes, I did.

11 Q. Okay, and which issues, the three issues
12 that you just mentioned, did those--were those all
13 involved at the Anniston Plant?

14 A. No, the primary involvement with the
15 Anniston Plant at that time was a, was an
16 environmental issue at the plant.

17 Q. And what year did that environmental
18 issue--what year was--did you become aware of it?

19 A. In 1985, I believe.

20 Q. And what was the environmental issue?

21 A. The presence of PCBs in sediments in a
22 drainage ditch leading away from the plant.

23 Q. Was that the 11th Street drainage ditch?

24 A. That's what it's called now.

25 Q. What did you call it then?

1 A. A ditch.

2 (Laughter.)

3 Q. Were there any other--besides that ditch,
4 were there any other ditches leading from the, from
5 the Anniston Plant that you were aware of?

6 A. Well, that, that isn't the ultimate receptor
7 of waters from other ditches leading from the plant,
8 but that's, you know, that was the focus of the issue
9 at that particular point in time, was what's now
10 called the 11th Street ditch.

11 Q. Okay, where else were PCBs detected besides
12 that ditch at that time?

13 A. In Snow Creek.

14 Q. And that 11th Street, what we now know as
15 the 11th Street ditch connects to Snow's Creek?

16 A. Snow Creek.

17 Q. No "s"?

18 A. I don't know. Maybe it is, maybe there is
19 an "s." I've never used an "s."

20 Q. We'll call it Snow Creek.

21 A. Okay.

22 Q. Any other, any other areas or media that
23 PCBs were detected in with respect to the Anniston
24 Plant at that time?

25 A. That's all I recall. That's what the focus

1 was.

2 Q. Now, how did, if you recall, how did
3 Monsanto determine that there were PCBs present in
4 the, in the drainage ditch?

5 A. They took samples and had them analyzed.

6 Q. Prior to 1985, is it your testimony that,
7 that they didn't know PCBs were in the drainage ditch?

8 A. I--they did not have concrete scientific
9 information that they were in there. I would say
10 that's true, yes.

11 Q. When you say "concrete scientific
12 information," are you just simply saying they didn't
13 have--they hadn't done testing in the drainage ditches
14 to determine the presence of PCBs?

15 A. I don't know whether they had or not, but if
16 they had, I was not aware of it.

17 Q. You were not aware of any samples prior to
18 that time that showed PCBs present in that ditch?

19 A. That's correct.

20 Q. Do you know what prompted Monsanto to sample
21 the ditch?

22 A. Yes.

23 Q. And what prompted Monsanto to do that?

24 A. They were asked to do it by the--I don't
25 know whether it was the ADEM at the time or the

1 Alabama Water Improvement Commission, but I think it
2 was ADEM--they were asked by the state regulatory
3 agency.

4 Q. As Manager of Product Acceptability, who did
5 you report to?

6 A. John Craddock.

7 Q. Who did John Craddock report to?

8 A. Uh, William or Bill McCarville.

9 Q. Am I correct that Mr. Craddock was here in
10 St. Louis?

11 A. That's correct.

12 Q. While you were Manager of Product
13 Acceptability, how often would you visit the Anniston
14 Plant?

15 A. I believe I visited it once or twice ;once
16 for sure, maybe twice.

17 Q. So you were familiar with the layout as
18 least as it was in 1984?

19 A. I would say probably not that much, but
20 maybe generally. I was there: That's--you know. It
21 would be hard for me to separate anything different
22 from the way it was in 1984 or 1985 than it is today.
23 I, I don't remember any specific differences.

24 Q. When you were Manager of Product
25 Acceptability, who was the Director of Environmental

1 Affairs?

2 A. Bill McCarville.

3 Q. When you became the Director of
4 Environmental Affairs, was Mr. McCarville promoted to
5 another position?

6 A. No, he retired.

7 Q. Do you know how old he was?

8 A. Early sixties.

9 Q. Do you know why you were chosen as Director,
10 Environmental Affairs?

11 A. I guess because I was doing a good job at
12 the work I was doing before then.

13 Q. Again, you were Director, Environmental
14 Affairs through the Solutia spinoff until January 31st
15 of 2001?

16 A. That's correct.

17 Q. During your time as a Director,
18 Environmental Affairs--and that includes both time
19 with Monsanto and time with Solutia--what was your
20 role with respect to the Anniston Plant?

21 A. Primarily, to provide technical support,
22 scientific expertise on PCB issues.

23 Q. Which PCB issues?

24 A. All of them.

25 (Laughter.)

1 Q. I guess that's fair.

2 As Director, Environmental Affairs, which
3 PCB issues were you dealing with or was the Anniston
4 Plant having that you were dealing with?

5 A. Well, I don't know how much detail you want,
6 but primarily beginning in 1993, with the discovery of
7 PCBs in various environmental samples in Anniston,
8 there were, there were remediation issues, there were
9 analytical issues, eventually there were litigation
10 issues, you know, fate and transport issues. I mean,
11 I'm not trying to be, you know,--

12 Q. I understand.

13 A. --a smarty pants. I was--you know, to the
14 extent that--I mean, my primary role at Monsanto and
15 then subsequently at Solutia was to be the internal
16 company resource on PCB and--issues and issues around
17 other legacy chemicals, and I, I had, you know,
18 maintained contact with the scientific literature,
19 scientific meetings, so I was primarily the person
20 within those two companies that had scientific,
21 technical background on PCBs, so whatever the issue
22 was, I was the point of first contact. I may or may
23 not have had the ultimate answers, but I was the point
24 of first contact.

25 Q. Now, you said when, when PCBs were detected

1 in 1993; is that correct?

2 A. That's what I said.

3 Q. Now, didn't you say earlier that PCBs were
4 detected in 1985?

5 A. Well, that--these were separate--yes.

6 Q. Okay.

7 A. But these were separate incidents or
8 separate situations.

9 Q. Explain how they were separate situations.

10 A. Well, the 1985 situation was involved in the
11 presence of PCBs detected in the sediments of what is
12 now called the 11th Street ditch. Monsanto prepared a
13 work plan or a proposal to remove those sediments that
14 was eventually carried out, and that situation was
15 closed.

16 Q. Did Monsanto test in any other--besides the
17 11th Street ditch and Snow Creek in 1985, did Monsanto
18 test any other media at or near the Anniston Plant?

19 A. I do not believe so.

20 Q. Now, what media did Monsanto test in 1993?

21 A. Well, the, the situation was prompted by
22 testing actually done or asked for by Alabama Power,
23 not by Monsanto. The first tests were done on samples
24 taken from a landfill, a former landfill that had been
25 acquired by Alabama Power.

1 Q. A former Monsanto landfill?

2 A. That's correct.

3 Q. Do you recall what levels, in 1985 what
4 levels were detected in the 11th Street ditch,
5 approximate levels?

6 A. I don't recall specifically.

7 Q. Do you recall--maybe you don't recall a
8 specific, a specific number, but do you recall your
9 reaction to seeing the results of the 11th Street
10 ditch testing?

11 A. Well, I think I was a little surprised by
12 the, the levels of some of the samples.

13 Q. And is that the same for Snow Creek?

14 A. No, the Snow--the samples in Snow Creek were
15 quite low, actually.

16 Q. What's, what's low, in your mind?

17 A. Well, at that time frame, the important
18 cutoff point was the 50-part-per-million disposal
19 cutoff that was--had been imposed by the Environmental
20 Protection Agency, so the numbers that I spoke of
21 being a little higher in the 11th Street ditch were
22 above that particular level. The levels in Snow Creek
23 were well below that and, I believe, you know, one to
24 two orders of magnitude below that. I mean, they were
25 levels that, that I didn't think were striking

1 compared to other levels in, in waterways in the
2 United States.

3 Q. PCBs, when you say, though, that PCBs aren't
4 naturally occurring, they're certainly manmade?

5 A. I--you know, we could quibble if we wanted
6 to, but I'll generally agree that they're, by far, the
7 biggest amount of them are man-made.

8 Q. Okay, educate me on, on that point. You
9 seem to, you seem to indicate that there, there are
10 certain situations where PCBs can, can be created in
11 the environment outside of--and by that, I mean
12 outside of a non--outside of a manmade PCB, that the
13 environment will somehow create these PCBs?

14 A. There is, there is some very small evidence
15 that PCBs can be naturally created in forest fires and
16 those kinds of situations. I'm not trying to tell you
17 that they account for the majority of PCBs in the
18 environment; I'm just telling you there is, there is
19 some evidence for the natural creation of PCBs and
20 other chlorinated compounds.

21 Q. Is that, is that an accepted premise in the
22 scientific world today?

23 A. I believe so.

24 Q. You are not, you are not saying that the
25 PCBs that were detected in the ditch or Snow Creek

1 were the result of such, such spontaneous creation,
2 are you?

3 A. No, I'm not.

4 Q. Do you know if, in 1993, there was any more
5 testing done in the 11th Street ditch?

6 A. There certainly was subsequent to 1993.

7 Q. Okay.

8 A. I don't know the exact time frame of that
9 testing.

10 Q. You said that, that the problem in 1985 was,
11 was taken care of and that sediments were removed?

12 A. That's correct.

13 Q. When were those sediments removed?

14 A. Approximately 1989.

15 Q. Do you know why it took four years from, the
16 from the PCBs being detected in the 11th Street ditch
17 in Snow Creek to the eventual removal in '89?

18 A. Not specifically, although I know we were
19 waiting for ADEM's approval of the work plan.

20 Q. Do you recall what, what size area was
21 tested in the 11th Street ditch?

22 A. Well, the testing was primarily from where
23 the unnamed tributary leading from the Monsanto plant
24 goes under the railroad tracks at 11th Street up to
25 its confluence with Snow Creek.

1 Q. In the areas that Monsanto removed these
2 PCBs and took care of the problem, has there, has
3 there, from--after that time, was there testing in
4 those same areas?

5 A. Subsequent to 1993, there was, yes.

6 Q. And does the testing show the presence of
7 PCBs in the areas where Monsanto removed PCBs?

8 A. There were some, yes.

9 Q. How do you account for that?

10 A. Primarily, movement of sediments from
11 further upstream of that ditch.

12 Q. And this is--when did, when did that plant
13 stop making PCBs?

14 A. 1971.

15 Q. Is that August 1971?

16 A. I don't know specifically the month.

17 Q. Somewhere around there?

18 A. The year is correct.

19 Q. So even, even more than a decade after they
20 stopped making PCBs, PCB levels within, within the
21 11th Street ditch varied due to, due to the mobility
22 of the PCBs; correct? Maybe--that's a bad question.
23 What I'm, what I'm trying to get at is, there, even
24 though, even though they stopped manufacturing PCBs,
25 the PCBs at the Anniston Plant continued to move

1 around.

2 MR. NASSIF: Object to the form.

3 MR. LANGLAIS: You can answer.

4 MR. NASSIF: Vague. Do you know what
5 "continued to move around" means?

6 A. Well, I can--

7 BY MR. LANGLAIS:

8 Q. Let me ask it this way. Did PCBs continue
9 to migrate from the Anniston Plant into, into the 11th
10 Street ditch and Snow's Creek, after that removal that
11 you discussed in 1989?

12 A. I mean, the data we have would certainly
13 suggest that there was continuing movement of
14 sediments from ditches or creeks upstream of the 11th
15 Street ditch into the 11th Street ditch after 1989,
16 yes.

17 Q. And certainly, it certainly more than
18 suggests that, don't you agree?

19 A. I certainly don't have an alternative
20 suggestion--

21 Q. Right.

22 A. --or an alternative theory, no.

23 Q. Did you assist in Monsanto's response to
24 EPA's CERCLA 104(e) request?

25 A. Yes--well, for which, which one?

1 Q. For the Anniston plant.

2 A. For PCBs?

3 Q. Yes.

4 A. Yes.

5 Q. What, what other 104(e) requests have you

6 assisted Monsanto with? And you understand by

7 "Monsanto," I mean Solutia and Pharmacia, as well?

8 A. Yes, I do. I had some minor input into the
9 response on the request on information on lead.

10 Q. What was your input with respect to the
11 requests concerning lead?

12 A. Primary--primarily, to verify that, that I
13 still believed what was written to ADEM in my letter
14 to ADEM with regard to the lead pot process at
15 Monsanto--or at the plant in Anniston.

16 THE VIDEOGRAPHER: Excuse me, Counsel. It's
17 time for a tape change.

18 MR. LANGLAIS: Okay.

19 THE VIDEOGRAPHER: This will end tape number
20 1 in the deposition of Robert Kaley II. We are off
21 the record at 10:39 A.M.

22 (Pause to change video tapes.)

23 THE VIDEOGRAPHER: We're back on the record
24 at 10:45 A.M. This begins tape number 2 in the
25 deposition of Robert Kaley II.

1 MR. LANGLAIS:

2 Q. Mr. Kaley, I'm going to go back in a few
3 minutes and, and ask you some specific questions about
4 your role in, in assisting Monsanto or in responding
5 to the CERCLA 104(e) requests from EPA, but first, I
6 want to find out if you played any role in preparing
7 some other documents. Did you have any role in
8 preparing the Complaint against the Defendants in this
9 lawsuit?

10 A. No.

11 Q. How about the Amended Complaint?

12 A. No.

13 Q. Did you have any role in preparing Monsanto,
14 Pharmacia, Solutia's initial disclosures in this
15 lawsuit?

16 A. No.

17 Q. How about in preparing interrogatory
18 responses in this lawsuit?

19 A. I don't believe so.

20 Q. So if you are listed in the interrogatories,
21 do you believe that you are listed because your name
22 appears on documentation, maybe with respect to--well,
23 let me ask it this way. Do you know why you would be
24 listed in, in Plaintiff's interrogatory responses as
25 persons who assisted in, in the preparation of those

1 responses?

2 A. Probably because I assisted in the
3 preparation of those responses and didn't recall it in
4 response to your question. I may very well have
5 answered some questions that they had in that--

6 Q. Okay.

7 A. --for that document. I don't know.

8 Q. We'll go through those. How about assisting
9 Monsanto with the preparation of responses to requests
10 for production?

11 A. Again, I don't recall, but I may have had
12 some minor role.

13 Q. Before we talk about your CERCLA 104(e)
14 request--responses, rather, I want to talk basically,
15 just some basics about biphenyls and PCBs. What are
16 biphenyls or diphenyls?

17 A. It's an organic chemical composed of two
18 six-membered benzene rings that are connected by a
19 bond.

20 Q. And am I correct that biphenyls are
21 precursors to, to PCBs?

22 A. Well, there's only one biphenyl. It is a
23 single, unique compound, and it is a--one of the
24 starting materials to make PCBs, yes.

25 Q. And biphenyl is produced by a process known

1 as pyrolysis of benzene; is that correct?

2 A. That's correct.

3 Q. Can you describe to me what happens
4 structurally to those rings to, to the benzene rings
5 in that process?

6 A. Well, in the--just in general terms, in the
7 presence of heat, one of the hydrogens is removed from
8 each ring and the, the two benzene rings are bonded at
9 the, at the position where those hydrogens have been
10 removed.

11 Q. Sure, so the hydrogens drop off one, one
12 carbon each on the, on the benzene rings and a, and a
13 bond is formed between the two carbons, now, of the
14 rings?

15 A. In general terms, that's correct, yes.

16 Q. Now, when we say--what's the difference
17 between PCBs and Aroclors, if there's any difference?

18 A. Well, PCBs, polychlorinated biphenyls, is
19 the term used to describe a family of chemicals that
20 have chlorines attached to a biphenyl ring.

21 Q. Okay.

22 A. Aroclor is a trade name originated by Swan
23 Chemical Company and taken over by Monsanto Company to
24 describe their product line of polychlorinated
25 polyphenyls, including PCBs, which were mixtures of

1 the various PCB congeners.

2 Q. Describe for me--now you have biphenyl, and
3 now you are trying to convert that biphenyl to
4 polychlorinated biphenyls, basically, you are--you
5 want to have some of the hydrogens, hydrogen atoms
6 drop off and chlorine, chlorine atoms take their
7 place; is that correct?

8 A. Yes.

9 Q. How is that replacement, how is that
10 chlorination done?

11 A. Well, in, in simple terms, the biphenyl is
12 reacted with chlorine gas in a furnace in the presence
13 of heat and in the presence of what is called a
14 catalyst. It's a chemical that facilitates the
15 reaction but doesn't participate in it.

16 Q. And the degree of chlorination determines
17 the nature of the Aroclors we discussed earlier;
18 correct?

19 A. Yes.

20 Q. And by that, I mean the more chlorine atoms
21 that replace the hydrogen atoms, the more persistent
22 that, that PCB will be in the environment?

23 A. Well, that's, that's a very--I mean, that's
24 one aspect of the, the result of the chlorin--the
25 increasingly heavy chlorination of the PCBs.

1 Q. Sure.

2 A. I mean, there are a number of properties
3 that change, depending on the level of chlorination,--

4 Q. Sure.

5 A. --but persistence in the environment is one
6 that is generally associated with higher chlorination
7 levels.

8 Q. As you increase the chlorination levels,
9 what other properties change?

10 A. Water solubility, vapor pressure, viscosity,
11 boiling point, you know, melting point, just about
12 every property that any particular chemical can have
13 is going to change. Physical state.

14 Q. Does the--as, as you go into higher
15 chlorination, does the solubility decrease or
16 increase?

17 A. Decreases. Water solubility decreases.

18 Q. And what happens to the vapor pressure as
19 you increase the chlorination?

20 A. The vapor pressure decreases.

21 Q. What's the practical--practically, what does
22 that mean as the vapor pressure decreases?

23 A. It means they evaporate less slowly. They
24 enter the air phase less slowly--I mean more slowly,
25 excuse me, more, more--the heavier the chlorination,

1 the more slowly they evaporate.

2 Q. Okay. So the lower the chlorination, the
3 quicker they evaporate?

4 A. Right.

5 Q. Okay.

6 A. Although that's still very slow for PCBs,
7 but relative to higher-chlorinated PCBs, it's more
8 rapid.

9 Q. And what happens to the boiling point? Am I
10 correct that the higher the chlorination, the higher
11 the boiling point?

12 A. That's correct.

13 Q. So the, the higher the chlorination, the
14 better, the better the PCBs would be to retain or to
15 avoid breaking down because of heat?

16 A. Um, yeah, that's generally true, yes.

17 Q. And you said "melting point." The higher
18 the chlorination, the higher the melting point?

19 A. Yes.

20 Q. Explain, explain the difference between the
21 melting point and the boiling point.

22 A. Well, the melting point is the point at
23 which it goes from a solid to a liquid, and the
24 boiling point is the point at which it goes from a
25 liquid to a gas.

1 Q. Okay. Now, would this be a true statement
2 that the higher the chlorination, the higher the
3 degree of chemical stability, the more stable the PCB
4 would be?

5 A. In general, that it is true.

6 Q. And by that, I mean, I guess, less reactive.

7 A. In general, that's true.

8 Q. What happens to--well, PCBs have a low
9 electric conductivity?

10 A. That's correct.

11 Q. Now, what happens to the conductivity as you
12 increase the chlorination?

13 A. I'm not sure it changes very much.

14 Q. Now, these are the characteristics that make
15 PCBs desirable as dielectric fluids; is that correct?
16 They are high boiling point, they are high degree of
17 stability, high flash point, and low electrical
18 conductivity?

19 A. Yes, I believe that--

20 Q. Is that correct?

21 A. Those are certainly properties that do make
22 them desirable as industrial fluids, yes.

23 Q. Are there any other properties that, that,
24 that we've discussed--that, that we haven't discussed
25 with respect to making PCBs desirable for dielectric

1 fluids?

2 A. There may be. Nothing springs to mind.

3 Q. Isn't it true that those same properties
4 that make this desirable for dielectric fluids also
5 are the same properties that make, make these PCBs
6 persistent in the environment? Would you agree with
7 that statement?

8 A. I would agree that for the PCBs that are
9 persistent in the environment--and not all of them
10 are--those are generally the properties, certainly
11 some of those properties can influence that. Things
12 like flash point and electrical conductivity do not
13 have any impact on the environmental persistence of
14 some PCBs.

15 Q. Which PCBs aren't persistent in the
16 environment?

17 A. Well, primarily, again, the ones that are,
18 that are more lowly chlorinated.

19 Q. Did, did Monsanto--did that Anniston Plant
20 manufacture PCBs that were not persistent in the--that
21 are persistent in the environment?

22 A. Certainly.

23 Q. Are you able to give me a breakdown of, of
24 those things that you consider, those PCBs you
25 consider to be persistent and not persistent?

1 A. Well, I can give you a rough, rough outline.
2 It's not hard and fast, but generally, polychlorinated
3 biphenyl congeners that have, you know, three, or four
4 or less chlorines are not persistent in the
5 environment. Those that have, you know, five, six,
6 and more chlorines tend to be more persistent in the
7 environment.

8 Q. So those that have three to four are still
9 persistent, they're just not as persistent as those
10 are five to six?

11 A. Well, there again, you know, you are asking
12 questions that now are going to require splitting
13 hairs a little bit, because at that three and four
14 break point, some of the three and fours do persist in
15 the environment for periods of, you know, maybe days
16 or, or weeks. Some of them disappear very rapidly,
17 depending on, really, the location of the chlorines on
18 those particular molecules.

19 Q. The PCBs that were detected in 1973, now,
20 they hadn't done manufacturing at that facility since
21 1971, so that's, that's two decades. Would you say
22 that those PCBs are pretty persistent in the
23 environment?

24 A. Well, the PCBs that were first detected were
25 in a tar-like material in a landfill. Obviously, that

1 would increase their persistence, so I mean if they're
2 still there and that's your definition of persistence,
3 yes, I believe that, you know, they certainly lasted
4 that long in that matrix.

5 Q. But in '93, they were also detected in the
6 11th Street ditch, as well.

7 A. '94, '95, maybe. I think it was that long
8 before those samples were actually analyzed.

9 Q. Okay, but in the mid Nineties, they were
10 still being detected in the, in the ditch?

11 A. Some PCB congeners were being detected in
12 samples from that ditch, yes.

13 Q. Do PCBs have a half-life, like radioisotopes
14 and things of that nature?

15 A. There is--I mean yes, there is something
16 that's described as a half life. It depends on the
17 specific congener. There's, there's not a half life
18 for the big family of--

19 Q. Sure,--

20 A. --PCBs.

21 Q. --because--

22 A. Each particular congener has its own
23 particular characteristics and will have its own
24 particular half life in whatever matrix you're--you
25 choose to discuss.

1 Q. Right, and that's because of the varying
2 degrees of chlorination and, and it also has to do
3 with the matrix that, that the PCBs are in; correct?

4 A. And the position of the chlorines,--

5 Q. Sure.

6 A. --on the rings.

7 Q. Now, getting to the position of the
8 chlorines, when, when Monsanto has a product called
9 Aroclor 1254, that 1254, that indicates, those numbers
10 indicate the positions on the, on the biphenyl ring or
11 on the ring where the chlorines are located; is that
12 correct?

13 A. No, that's not correct.

14 Q. Okay, what does, what does that number
15 reflect?

16 A. The 12 part of the number, the first two
17 digits, reflects the fact that the product is based on
18 distilled biphenyl, and the 54 represents the average
19 level of chlorination of the particular product.

20 Q. So 54, for that product I just mentioned,
21 Aroclor 1254, that would essentially be a little--the
22 average is a little more than five chlorinated
23 positions; correct?

24 A. Yes. It's right, pretty close to five
25 chlorines per molecule on average, although it

1 contains congeners with, you know, one, up to six or
2 eight chlorines, so it's important to remember that
3 they're a mix and that that number is only an average.

4 Q. Sure. So there could be some within that
5 mixtures that actually has more than five chlorinated
6 carbons?

7 A. No, there undoubtedly are.

8 Q. And you were talking before how, how if it's
9 got five to six, those represent some of the more
10 persistent PCBs; is that correct?

11 A. Relatively speaking, yes.

12 Q. So Aroclor 1254 would be one of--by your
13 definition, would be one of those more persistent
14 PCBs?

15 A. No, it contains PCB congeners which are among
16 the more specific. It also contains some that are not
17 necessarily persistent.

18 Q. Sure, and I understand that, but on average,
19 I mean, I mean you all have the average in there--

20 A. Yes.

21 Q. --of 54 percent. I mean--I, I understand
22 what you are saying. I don't, I don't need to beat
23 that horse.

24 Let's talk about the lead pot process. When
25 were you asked, what year were you asked to look into

1 the lead pot process that was performed at the
2 Anniston Plant?

3 A. I, my recollection is it was 1999. I don't
4 remember. Whatever the date on that letter is.

5 Q. Was that your first introduction to, to that
6 process, when you were asked to look into it? Did you
7 know what they were talking about when you were asked
8 to look into that process?

9 A. Um, that was my first introduction to that
10 process.

11 Q. And generally, that--well, not generally,
12 but that lead pot process was the process that was
13 once used at the Anniston Plant to make biphenyl?

14 A. That's right.

15 Q. To get to, get those--that--basically, it
16 was, it was to produce that product which is right
17 before the chlorination portion of it; correct?

18 A. Well, it was used to produce biphenyl.

19 Q. Sure, and biphenyls--

20 A. And not all biphenyl went to the production
21 of polychlorinated biphenyls, so it was, I mean it was
22 the process used to create that particular product for
23 some period of time.

24 MR. LANGLAIS: Could I have this marked as
25 Defendant's Exhibit 1?

1 (Defendant's Exhibit
2 Kaley 1 marked for
3 identification.)

4 BY MR. LANGLAIS:

5 Q. I'm going to hand you what's going to be
6 marked as Defendant's Exhibit 1.

7 A. Okay.

8 Q. If you would, take a moment to look at that.

9 MR. TAYLOR: This is Jerry. When you are
10 doing exhibits, if there's a Bates stamp on it, could
11 go ahead and read that out--

12 MR. LANGLAIS: Sure.

13 MR. TAYLOR: --for those of us that are on
14 the phone?

15 MR. LANGLAIS: Yeah, this is Bates
16 labeled--this is an October 12, 2000, letter,
17 beginning Bates label ADA 00-- 000135 through ADA
18 000157.

19 MR. TAYLOR: Thanks.

20 THE COURT REPORTER: Could we go off the
21 record for a second?

22 MR. LANGLAIS: Sure.

23 THE VIDEOGRAPHER: We're off the record at
24 11:02 A.M.

25 (Discussion off the

1 record.)

2 THE VIDEOGRAPHER: We're back on the record
3 at 11:05 A.M.

4 BY MR. LANGLAIS:

5 Q. Mr. Kaley, do you still need more time to
6 review what, what I've handed you, what's been marked
7 as Kaley Exhibit Number 1?

8 A. I suppose that depends on what question you
9 are going to ask, but not, not--as I sit here, I think
10 I'm ready to go.

11 Q. Okay.

12 A. I would say, though, this does correct my
13 recollection on the year at which I was asked to look
14 into this. It was 2000 and not 1999.

15 Q. Do you recall the month in 2000 when you
16 would have been asked to prepare this letter?

17 A. Um, sometime before October but not, not a
18 whole lot before October. I don't--well, maybe I do,
19 because I don't know whether I reference a ADEM letter
20 or not. I don't, I don't specifically recall.

21 Q. Does this appear to be a true and correct
22 copy of the letter that you sent to, to ADEM in
23 response to their request for information on lead use
24 at the Solutia's Anniston facility?

25 A. Yes, it does, except Attachment 1 is not

1 included; nor, apparently, is Attachment 2.

2 Q. Okay, do you know what--and I can't get into
3 this--this is how, this is how it was made available
4 to us. The numbers are sequential, so--

5 A. Okay.

6 Q. --I can get into that. So you are saying
7 this is missing Attachment 1 and Attachment 2?

8 A. Well, without--apparently, just leafing
9 through it, it is apparently missing those two
10 attachments. Without further detail, I don't know
11 exactly what's missing, but, but certainly, there was
12 an Attachment 1. There's a cover sheet for Attachment
13 1, and Attachment 1 is not included, and there is an
14 Attachment 3, which would suggest there had been an
15 Attachment 2.

16 Q. Okay, can you flip through here and tell me
17 what Attachment 1 is in this letter?

18 A. I'm sure Attachment 1 was the standard
19 manufacturing process for biphenyl--yes, it was. The
20 Attachment 1 was the standard manufacturing process
21 for biphenyl, dated September 17th, 1957.

22 Q. Okay, and what was Attachment 2?

23 A. Attachment 2 was sampling and analysis
24 results for lead in groundwater, outfalls and soils,
25 although those appear to be what is attached behind

1 the sheet ADA 179 labeled "Attachment 3," so
2 apparently, those tables were included, the Attachment
3 2 tables were included, but there seems to be a cover
4 sheet for them missing, and they are misoriented with
5 regard to the Attachment 3 cover sheet.

6 MR. LANGLAIS: Okay.

7 MS. LAVEY: I'm going to jump in here and
8 suggest that, Jim, perhaps Attachment 2 is described
9 at the top of page 2.

10 A. I'm sorry, that was--you are right. I'm
11 sorry, I see a Table 11, and I saw that as 2. You are
12 absolutely right. I'm sorry for my mistake. All
13 right, Attachment 2--

14 MS. LAVEY: I'm sorry, I--

15 A. Attachment 2--you are absolutely--thank you,
16 very much--Attachment 2 is a 1984 amendment to the
17 1979 SMP for polyphenyls. I'm sorry. Thank you for
18 that correction. Attachment 3 is apparently correct
19 as described in the doc--in the letter.

20 (Defendant's Exhibit

21 Kaley 2 marked for

22 identification.)

23 BY MR. LANGLAIS:

24 Q. Mr. Kaley, I'm going to hand you what I'm
25 going to mark as Kaley Exhibit Number 2. Take a look

1 at that exhibit. Let me know when you are finished.

2 A. I've flipped through it.

3 Q. Okay, does this appear to be the document
4 described as Attachment 1 in your letter to ADEM Bates
5 label--I mean marked as Kaley Exhibit Number 1?

6 A. It appears to be, yes. Certainly, the dates
7 correspond.

8 Q. Tell me, how is it that you were the
9 person--I'm sorry, strike that. How was it decided
10 that you would prepare this response with respect to
11 the lead request for information?

12 A. Well, primarily as I described my
13 responsibilities, I was the person who had technical
14 responsibility for PCB products, and it fell within my
15 bailiwick to, to try to prepare that response.

16 Q. Was it you that made the decision to prepare
17 the response, or did someone present this to you?

18 A. It was probably a joint decision among
19 several people.

20 Q. And who would have, who would have been
21 involved in that decision process?

22 A. I don't know, probably the remediation
23 people at the plant. I'm sure the attorneys had input
24 into it.

25 Q. Can you describe for me how you went about

1 responding to EPA CERCLA 104(e) requests?

2 MS. LAVEY: Do you mean this one?

3 BY MR. LANGLAIS:

4 Q. I'm sorry, how did you go about responding
5 to the request for information on lead use at the
6 Anniston Plant?

7 A. Well, I tried to gather the, the standard
8 manufacturing processes for biphenyl and to read
9 those, to gain an understanding of what the lead
10 process, pot process was, how it was applied, and, and
11 what the environmental implications of that might be.

12 Q. Can you tell me which--was this the only SMP
13 that you looked at, the one references as Kaley
14 Exhibit 2 for the biphenyl process?

15 A. I don't specifically recall. My
16 recollection is that it is not, but that it was the
17 one that most clearly described the process.

18 Q. Now, this was--this lead pot process was a
19 process that--when did that first occur, by your
20 estimation, at the Anniston Plant?

21 A. When did they first start using it?

22 Q. Yes.

23 A. My understanding would have been from the
24 late 1920's, when they first started manufacturing
25 biphenyl.

1 Q. In this letter, you say 1928. Is that an
2 accurate start date?

3 A. No, I say approximately 1928, so yes, I'm
4 sure it's, it's accurate.

5 Q. So this lead pot process occurred at the
6 Anniston facility from late 1920's, approximately
7 1928, through 1964; is that correct?

8 A. Yes, although it was only used
9 intermittently for the last several years of that time
10 frame.

11 Q. Do you recall reviewing any other documents
12 besides the standard manufacturing process for
13 biphenyl in, in assisting you with the preparation of
14 this response?

15 A. Well, certainly, I--the, the Attachment 2,
16 as was pointed out to me, was a 1984 amendment to a
17 1979 standard manufacturing process for polyphenyls.
18 I clearly reviewed that, and I clearly reviewed the,
19 the analytical results that are attached as Attachment
20 3.

21 Q. Do you think if you had reviewed other
22 documents, you would have noted in that this letter?

23 A. Not necessarily, no.

24 Q. Why is that?

25 A. Well, I was only noting, I was only

1 attaching to this letter those documents that I had
2 relied on specifically and that I felt provided
3 information to the reader, so I clearly--if there were
4 other documents I reviewed that said things less
5 clearly or didn't, in fact, contain relevant
6 information, I would not have referred to them.

7 Q. Now, based upon this letter, is it your
8 testimony that the only process used at--the only
9 process at the Anniston Plant in its history that used
10 lead was the lead pot process?

11 A. That's my understanding, yes.

12 Q. And that understanding is based upon your
13 review of the documents that you've just discussed?

14 A. Right, and discussions with other people at
15 the Anniston Plant.

16 Q. What documents did you review to determine
17 whether or not there had been other lead processes
18 used at that plant?

19 A. I believe somewhere, I've seen a list of the
20 products from that plant, and none of them seemed to
21 have any involvement with lead whatsoever.

22 Q. And is it your testimony that you took a
23 product list, historical product list and walked
24 through that list and had discussions and reviewed
25 documents to determine which processes contained lead?

1 A. Well, that's probably a little more official
2 sounding than what I did, but I believe I looked at
3 the, the list of doc--or the list of products, in my
4 own mind as a chemist made a decision that lead would
5 not have been involved in, in those as either a
6 reagent or a product in those materials, and then I
7 also had discussions with, with Anniston Plant
8 personnel to confirm that and to check their
9 recollection.

10 Q. Which, which people did you--who did you
11 speak with with respect to the lead pot process?

12 A. Primarily, Jerry Brown. I'm not--

13 Q. Is Jerry down someone who actually performed
14 the lead pot process at that Anniston Plant?

15 A. I believe not. I don't think so. I think
16 he came after the lead pot process had been shut down.
17 I'm not sure. It was about the same time frame.

18 Q. In preparing this letter, and, and even if
19 you have the information now, have you identified any
20 former employee, current or former employees who had
21 involvement with the actual manufacture of biphenyl at
22 the Anniston Plant using the lead pot process?

23 A. I have not.

24 Q. So your determin--this letter, here, that
25 you've sent to ADEM is based upon discussions with

1 employees who didn't actually do the process and your
2 review of SMPs, or standard manufacturing process
3 documents for biphenyl?

4 A. I would say an employee, Jerry Brown, not
5 employees. Yes, that's correct, other than that.

6 Q. And did you--and so am I to also understand
7 that you didn't speak to anyone else besides Jerry
8 Brown about the lead pot process?

9 A. Not that I recall.

10 Q. Why would Jerry Brown have knowledge about
11 the lead pot process? Why would you go to him?

12 A. Well, because he had discussions with other
13 people about the lead pot, lead pot process. He was
14 at Anniston, and had the opportunity, and knew various
15 people to talk to, so I relied on him to have those
16 discussions and relay the information to me.

17 Q. Did Jerry Brown--in your discussions with
18 Jerry Brown, did he, did he identify any, any persons
19 who were still alive that were involved in the actual
20 production of biphenyl using the lead pot process?

21 A. If he did, I don't remember.

22 Q. Was Jerry Brown at the Anniston Plant at the
23 time the lead pot process was being used?

24 A. I think I answered that before. I do not
25 believe he was.

1 Q. No--

2 A. I think he came after 19--shortly after
3 1964. That's my recollection.

4 Q. All right.

5 A. I could be wrong, but that's my
6 recollection.

7 Q. Okay. Who directed you to go to Jerry Brown
8 to discuss the lead pot process?

9 A. No one. That was my own initiative. I
10 mean, Jerry is known to be one of the, if not--I'm not
11 going to say one of, probably the most knowledgeable
12 person about historical operations at the plant.

13 Q. I know you can't remember their names, but
14 did you inquire, did you, did you ever think to talk
15 to any of the people that Jerry Brown told you he, he
16 spoke with about the lead pot process?

17 A. I certainly didn't speak to any of them.

18 Q. Why wouldn't you--if Jerry Brown identified
19 someone who actually did the lead pot process, why
20 wouldn't you have spoken to them?

21 MR. NASSIF: Object to the form.

22 BY MR. LANGLAIS:

23 Q. (Continuing) Well, let me ask it this way.
24 Is it your testimony that, that Jerry Brown didn't
25 identify, didn't, didn't let you know that he had

1 spoken to people about the lead pot process?

2 A. Jerry Brown--no, it's not my testimony.

3 Q. Okay.

4 A. I would say that Jerry Brown did speak to
5 people, trying to find out about the lead pot process
6 but that if he mentioned any names to me, I don't
7 know, remember who they were, nor do I remember if
8 they even had direct involvement on the ground with
9 the lead pot process.

10 Q. And when was the last time you've spoken
11 with Jerry Brown, if you recall?

12 A. Probably, maybe one to two years ago.

13 Q. When was the last time you spoke to Jerry
14 Brown about the lead pot process?

15 A. Probably within months of the date of this
16 letter.

17 Q. Did Mr. Brown indicate any, any other
18 documents that you should look at with respect to the
19 lead pot process?

20 A. Not that I recall.

21 Q. Did Mr. Brown--did you speak to Mr. Brown
22 with respect to just lead generally at the facility?

23 A. Yes.

24 Q. Not just the lead pot process?

25 A. Yes.

1 Q. Do you recall what those discussions would
2 have, would have been about? What would they have
3 involved?

4 A. His, his only other recollection of lead at
5 that plant was the use of lead in some plumbing in a
6 laboratory building which was razed and then the
7 materials were sent to put in the landfill at
8 Anniston.

9 Q. Do you recall how many documents or how
10 many--do you recall how many documents you reviewed
11 in, in ruling out whether or not other lead processes
12 were used at the plant?

13 A. I don't recall. I don't recall anything
14 specifically other than generally looking at a, at a
15 list of products.

16 Q. So you looked at a list of products and you
17 spoke with Jerry Brown, and you, based upon, based
18 upon that review and your background in chemistry, you
19 determined that none of those processes would have
20 involved lead? Is that correct?

21 A. Basically, yes.

22 Q. So you didn't do any extensive document
23 review of, of all the documents that Monsanto had in
24 its possession to determine if, if they used lead in
25 other--in any of the processes, did you?

1 A. No.

2 Q. Now, we discussed earlier that biphenyl is
3 produced by the pyrolysis of benzene, also known as
4 benzol; is that correct?

5 A. Uh, which, which is the question? That we
6 discussed it, or that--

7 Q. That we discussed it.

8 A. --benzene is known as benzol?

9 Q. That we discussed it.

10 A. Yes, briefly, yes.

11 Q. And "benzol" is another term for, for what?

12 A. I believe it's a term that was previously
13 used to describe benzene.

14 Q. Now, why don't you, why don't you describe
15 for me the, the lead pot process that was used at the
16 plant from approximately 1928 through up to and
17 including 1964.

18 A. Well, my understanding is that there were
19 stainless steel containers containing molten lead
20 through which benzene was bubbled. The molten lead,
21 coincidentally, or luckily, or something was, the
22 melting point of lead was at about the right point for
23 the optimum conversion of benzene to biphenyl. The
24 biphenyl was then collected after its production and
25 distilled to make product-quality material.

1 Q. Would you turn to--you reference in the
2 letter a flow sheet attached to Attachment 1 which
3 we've now identified as Kaley Exhibit 2. Would you
4 turn to that flow sheet?

5 A. Okay. I'm on there.

6 MR. LANGLAIS: Okay, and that's--for people
7 on the phone, and for the record, it's marked as NWV
8 018270, and also as DSW 048627.

9 MS. LAVEY: Also for the folks on the phone,
10 it's also Papageorge Defendant's Exhibit 9.

11 MR. LANGLAIS: Did you--that's a good point.
12 Did you speak with William Papageorge or think to
13 speak to Mr. Papageorge about the lead pot process?

14 A. No, I didn't.

15 Q. Do you know who the plant manager was at the
16 time in 1964, when this process was still in use?

17 A. Not specifically, no.

18 Q. What do you mean, "not specifically"?

19 A. Well, Bill Papageorge was there in the late
20 1960's. I don't know whether he was there in 1964 or
21 not.

22 Q. Who was, who was the plant manager prior to
23 Bill Papageorge?

24 A. I don't know.

25 Q. Did you ever, did you ever--did you look

1 into, into Monsanto--did you ever make a request upon
2 people at Monsanto to identify, to identify people who
3 would still be alive that had involvement with the
4 lead pot process?

5 A. No, I didn't.

6 Q. Wouldn't it have made sense to, to maybe
7 ask--surely, surely people who retired from Monsanto
8 receive retirement benefits, right?

9 A. I suppose they still do. I don't know.

10 Q. And wouldn't it have been, maybe, a good
11 idea to go and seek those records out to determine if
12 there were any employees who were around at the time
13 that that lead pot process was being done?

14 A. I relied on Jerry Brown to inquire among the
15 people that he thought was appropriate.

16 Q. But wouldn't it have been--so you are
17 getting secondhand information through Jerry Brown?

18 A. That's correct.

19 Q. Did Jerry Brown write the letter?

20 A. No, he didn't.

21 Q. Did he, did he review the letter?

22 A. Yes, he did.

23 Q. Okay, and was he the one who kind of signed
24 off on this? I mean, who authored the letter?

25 A. I did.

1 Q. Okay, and Jerry Brown read it to see if it
2 was accurate in his mind?

3 A. That's correct.

4 Q. And it was, and it was based upon Jerry
5 Brown's discussion with these people whose names we
6 don't know, right?

7 A. Well, to the extent that he learned anything
8 different than what's in the SMP, which I don't
9 believe he did necessarily, I don't recall any
10 specific findings from his discussions, that part of
11 it he was--relied on those, but primarily, the letter
12 was based on the things in here that it says it was
13 in, was these, these documents.

14 Q. In 2000, in your position, wouldn't you have
15 had the ability to make a request upon, say, Human
16 Resources within, within the company to give you a
17 list of personnel who worked during, during that time
18 frame? At least, at least during the early Sixties?

19 A. I suppose I could have made--found someone
20 to whom I could have made such a request, yes.

21 Q. Sure. Wouldn't it make sense to you to
22 actually talk with someone who did the lead pot
23 process, as opposed to speaking with someone who
24 talked to someone else about the lead pot process?

25 A. No, I believe for the purposes of responding

1 to this letter, speaking to Jerry was, was the
2 appropriate route to take.

3 Q. You made a determination in your letter that
4 there was no--well, let me ask it this way. Is it
5 your testimony that there was no lead waste generated
6 as part of the biphenyl process using the lead pot
7 process?

8 A. No, I don't think that's necessarily--

9 Q. What determination, what determination did
10 you, did you make with respect to that? Certainly,
11 the, the ADEM and EPA were interested in knowing
12 whether or not this process generated waste that
13 contained lead; is that correct?

14 A. No, I believe they were interested in
15 knowing if it generated, or if there was a potential
16 for lead from this process to be discharged into the
17 environment.

18 Q. Okay, I'll use your own words. Did
19 you--what did you determine with respect to the
20 potential of discharge of lead from this process to
21 the environment?

22 A. I concluded that it was unlikely, if not
23 impossible, that lead from this process would have
24 been discharged into the environment of greater
25 Anniston.

1 Q. Now, talk me through how you went about
2 making that determination.

3 A. Well, as I describe in the letter, I looked
4 at, at the documents, the flow sheet, there's a lead
5 trap at the, at the end of the final converter which
6 would have trapped most, if not all of the lead that
7 was carried through the process. Lead's boiling point
8 is--I don't know, whatever I say it is in here--
9 melting point, I'm sorry, is like 300 degrees. There
10 are other discussions in here of temperatures at the
11 various points in the process, all of which were well
12 below the melting point of lead, so any lead that
13 had--could have been entrained in the process would
14 have dropped out before and into the lead trap or
15 other parts of the process before it could have
16 escaped from the process. It was a tightly controlled
17 process. It had to be because of the dangers of fire
18 from the benzene so there weren't fugitive emissions.
19 I mean, that's basically my thought process.

20 Q. Okay, that's, that's a, that's a theoretical
21 process, as opposed to an experimental. You are
22 familiar with the distinction between those two as a
23 chemist; right?

24 A. Well, the process didn't exist at the time I
25 was doing this letter, obviously, so I couldn't have

1 done any experiments on whether lead was being
2 discharged or not.

3 Q. Sure. In fact, you've never, you've
4 actually never seen, you've actually never seen the
5 lead pot process, so your theory is, is that there was
6 no discharges of lead; correct?

7 A. My conclusion is that there was no
8 discharges of lead. I'm not sure it's--I don't know
9 what you mean by a theory. It's my conclusion based
10 on my review of these documents.

11 Q. But how can you conclude that no lead was
12 released from lead pot process--well, let me ask you
13 this. Is it your testimony that no lead was released
14 from the lead pot process between 1928 and 1964?

15 A. No, it's my conclusion that, that based on
16 my review of the documents, the discharge of lead from
17 this process into the greater Anniston environment was
18 very unlikely. Subsequent to that, as the letter goes
19 on to say, we have environmental results, testing on
20 both the plant site and off the plant site which
21 suggest that that conclusion is true and that elevated
22 levels lead were not detected at areas where you might
23 expect them had that process been discharging lead.

24 Q. But again, since, since you weren't there at
25 the time at any point during the time that this

1 process was being done, it's only your theory that,
2 that lead, it was very unlikely that lead was
3 released; is that right?

4 A. Well, no, because I think if lead had been
5 relea--I think if, if lead had been released, it would
6 have been detected either at the plant site or in, in
7 a pattern consistent with discharge from the plant
8 site, and it was not.

9 Q. Okay.

10 A. I think we have experimental verification
11 that lead at above background levels was not
12 discharged from that process.

13 Q. And did you--do you recall where the testing
14 was done? Was it done all over the entire plant, or
15 where was the testing for lead that you refer to done?

16 A. I don't recall specifically, but I think
17 there is a document that describes that somewhere.

18 Q. Let's, let's start, let's start with
19 the--let's start at the very beginning of the process.
20 Now, what--how did--what did you determine with
21 respect to how the Anniston facility received in the
22 lead? Like, what form did the lead come in?

23 A. I don't know that I determined that
24 specifically. It would have come--

25 Q. Did it come in chips?

1 A. --in blocks--no, I'm sure it would have come
2 in ingots. I'm not sure, but my supposition is it
3 would have come in ingots, and then I think--yeah--

4 Q. So it would have come in some form, we're
5 just--

6 A. Sure.

7 Q. --squabbling over the size, at this point;
8 right?

9 A. I'm not squabbling. I'm saying I don't
10 know, but I suspect it came in ingots.

11 Q. And so what, what would have had to have
12 happened is then they take this lead and they do what
13 with the lead?

14 A. They put it in the pots and turn on the
15 heat.

16 Q. And then melt it, right?

17 A. (Nods head in affirmative manner).

18 Q. As part of that melting of the lead, was
19 there, was there not lead dross formed? Do you know
20 what lead dross is?

21 A. I have a general understanding of what it
22 is.

23 Q. What do you think dross is?

24 A. It's insoluble materials in any kind of
25 process. In this case, it would have been materials

1 that were insoluble in the, in the, the lead, itself.

2 Q. Impurities, right, basically?

3 A. Or byproducts formed during the process.

4 Q. Okay, but it would be certainly--we'll call
5 them non-lead, non-lead material would have formed,
6 maybe, maybe with, with some, with some lead inter--
7 intertwined in that, that dross that's floating on top
8 of the lead. Is that right?

9 A. Well, my understanding is that occurred
10 during the running of the process, not during just the
11 melting of the, or would have occurred during the
12 running of the process, not during just the melting of
13 the lead, but aside from that, I basically agree with
14 you.

15 Q. Explain that to me. They, they come in with
16 these lead ingots and they put them in the pot and
17 they melt it. At that point, does, does lead dross
18 not, not form at the top of this lead pot?

19 A. Frankly, I don't know.

20 Q. Right, because you weren't there; right?

21 A. I was not there, that's correct.

22 Q. And you didn't speak, you didn't actually
23 speak to anyone who actually watched the process?

24 A. That's correct.

25 Q. And you can't sit here today and tell me

1 that Jerry Brown spoke to anyone who actually watched
2 the process?

3 A. I do not know specifically or not.

4 Q. It's your testimony, am I right that Jerry
5 Brown didn't actually do the lead pot process?

6 MR. NASSIF: Objection: Asked and answered
7 twice.

8 BY MR. LANGLAIS:

9 Q. Is that your testimony?

10 A. That's my understanding, yes.

11 Q. Okay, so, so again, your--you can only
12 theorize as to what happened with, with the dross;
13 right?

14 A. Well, again, I, I don't want to quibble over
15 your word "theorize," but I reviewed what it says I
16 reviewed and I came to my conclusions based on that.
17 If you want to call that a theory, then that's
18 correct, but it's, you know, based on my review of the
19 documents, I came to my conclusions.

20 Q. Right, but it's clearly, your knowledge with
21 respect to this process is clearly not personal
22 knowledge.

23 MR. NASSIF: Objection: Asked and answered
24 at least twice.

25 BY MS. LAVEY:

1 Q. (Continuing) You can answer.

2 A. That is correct.

3 Q. Okay, what did--so you would agree with me
4 that dross did form during the melt process of lead;
5 right?

6 A. No, I would not agree with you.

7 Q. Okay, then explain why dross would not have
8 been formed during the melting process of lead.

9 A. Because I don't know whether there were
10 impurities in the lead that was put in those pots to
11 melt which would have risen to the top as dross. I
12 would suspect that it didn't form during just the
13 melting process. I know lead dross did form in those
14 units and was removed. My understanding was that it
15 was a development during the running of the process.

16 Q. Okay.

17 A. But if you have other information that says
18 it formed during the melting, I'm not going to quibble
19 that with that. I don't know.

20 Q. It formed during the process.

21 A. Yes.

22 Q. You'll give me that, right?

23 A. Certainly.

24 Q. What did, what did Monsanto do with that
25 lead dross?

1 A. It's my understanding that it was taken off
2 and put in the landfills on the plant site.

3 Q. Okay, and does--did you ever do a--do you
4 know what a TCLP test is for, for toxicity for lead?

5 A. Generally, yes.

6 Q. Okay, what do you, what do you think a TCLP
7 test is? What does it, what does it look at?

8 A. A test coming from a landfill to see if it
9 has certain toxicity characteristics.

10 Q. Did you ever do a TCLP test for any of the
11 landfills at Monsanto?

12 A. I didn't.

13 Q. Do you know if they were done?

14 A. I don't know specifically whether they were
15 done or not, no.

16 Q. Well, if lead went into the landfill, if the
17 lead dross went into the landfill, do you think that
18 that lead dross would have contained some component of
19 lead?

20 A. That's a legitimate conclusion, yes, some,
21 some amount or another.

22 Q. Is there any reason to think that that lead
23 would not have leached from the landfill?

24 A. I think they have some of the data that has
25 been submitted to ADEM shows there is not lead in

1 landfill leachates.

2 Q. But you don't, you don't have any, as you
3 sit here today, you didn't actually perform the TCLP
4 test?

5 A. I think we've established that,--

6 Q. Right, and you--

7 A. That's correct.

8 Q. --don't--do, do you recall--and you don't
9 recall when, when TCLP tests were performed?

10 A. I don't even recall if they were performed.

11 Q. Right. Okay. I'm just trying to determine
12 what, what personal knowledge you have about that.

13 Now, you call--so once this lead is melted,
14 what happens in the process next?

15 A. The benzene is vaporized and bubbled through
16 a series of three lead pots to form biphenyl.

17 Q. Is that first, that first lead pot where,
18 where this lead is melted, is that, is that closed
19 top?

20 A. Yes, I believe they're all closed.

21 Q. Okay.

22 A. It has to be an air-free process.

23 Q. All right.

24 A. Or I mean an enclosed, airtight process.

25 Q. And is it your testimony that there--well,

1 let me ask you this: Were there any emissions coming
2 from that process?

3 A. I don't know. Based on my understanding of
4 this process and the environmental results from the
5 Anniston Plant, if there were, they were very small--

6 Q. Did you--

7 A. --and, and not measurable.

8 Q. Did you test offsite for lead, off the
9 Anniston plant, or was it just--was the, was the
10 testing that you are referring to that confirms the,
11 what you were discussing earlier that no lead was
12 discharged through the process or it was unlikely, did
13 that testing involve only on-site testing or offsite
14 testing?

15 A. I didn't do any of the testing personally
16 myself. The results, I believe, were, without going
17 into a great deal of detail, were both on-site and
18 offsite testing.

19 Q. So if, if--so what were the, what were the
20 indications offsite for lead?

21 A. My recollection is that in the drainage
22 patterns from, leading away from the Anniston Plant,
23 that the levels of lead in the sediments were no
24 higher or maybe even lower than they were in Snow
25 Creek upstream of the plant where our discharge

1 entered Snow Creek.

2 Q. Are you aware if Monsanto ever did any air
3 modeling at the facility?

4 A. I'm not aware of any.

5 Q. And certainly, they wouldn't have, they
6 wouldn't have done any air modeling at the time this
7 process was in, was in use; right?

8 A. I don't know.

9 Q. I guess my point is this: Isn't it possible
10 that, that there were emissions from that lead pot
11 process?

12 A. I--there is certainly no evidence that there
13 are any emissions from that process that lead to
14 elevated levels of lead, either on our plant site or
15 in the Anniston environment,--

16 Q. So--

17 A. --consistent with operations in our plant.

18 Q. So is it your testimony that a process that,
19 that was being done in 1928 had no, no emissions to
20 the air?

21 A. It's my testimony that it had no impact on
22 lead levels in the Anniston area.

23 Q. That's not my question. My question is
24 whether or not that process had emissions.

25 A. I don't know.

1 Q. You can't say either way whether or not,
2 whether or not it had emissions?

3 A. At some level or not, no, I can't say.

4 Q. And you are--you can't testify that there
5 were no lead emissions from that process?

6 A. No, I cannot.

7 Q. You cannot, and you are, you are simply--you
8 are theorizing that because lead wasn't detected at
9 the Monsanto plant and maybe on the perimeter of the
10 Monsanto plant, that there mustn't have been lead
11 emissions from that process. Is that your testimony?

12 A. My testimony is that based upon my review of
13 the documents that I had available to me and the
14 environmental measurements for lead both on and off
15 the plant site, that there were not significant
16 emissions of lead from that process.

17 Q. So we have, so far in your closed system, we
18 have lead dross being, being disposed in a landfill.
19 Typically, when I think of, when I think of a closed
20 system, I think of a, a system where, where there is
21 no waste. Is that, is that your, your definition of a
22 closed system?

23 A. Well, no. I don't think that's the
24 definition at all.

25 Q. Okay, so you--

1 A. I mean, certainly, there can be waste coming
2 out of a closed system, and I mean when the system was
3 operating, it was closed. Obviously, to get the lead
4 dross off the lead pots, it had to be opened at that
5 point.

6 Q. Sure, and at that point, there was very
7 likely emissions.

8 A. At some level, there may have been. I
9 don't, I don't know.

10 Q. Well, you theorized on everything else.
11 Now, will you theorize with me on this, that if you
12 open up, if you open up one of the vat that contains
13 molten lead, that there will be emissions of lead from
14 that molten lead into the, into the air?

15 MR. NASSIF: I object to the form of the
16 question. The witness has consistently said he did
17 not agree with your use of the term "theorized." He
18 has given you his testimony. He has said at least
19 three times, "No, I don't understand what you mean by
20 'theorize'" and then he's answered his questions.

21 BY MR. LANGLAIS:

22 Q. (Continuing) Well, this is what I mean by
23 "theorize." You've, you've concluded that because you
24 haven't detected lead at the, at the Monsanto Anniston
25 Plant, that there mustn't have been lead releases or

1 it is very unlikely that there were lead releases from
2 that, from that lead pot process.

3 A. There were not lead releases at a level
4 which impacted environmental measurements of lead in
5 the Anniston community.

6 Q. Yeah, but--

7 A. Yes, I have concluded that.

8 Q. But again, you are, you are changing my
9 question. What I, what I want to know is, I don't
10 care about the levels that would, would require
11 action, I want to know if there were, if there were
12 lead discharges from this lead pot process, and you
13 are changing, when I ask you that question, you are
14 changing my answer to, to discharges that would have
15 an impact on. Do you see that?

16 A. Yes, I understand what you are doing and I
17 understand what my answers are, and I believe my
18 answers are consistent with what I said in this
19 letter, that based on my review of the documents and
20 the environmental measurements for lead in the
21 Anniston community, that there were not measurable or
22 significant impacts or releases of lead from that
23 process into the Anniston community.

24 Q. But you, you can't testify that there were
25 no releases?

1 A. I can testify that there were no releases
2 that had impact on environmental sampling levels.

3 Q. Okay, on a process that, that, that ended
4 what? Ten, ten years before you even showed up?

5 A. That's correct.

6 Q. Now, let's, let's go back to the process.
7 After the molten--the lead is melted and you
8 bubble--and in that first chamber, in that first pot,
9 you put molten, you put--you bubble benzene through
10 that molten lead; is that correct?

11 A. Yes, that's correct.

12 Q. Describe for me what happens, what happens
13 next.

14 A. Well, the benzene is converted to biphenyl.

15 Q. Okay, and then, then it goes into--what I
16 want you to do is I want you to walk me through the
17 three pots that--I want you to walk me through this,
18 this flow sheet.

19 A. Okay. Well, there's a feed tank at which
20 the benzene is stored. The benzene is put into a
21 vaporizer to get it into a gaseous state. The first
22 two pots are called preheaters. They're basically
23 what that says; they're basically there to get the
24 benzene up to the temperature it's going to take to do
25 a--the most efficient conversion to biphenyl, but

1 certainly, there is some conversion to biphenyl in
2 those preheaters as some of the benzene gets up to the
3 right temperature. By the time it gets to the third
4 converter, the benzene and the pots are at the correct
5 temperature to create biphenyl. The biphenyl is then
6 in a gaseous state. It will--it goes to a lead
7 trot--trap where any lead that was either entrained or
8 vaporized would be precipitated out of the biphenyl
9 due to the changes in temperature. It then goes to a,
10 a distillation column where the biphenyl is distilled
11 to collect pure product. The condenser then converts
12 that gaseous biphenyl into the--a liquid product and
13 goes to the catch tank, where it is collected and, and
14 cooled so that it can be used.

15 Q. So am I to understand that all this molten
16 lead, as you bubble the, as you bubble the benzene
17 through, all this molten lead, everything goes from,
18 from a liquid to, to this gas and there is no
19 lead--there is no liquid material left over in any of
20 the pots?

21 A. Well, no, the lead, liquid lead remains
22 almost totally in the pots.

23 Q. Right.

24 A. There's only very small amounts of lead, if
25 any, that are carried with the product into the lead

1 trap where those small amounts, if any, are
2 precipitated out of that stream.

3 Q. Sure. What did the--based upon your, your
4 inquiry, what did the Monsanto Anniston Plant do with
5 this liquid lead? Did it just continue to use it as
6 part of the process? Did they just add more lead to
7 it? I mean, describe for me what happened there.

8 A. Yes, they just added more lead to it, as,
9 as, if necessary, in the levels in the pot, they added
10 more lead to it.

11 Q. Why would they have to add more lead? There
12 must have been lead losses.

13 A. Well, there was some small amount,
14 certainly. There was lead put--that was being caught
15 in the trap, so certainly, there, there was lead
16 leaving the lead pots and being trapped in the lead
17 trap.

18 Q. And, and, and being trapped in the, the
19 dross that we discussed earlier.

20 A. To the extent there was any. I don't know,
21 I don't know how much dross was formed, but to the
22 extent there may have been some lead involved in that
23 dross, yes.

24 Q. How much--how big were these traps? Do you
25 know?

1 A. How big were the traps?

2 Q. Yeah, the lead traps.

3 A. I, if I know, I don't recall.

4 Q. Okay, how much lead was trapped in those
5 lead traps?

6 A. I don't know.

7 Q. Do you know how often the lead traps were
8 cleaned out?

9 A. Not as I sit here, no.

10 Q. Do you know where the material that was set
11 inside the lead traps was, was put?

12 A. Back in the pots.

13 Q. They just kept putting it, putting it back
14 in?

15 A. Sure. It was used--it was perfectly usable
16 lead.

17 Q. So why would they have to add more--why
18 would they have to add more lead to it? You see what
19 I mean? There, there must be a loss somewhere--

20 A. Well, there is. You've talked about the
21 dross, so you know, I don't know, and I don't know how
22 much they had to add, so I don't know what amounts
23 we're talking about.

24 Q. Okay, because presumably, let's just assume
25 for a second that, that the only--that there was no

1 lead lost, that, that any of the lead, any of the lead
2 losses were entrained in this trap. If you were to
3 take a lead and then go back and add it to the molten
4 lead, it would bring you right back up to the, the
5 level, and so you would literally never have to go
6 even buy lead again; right?

7 A. Assuming there was no dross being removed,
8 right.

9 Q. Right, and the fact that, that Monsanto had
10 to continuously buy lead would seem to indicate that
11 maybe the losses were greater than, than you perceive.

12 A. Well, no, I mean, I don't know that I
13 perceive any great losses at all. What I'm--all I am
14 doing is concluding that based--that there was not
15 lead discharged into the community based on this
16 process, that the, the dross that was formed was put
17 in the land--was removed and put in the landfill, and
18 that any--there's no evidence for any, you know,
19 gaseous air emissions that, that impacted soil levels
20 in the Anniston community or our plant.

21 Q. You know, as I sit here, I'm thinking that
22 maybe, maybe the best way to determine lead losses
23 would be to look at how much lead the Anniston Plant
24 was purchasing. Wouldn't you agree?

25 A. Well, I don't know what you mean by "lead

1 losses." I don't--

2 Q. Well, let me--

3 A. We're not arguing about whether there was
4 lead coming out of those pots. There clearly was lead
5 coming out of those pots. The dross was being
6 landfilled.

7 Q. Clearly--right, but, but what I want to,
8 what I want to look at, now I want to determine the
9 extent of, of what I'm referring to as those lead
10 losses. Monsanto is out purchasing, purchasing large
11 quantities of lead. That would seem to indicate that
12 they need those large quantities of lead to replace an
13 equal amount of, of lead lost somewhere, whether it
14 was in emissions or in dross. Wouldn't you agree?

15 A. I, yeah, I would basically agree with that.
16 I don't know what large quantities are, and I don't
17 know whether the quantities were large or small,--

18 Q. Right.

19 A. --but--

20 Q. You know--

21 A. --whatever quantities they were purchasing
22 were arguably being used to replace lead in those
23 pots.

24 Q. Did you ever inquire about how much lead
25 ingots or whatever form they were buying the lead and

1 how much lead this Anniston Plant purchased?

2 A. No.

3 Q. Was that information that you would have had
4 access to--

5 A. I don't know.

6 Q. --at the time you did your inquiry?

7 A. I don't know.

8 Q. Certainly would have been good information
9 to have, wouldn't you agree?

10 A. Not necessarily.

11 Q. Why wouldn't it be?

12 A. Well, because the purpose of, of the letter
13 that I was responding was basically to address levels
14 of lead in the Anniston community. That's what the
15 question was.

16 Q. Right.

17 A. It wasn't to become, you know, the most
18 knowledgeable person in the world on the lead pot
19 process. I did my best to learn what I could learn
20 from the documents I had available to me, but the, the
21 import of the letter and the import of ADEM's request
22 was the impact of, of the potential impact of that
23 process on lead levels in the Anniston community.

24 Q. Sure. They weren't asking you if there were
25 discharges, they were just asking you what the impact

1 would, the potential for impact would be.

2 A. Well, they were asking on what information
3 we had on the use of that process in the plant, and
4 that's the information I was responding to.

5 Q. Once the gas travels through the lead trap
6 and presumably removes, removes, I guess, some of the
7 lead articles would fall out? Am I to assume that as
8 the gas passes through, it is somehow cooled a little
9 bit?

10 A. It's cooled--well, number one, I don't think
11 it's lead particles. It's vaporized lead, probably,
12 and it's cooled a lot.

13 Q. But certainly, that vaporized lead as it
14 cooled becomes particulates, right? Particulates?

15 A. Or liquid, depending upon how cool it gets,
16 yes.

17 Q. How else would the trap work?

18 A. I'm not arguing with you.

19 Q. Okay.

20 A. It's either liquid or, or solids.

21 Q. Okay.

22 A. I don't know which it was, but it was
23 obviously precipitating out of that gas stream, yes.

24 Q. Okay. Did any of these--was there any kind
25 of emissions controls? You understand what I mean by

1 "emission control"?

2 A. Generally, yes.

3 Q. Were there any emission controls used in
4 connection with the lead pot process?

5 A. Well, certainly. The lead trap was an
6 emission control.

7 Q. Right, but beyond that, there was no--

8 A. I don't know of anything--

9 Q. You are not aware--

10 A. --specifically.

11 Q. --of anything else?

12 A. Not specifically.

13 Q. And the lead trap is really only going to
14 capture, capture lead that falls out of that gas that
15 that's, that's transported? It's not necessarily
16 going to capture any emissions that might come out of
17 the, the top of the pot when you, when you take it
18 off, right? You described earlier that you would
19 literally have to take the--

20 A. Well, I don't know that you would literally
21 have to take it off. I don't know the exact process
22 but certainly, it had to be opened enough for people
23 to get access to take out--take off the dross from the
24 lead.

25 Q. Mm-hmm.

1 A. But they probably also, you know, and I
2 don't know specifically, but they probably cooled the
3 pots to some extent to do that, so I, you know, I
4 don't know.

5 Q. But that would be speculation on your part--

6 A. Certainly.

7 Q. --because you didn't see that in any of the
8 documents, right?

9 A. I'm not aware, I'm not aware of, of seeing a
10 specific description of how that dross was removed.

11 Q. As this, as this--now, can I refer to this
12 as biphenyl gas as it passes and goes past the lead
13 trap? You said it's distilled--

14 A. That's correct.

15 Q. --to get pure product.

16 A. That's correct.

17 Q. Now, as it passes the lead trap, the fact
18 that you have to distill it to get a pure product
19 tells me there's still impurities in there; right?

20 A. To some extent, yes.

21 Q. What impurities would have been in there?

22 A. Higher chlorinated polyphenyls.

23 Q. Would there have been, would there have been
24 any lead? I mean, certainly--

25 A. There may have been some trace amounts. I

1 don't know.

2 Q. Right, because you don't know the efficiency
3 of the lead trap, right?

4 A. Not specifically, no.

5 Q. Right, because there was no indication in
6 the, in the, in the SMPs on this process about the
7 efficiency of the lead trap.

8 A. I don't know that it was measured, but
9 obviously, with the temperatures, it would have been
10 quite efficient, but I saw no specific measurements of
11 efficiencies, no.

12 Q. And again, your, your testimony about
13 efficiencies would be pure speculation on your part.

14 A. It would be an understanding of, of how lead
15 would behave at the various temperatures that, that
16 are involved in the process.

17 Q. Okay. Well, how efficient was the lead
18 trap?

19 A. I would say it was quite efficient.

20 Q. How can you say that? You've never--you
21 didn't do--you are basing this upon, upon your review
22 of, of the manufacturing document. You, you didn't
23 actually do any testing because you weren't there.

24 A. I think we've established that,--

25 Q. Right.

1 A. --but based on my understanding of how a
2 metal that boils at 375 degree--or it melts at 375
3 degrees is going to behave at a temperature of a
4 hundred degrees, I think I can draw some conclusions
5 that it's going to be a very efficient process. The
6 vapor pressure of lead at a hundred degrees is
7 significantly less than it's going to be at its
8 melting point of 327 degrees or the temperature of
9 these ovens.

10 Q. So you are saying that under all the
11 conditions being perfect, it would entrap a high
12 amount?

13 A. No, I'm saying under the conditions at which
14 it operated, it would trap a high amount.

15 Q. But you didn't know, you don't know what
16 condition, you don't know what conditions it operated
17 under.

18 A. Sure. The temperatures are here. The
19 fractionating column immediately downstream of the
20 lead trap was operated at a maximum temperature of a
21 hundred degrees C. That's--the vapor pressure of lead
22 at a hundred degrees C. is going to be very, very low.
23 It's not going to maintain, be maintained in a gaseous
24 state to be carried along in the product line.

25 Q. But you are assuming that the people who did

1 the process are following the SMP exactly how it's
2 written.

3 A. I am following the SMP. I am basing my
4 conclusions based on SMP as it is written. Certainly,
5 I am.

6 Q. And in your experience as a chemist, you
7 know that sometimes--I worked in a lab for six and a
8 half years, and I know that with young people,
9 sometimes they don't always follow the instructions to
10 a T.

11 A. I--

12 MR. NASSIF: I object. I object to the
13 form, and I object it calls for speculation. Go
14 ahead.

15 BY MR. LANGLAIS:

16 Q. You can answer.

17 A. I believe that our trained operators were
18 doing the best they could to follow the SMP as closely
19 as they could.

20 Q. But you have no--you can't--you have no
21 personal knowledge to support that.

22 A. Well, I think the temperatures in a process
23 are very tightly controlled because if they don't
24 tightly control the temperatures in the process, there
25 are going to be product quality and safety issues, so

1 to that extent, I believe that the SMP correctly and
2 appropriately describes the conditions in that
3 process.

4 Q. Do you know if they ever had a failed batch
5 of biphenyl using this process?

6 A. I don't know specifically or not.

7 Q. Do you know if they ever had an accident
8 involving this bi--this process?

9 A. I don't know.

10 Q. Do you know if there was ever an equipment
11 malfunction in this lead pot process?

12 A. I don't know.

13 Q. Which are all the variables that would go
14 into this perfect world that you are talking about,
15 right? Perfect conditions, everything being, being
16 perfect, there would be all this lead would get
17 entrapped in this lead train, lead entrapment section
18 and there would be no, no other lead, right?

19 MR. NASSIF: Object to the form.

20 A. Well, your use of the word "perfect," I
21 believe, is inappropriate, and I think the conditions
22 you're describing are sporadic and intermittent, at
23 best. To say that they never happened, I have no
24 basis to say that, but I think the process on a daily
25 basis ran as close to the standard manufacturing

1 process as it could.

2 Q. And you can't, you can't even speak to the
3 frequency of, of equipment malfunctions, can you?

4 A. I don't know, have any--

5 Q. You can't speak to--

6 A. --specific information on that.

7 Q. --the frequency of, of failed batches of
8 biphenyl?

9 A. No, I have no information on that.

10 Q. Once, once this, um, this product--once you
11 get this pure product and it's distilled, where do the
12 impurities go during that distillation process?

13 A. At the bottom of the distillation column.

14 Q. Do you know what happened to those bottoms?

15 A. For this process? Not specifically, no.

16 Q. Is it possible that, that the lead trap is
17 not as efficient as you may think it was and that
18 there was lead trapped in those lead bottoms?

19 A. I, I don't know.

20 Q. You don't know either way?

21 A. I don't know whether there was lead in those
22 bottoms or not.

23 Q. It's a possibility,

24 A. I'm sorry, I don't know whether there was
25 lead in those bottoms or not, specifically. If there

1 was, it was very, very small amounts.

2 Q. And, and they discard these bottoms, did
3 they get rid of these bottoms in the landfill, do you
4 think?

5 A. Yes. That's what--that would be my, my
6 assumption, at this point, that they would be drummed
7 and put in the landfill.

8 MR. LANGLAIS: Let me mark this Kaley
9 Exhibit 3.

10 (Defendant's Exhibit
11 Kaley 3 marked for
12 identification.)

13 MR. LANGLAIS: For people on the phone, I'm
14 marking an oversize map. People on the phone, I'm
15 marking an oversize map that's Bates labeled DSW
16 0446189.

17 BY MR. LANGLAIS:

18 Q. Would you take a moment to look at that map,
19 let me know when you are finished?

20 (Witness peruses said
21 document.)

22 A. Okay, I've scanned it.

23 Q. Okay, does this, at least--this is dated
24 April 23rd, 1996. Do you agree with that?

25 A. Yes.

1 Q. This exhibit?

2 A. Yes, I do.

3 Q. Does this appear to be a, a true and correct
4 depiction of the Monsanto Anniston Plant, at least as
5 it existed in April of 1996?

6 A. Well, I'm not necessarily familiar with all
7 of the--where all of the processes and buildings, et
8 cetera, were in 1996, but it, it generally represents
9 my recollection of the layout of the Anniston Plant,
10 yes.

11 Q. Okay. If you would look for me--I'll point
12 this out to you. If you would look for me, there's a
13 section over here that says "Biphenyl production." Do
14 you see that?

15 A. Yes. I do.

16 Q. Is that where the lead pot process for the
17 production of biphenyl occurred between 1928 and 1964?

18 A. I believe that's correct. I do not--I don't
19 have any information that it, that it had moved in
20 that, in that time frame.

21 Q. Was the lead pot process used at any other
22 Monsanto facility that you are aware of?

23 A. Not that I'm aware of.

24 Q. Do you know how--did the W. G. Krummrich
25 Plant manufacture biphenyl?

1 A. I do not believe so.

2 Q. Where do you think they got their biphenyl
3 to manufacture--did they manufacture PCBs?

4 A. Yes, they did.

5 Q. Where did they get their biphenyl to
6 manufacture the PCBs?

7 A. I would assume they got it from Anniston
8 Plant.

9 Q. And what would you base--what are you basing
10 that assumption on?

11 A. Because I'm--the only place that I know that
12 Monsanto produced biphenyl was the Anniston Plant.

13 Q. And that's--how about outside the United
14 States? I want to make sure we're, we're clear, I'm
15 not just limiting, limiting this to any Monsanto
16 facilities inside the U.S. Monsanto had, had
17 facilities manufacturing PCBs overseas, did they not?

18 A. Yes.

19 Q. Can you tell me which facilities that you
20 are aware of, which Monsanto facilities anywhere in
21 the world that you are aware of that manufactured PCBs
22 at any time?

23 A. They were manufactured in Newport, Wales,
24 and they were manufactured for a short period of time
25 in a joint venture in Japan.

1 Q. How about at the Queeny Plant?

2 A. No, they were never manufactured at the
3 Queeny Plant. I mean, I'm not saying Sauget because
4 obviously, you know that.

5 Q. Right, and they called the Sauget plant,
6 they called that CRUM-rich (Phonetic)? Am I saying
7 that right?

8 A. CRUM-rick (Phonetic).

9 Q. CRUM-rick (Phonetic)? Is that named after a
10 former worker there, or do you know?

11 A. It was one of, it was one of Mr. Queeny's
12 associates.

13 Q. Okay. Now, historically, what other--now,
14 this is not just limited to PCBs, but what other
15 manufacturing facilities are you aware of that
16 Monsanto had throughout the United States at any point
17 before 1964? Do you, do you know the history of
18 Monsanto in terms of where they've had plants in
19 various locations?

20 A. I certainly know where some plants have been
21 in various locations.

22 Q. That's what I'm looking for.

23 A. There are dozens. There's a plant in
24 Luling, Louisiana, there was a plant at Texas City,
25 Texas, there's a plant at Chocolate Bayou, Texas,

1 there was a plant at Camden, New Jersey, there was a
2 plant at Kearny, New Jersey, there was a plant
3 in--it's a Delaware River plant somewhere in New
4 Jersey, Paulsboro, I believe, there's a plant in
5 Indian Orchard, Massachusetts, there's a plant in
6 Decatur, Alabama, Decatur, Georgia, one of those two,
7 there's a plant in Pensacola, Florida, I mean
8 there--those are the ones I think of. There are
9 dozens of plants. There are lots of others, there are
10 plants in Iowa, there's a plant in Idaho Springs,
11 Idaho--

12 Q. And none of the plants you've mentioned have
13 ever manufactured biphenyl; right?

14 A. That's my understanding.

15 Q. And none of the places that you mentioned
16 ever manufactured PCBs?

17 A. Other than Sauget and the two overseas that
18 we discussed, I believe that's--I mean that is
19 correct. I believe that is correct.

20 Q. Am I correct the Sauget plant has PCB
21 contamination located at the plant?

22 A. I don't know. What you--I mean, I--

23 Q. Have PCBs been detected in soils at the
24 Sauget plant?

25 A. In areas around the Sauget plant, certainly,

1 they have.

2 Q. And has, has Monsanto or, or, um, Solutia,
3 Pharmacia, ever done any cleanup of PCB contamination
4 at the Sauget plant?

5 A. They've done cleanups that involved some
6 soils that have contained PCBs, yes. I mean around
7 the plant. I don't know at the plant. If you mean on
8 the plant site, I don't know about that, but I know
9 they've done some cleanups in that general area.

10 Q. Has, has Monsanto done any other PCB
11 cleanups in the United States besides Anniston and
12 Sauget?

13 A. There have been minor issues at some plant
14 sites, yes.

15 Q. What, what plants and what minor issues?

16 A. There was a plant--there was certainly a
17 cleanup of the Delaware River plant involving heat
18 transfer system, there was a cleanup at the Kearny
19 plant in New Jersey involving the heat transfer
20 system, and I believe there was some cleanup at the
21 Pensacola plant. I don't know the source of those
22 PCBs.

23 Q. I'm sorry, I didn't catch the second one.
24 The Delaware plant, the Pensacola plant--

25 A. The Kearny plant in New Jersey.

1 Q. C-a-r-n-i--

2 A. K-e- --

3 Q. Oh.

4 A. -a-r-n-e-y, I think.

5 Q. Okay.

6 A. No "e"? Just "y"?

7 Q. What's a heat transfer system?

8 A. Well, it's basically a system that's very
9 similar to the radiator on your car. It's a way of
10 getting heat from--a source of heat to another part in
11 a plant.

12 Q. And PCB, the PCB cleanups at, at these three
13 plants you've just identified were, were connected
14 with heat transfer system?

15 A. For Kearny and Delaware River, I believe
16 that's true. Pensacola, I'm not sure of the source of
17 the PCBs.

18 Q. Okay. Were these, what were they? Were
19 there leaks from this heat transfer system?

20 A. I believe so. You are, you are pushing my
21 knowledge.

22 Q. What kind of levels were detected?

23 A. I don't know.

24 Q. Okay. How about the--are you familiar with
25 the levels detected at the Sauget plant? Levels of

1 PCBs?

2 A. No, not specific, no.

3 Q. Has there been any--that you are aware of,
4 have there been any lawsuits filed by residents of
5 Sauget, Illinois, in connection with Monsanto's Sauget
6 plant, also known as the Krummrich Plant?

7 A. I can recall one.

8 Q. And do you recall, do you recall any other
9 details of that lawsuit?

10 A. Not specifically, no.

11 Q. Now, you recall one lawsuit or one
12 individual, one resident suing?

13 A. Both.

14 Q. Okay, one lawsuit that involved one person?

15 A. That's my understanding, that's my
16 recollection, yes.

17 Q. Do you know when that lawsuit occurred?

18 A. Several years ago. I believe it was
19 dismissed by the plaintiffs, actually, eventually.

20 Q. And are you aware, this--are you aware of
21 cases where there wasn't actually a lawsuit filed but
22 where there was threatened litigation with, with--in
23 connection with PCBs at other Monsanto plants?

24 A. No.

25 MR. LANGLAIS: How we doing on time?

1 THE VIDEOGRAPHER: We've got about five
2 minutes.

3 BY MR. LANGLAIS:

4 Q. At what temperature does, does lead melt?
5 Did you say that earlier?

6 A. Let me see what it says in the letter.
7 327.5 degrees Centigrade.

8 Q. Do you know who, who supplied the lead
9 ingots to the Anniston Plant?

10 A. No.

11 Q. How was--are you familiar with how, how
12 purchasing is done within--how purchasing was done
13 within the Monsanto Company?

14 A. Not really.

15 Q. Do you have any knowledge of how purchasing
16 was done?

17 A. Not really.

18 Q. Okay.

19 A. I would be very uncomfortable even trying to
20 answer a question like that.

21 Q. Maybe you can ans--I'll ask the question;
22 you either know it or you don't. It's a basic
23 question. Would, would purchasing be done through the
24 St. Louis office, or would people at individual plants
25 do their own ordering of materials?

1 A. I don't know.

2 Q. Have you ever heard a company called
3 National Lead Company?

4 A. Yes.

5 Q. Does that name ring a bell?

6 A. I've heard of it.

7 Q. Does that--is that one of the suppliers of
8 lead to the Anniston Plant?

9 A. I don't know.

10 Q. Do you recall where you, where you--when or
11 where you would have heard of that?

12 A. I believe there was some lead litigation in
13 East St. Louis that involved National Lead, so I would
14 have read it in the newspaper, probably.

15 Q. Did--do you know if Monsanto has ever sued
16 National Lead Company?

17 A. I have no idea.

18 Q. How many lead pots did the Anniston Plant
19 have? And I know it, I know it depends on the time
20 frame, but why don't you, why don't you tell me kind
21 of how, how that--how many pots they would have had,
22 say, at the beginning in 1928, if you know.

23 A. Well, I don't know.

24 Q. Okay.

25 A. But I know in 1957, at the time the SMP was

1 written, there were twelve biphenyl units in operation
2 at the Anniston facility, although there had been a
3 thirteenth unit at one time, and there were three pots
4 per unit,--

5 Q. Right. Okay.

6 A. --so there would have been a maximum of 39
7 pots.

8 Q. Do you have any, any information about
9 production levels of biphenyl at--using the lead pot
10 process?

11 A. No.

12 Q. At the time you were tasked with filing a
13 response to--with respect to the lead information
14 request, was that something that you would have looked
15 at?

16 A. No.

17 Q. Was that information that would have been
18 available to you?

19 A. I don't know. I doubt it.

20 Q. Do you know if, if the biphenyl process was
21 ever shut down at any time for routine maintenance?

22 A. I don't know.

23 Q. Do you know if, if, um, during times of
24 repair, the lead pots, themselves, were, were cleaned
25 out?

1 A. I don't know.

2 Q. Do you know where--strike that.

3 THE VIDEOGRAPHER: Counsel, it's that time.

4 MR. LANGLAIS: Okay.

5 THE VIDEOGRAPHER: This will end tape number
6 2 in the deposition of Robert Kaley II. We're off the
7 record at 12:08 P.M.

8 (Discussion off the record.)

9 (Luncheon recess.)

10 THE VIDEOGRAPHER: We're back on the record
11 at 1:12 P.M. This will be start number 3 in the
12 deposition of Robert Kaley II.

13 BY MR. LANGLAIS:

14 Q. Mr. Kaley with, respect to the lead pot
15 process, the still bottoms that were left at the end,
16 were those tested before they were disposed, that
17 you--

18 A. I have no knowledge of that.

19 Q. Have you ever heard of a term called
20 "Montars"?

21 A. Yes.

22 Q. Is that, is that term, "Montars," used to
23 describe those still bottoms that remained?

24 A. It was, it was a term used to describe some
25 still bottoms from some processes.

1 Q. Do you know if the still bottoms that we're
2 discussing with respect to the biphenyl process, do
3 you know if that term, "Montar," describes those?

4 A. I do not believe so, but I could be in
5 error.

6 Q. Do you know if the Montars contained lead?

7 A. I have not seen any analyses one way or the
8 other on that.

9 Q. Now, Montars were, were sold, were they not?

10 A. Some were, yes.

11 Q. Now, if lead was detected in the still
12 bottoms following the biphenyl process, would that
13 shake your confidence with respect to the efficiency
14 of the lead trap?

15 A. No. I--it would depend on detection limits
16 and, and a whole bunch of things, and as I said, I
17 don't think I know any particular value for the
18 efficiency of the lead trap.

19 Q. In your inquiry, did you come across
20 anything that indicated that there were any spills of,
21 of this molten lead onto the ground with respect to
22 the lead pot process?

23 A. I don't recall anything specifically.

24 Q. Do you know if, at that time, spills were
25 recorded by the facility?

1 A. I don't know.

2 Q. Based upon your review, was the lead pot
3 process essentially unchanged between 1928 and 1964?

4 A. I don't recall specifically. I would be
5 surprised if there weren't slight modifications, but I
6 don't know that there were any specifically.

7 Q. What is Santowax?

8 A. It's a term used to describe some of the
9 polyphenyl products.

10 Q. Was Santowax a byproduct of the biphenyl
11 process?

12 A. No, Santowax was a product further along the
13 biphenyl process, if my recollection--I mean, there
14 are a number of Santowaxes, and I don't really have
15 them all which was which, so I really can't answer
16 that question because I don't know which one you are
17 talking about, but there were at least three
18 Santowaxes. There may have been more, but some of
19 them were actual products.

20 Q. So with respect to the lead pot process to
21 manufacture biphenyls, you, you don't know either way
22 whether Santowax was, was produced as part of that
23 process?

24 A. Well, it would have been produced as a
25 further reaction course during that process because

1 some of the Santowaxes were polychlorinated terphenyls
2 which were produced as a--subsequent to the
3 polychlorinated biphenyls.

4 Q. Do you know if the Santowax was tested for
5 lead?

6 A. I have not seen any data to suggest that.

7 Q. There appears to have been an increase in
8 the operating pressure of the lead pot process. Do
9 you know why that, that was added as a component to
10 the process?

11 A. I'm not aware that it was, and if it was, I
12 don't know why.

13 Q. Can you tell me about the tubular biphenyl
14 reactor that was instituted sometime in 1961 in
15 connection with, with the production of biphenyl?

16 A. Not very much, other than the fact that it
17 was obviously an alternative way to provide heat to
18 carry out the reaction.

19 Q. So am I correct, though, that lead was still
20 used in the production of biphenyls using the tubular
21 reactor process?

22 A. Oh, no. No, they were used as a substitute
23 for the lead pots to provide heat in which the
24 reaction of benzene to biphenyl was carried out.

25 Q. Okay.

1 A. No, they were replacement.

2 Q. So lead is a catalyst; correct?

3 A. No. Lead was there to provide the heat
4 necessary to carry out the reaction. It was not a
5 catalyst. It was essentially a heating bath to--

6 Q. But isn't, isn't a catalyst really any,
7 anything that, that causes a, a chemical reaction to
8 occur?

9 A. No, I--there's--it's a much more specific
10 definition than that. I mean, there are chemical
11 reasons, I mean lead did not participate in the
12 reaction at all. It didn't accelerate the reaction,
13 it didn't slow down the reaction; it was only there to
14 provide the heat.

15 Q. But it caused the reaction.

16 A. No, the heat caused the reaction.

17 Q. The heat from the lead.

18 A. Well, yes, the heat from the lead, but it
19 didn't matter. The heat from the tubular reactors
20 also caused the reaction.

21 Q. So in your mind, the catalyst would be the
22 heat; is that right?

23 A. No. I mean, there wasn't--in my mind, a
24 catalyst is a separate chemical put in to accelerate a
25 reaction that is already occurring or to facilitate

1 that reaction, so in my view, in this process, there
2 was no catalyst in this particular reaction that I'm
3 aware of, anyway.

4 Q. Do you know why the Anniston Plant stopped
5 using the lead pot process?

6 A. I mean, I don't have a specific answer.
7 Obviously, the decision was made among the engineers
8 that the tubular process, the tubular heaters were a
9 better way to, to do the reaction.

10 Q. And that, and that, you are getting that
11 from your review of, of the documents?

12 A. No, I'm getting that from, basically, my
13 intuition as a chemist and, you know, an understanding
14 that they wouldn't have put in an inferior process.

15 Q. Right. No one told you that, though, that's
16 just--

17 A. That's--

18 Q. --your--

19 A. --correct.

20 Q. So were you the person with, with the most
21 knowledge about the lead pot process?

22 A. I don't know the answer to that.

23 Q. Now, you mentioned earlier that, that there
24 was other lead at the facility, and that was lead
25 piping, I believe, and lead--did you say lead piping

1 and lead sinks?

2 A. I think it was lead-lined sinks, yes, in the
3 laboratory building.

4 Q. And, and--

5 A. That's my understanding.

6 Q. --have you seen documents that show where,
7 where that material was, was taken?

8 A. No, I'm relying on Jerry Brown that the
9 material was taken to the landfill when that building
10 was razed.

11 Q. And by "razed," you mean demolished, right?

12 A. Yes.

13 Q. Are you familiar with a term called "chat,"
14 c-h-a-t?

15 A. I, I've heard that term, yes.

16 Q. What is chat?

17 A. It's finely or coarsely ground rock, in my
18 view: Typically, limestone.

19 Q. Did, did the chat contain lead, detectable
20 levels of lead?

21 A. I don't know. I don't know which chat you
22 are talking about, and it wouldn't matter because I
23 don't know which, you know, whether it did, did or
24 not, so--

25 Q. Now, you said "which chat," which leads me

1 to believe that there are multiple, there was more
2 than one chat? Is that right?

3 A. Well, I mean to me, chat is like the crushed
4 limestone you use to cover roads. What the uses are
5 at the Anniston plant over and above that, I don't
6 have any idea.

7 Q. Do you have any knowledge of whether, of
8 whether chat was used at the Anniston plant to cover
9 roads?

10 A. I don't know.

11 Q. Do you have any, any knowledge of whether
12 Montars or any other still bottoms were used to cover
13 the roads at the Anniston plant?

14 A. I've never heard anything like that, no.

15 Q. Now, we were discussing earlier which plants
16 were involved in, in the manufacture of PCBs. Which
17 plants were involved in the formulation of PCB
18 products, not necessarily the manufacture of PCBs but
19 just formulating PCBs?

20 A. I don't know completely. I suspect--well,
21 Anniston was, Sauget was, I believe there was some
22 formulation at the Queeny Plant. Other than that, I'm
23 not aware of any. That's for U.S. operations. For
24 foreign operations, I really don't know whether they
25 did or not, but they may very well have.

1 Q. Now, production at the, at the Anniston
2 Plant, PCB production at the Anniston Plant ended in
3 1971?

4 A. That's correct.

5 Q. When did production, when did production at,
6 I guess, the PCB formulation at the Queeny Plant, when
7 did that end?

8 A. I don't know.

9 Q. Do you know when the formulation at the
10 Krummrich, Krummrich Plant ended?

11 A. Well, we quit making PCBs at Krummrich in
12 1977, so it certainly ended then, and it probably--in
13 1971 and '72, we quit marketing products except for
14 electrical uses, so for nonelectrical uses, it all
15 would have ended at all plants by 1972.

16 Q. When did, when did sales of, of any PCB or
17 PCB-containing products end?

18 A. The sales of nonelectrical uses ended in
19 1971 or '72. The sales for electrical uses ended in
20 1977.

21 Q. Did Monsanto have facilities outside the
22 U.S. that manufactured PCBs?

23 A. Yes, I believe we talked about the, the
24 facility at Newport, Wales, and the joint venture in
25 Japan.

1 Q. When did the Newport, Wales, facility stop
2 producing PCBs?

3 A. I don't know specifically. Certainly, by
4 1977; probably before.

5 Q. And how long, with respect to the joint
6 venture in Japan, how long did that joint venture
7 last?

8 A. I don't know.

9 Q. Do you know why it ended?

10 A. Primarily, because of the discovery of PCBs
11 in the environment and pressures everywhere to
12 minimize the environmental discharges.

13 Q. What--when you say "the environment," what
14 do you mean, with respect to that joint venture?

15 A. I mean that PCBs had been reported after
16 1966 in a variety of environmental matrices and for
17 that reason, Monsanto and, and foreign companies, for
18 that matter, started limiting their, their sales and
19 the uses of PCBs.

20 Q. As part of that joint venture, did they,
21 they detect PCBs in the blood of, of any individuals?

22 A. I'm not sure I understand that question.

23 Q. Okay, I want to make sure we're not just
24 limited to PCBs being detected in soil or water. Did
25 they, did they, as part of that, the end of that joint

1 venture, did they detect PCB levels in, in people's
2 blood?

3 A. I'm--I don't know what that would have had
4 to do with the joint venture, but not that I know of.
5 I don't know that there's any relationship.

6 Q. Now, was there a name, is there, is
7 there--have you heard of something called the Utsi
8 incident?

9 A. No.

10 Q. Or the Oshi incident?

11 A. Well, there's the Yusho incident.

12 Q. Yusho, that's it. How do you spell that?

13 A. Y-u-s-h-o.

14 Q. Okay, can you tell me what that is?

15 A. It's an incident in Japan where some foreign
16 Japanese manufacturer, not Monsanto, Japanese
17 foreign--Japanese-manufactured PCBs in a heat transfer
18 system leaked into some rice oil that was subsequently
19 consumed by Japanese consumers, and they had various,
20 uh, health effects associated with the ingestion of
21 that thermally-degraded rice or heat transfer fluid.

22 Q. And how was that heat transfer fluid
23 different from what Monsanto was producing at the
24 time?

25 A. I don't know specifically, other--but the

1 fact it was it had been thermally degraded in the heat
2 transfer system. It was not a fresh, or a raw, or a
3 new PCB product; it was a thermally degraded product.

4 Q. Now, Monsanto is the only company known to
5 have ever manufactured PCBs in the United States; is
6 that correct?

7 A. Other than apocryphal stories, basically,
8 yes. I mean, I'll accept that as a premise and we can
9 move on.

10 Q. What do you mean, apocryphal stories?

11 A. Well, I think there was a small company in
12 Texas at one time that manufactured some specific PCBs
13 for very limited uses, but I don't really have any
14 documentation of that, so for all practical purposes,
15 Monsanto was the only commercial manufacturer of PCBs
16 in the United States.

17 Q. After Monsanto stopped production of PCBs at
18 the Anniston Plant, how long did it continue to store
19 PCBs or PCB-containing products at that plant?

20 A. I don't know. If it did at all, I don't
21 know.

22 Q. When Monsanto made the decision to no
23 longer--well, when the decision was made to no longer
24 sell PCBs to, um--at all, I believe you said it was in
25 the late 1970's, what did Monsanto do with any

1 remaining inventory that they had?

2 A. They sold some small amounts to laboratory
3 supply companies, and the rest were--really, there
4 wasn't hardly any inventory left because we made the
5 announcement in the year before, and, and the
6 companies who were the purchasers basically were
7 letting us know how much they needed it, so there
8 wasn't very much. We sold it or gave, actually, a
9 small amount to some laboratory supply houses to use
10 as standards. The rest, if any, would have been
11 incinerated.

12 Q. Where was that incinerated?

13 A. I don't know for sure whether it was at
14 Krummrich or whether it was commercial.

15 Q. Are you familiar with the areas where the
16 biphenyl production occurred, like whether it occurred
17 inside a building or out in the open?

18 A. I don't really recall. I've always heard
19 there was an open-air process, but if you look at
20 aerial photographs, there appears to be some sort of
21 an enclosure, so I don't know whether, exactly whether
22 it was just, you know, walls and still open air or
23 whether it was in a building. I don't know.

24 Q. Do you think that you've just forgotten, or
25 do you think that was something you discussed with

1 Jerry Brown?

2 A. No, I don't think I ever knew. I don't
3 think I've ever discussed it with Jerry Brown, but--

4 Q. Could you tell me what lampblack is?

5 A. It's basically finely, finely divided
6 carbon.

7 Q. Did Monsanto's Anniston Plant have, have
8 lampblack at the facility?

9 A. I don't know whether they did or not.

10 Q. What would, what would be the use of
11 lampblack?

12 A. It's primarily used as a colorant in
13 rubbers. It's what makes, primarily what makes, like,
14 tires so black.

15 Q. How is it--is it different from carbon black
16 or is it the same thing?

17 A. I'm not sure what carbon black is, but I
18 think--I'd surmise they're basically the same thing.

19 Q. And you are unsure whether Monsanto had any,
20 had any use for lamp, lampblack at the Anniston Plant?

21 A. I'm not aware of any.

22 Q. Do you know what process produces lampblack?

23 A. I believe it's, it's--Monsanto produced it
24 at a plant in New Jersey, the Camden plant, and it's,
25 it's a burning process, and I'm trying to think what

1 they're burning, and I'm not--it's not coming to me.

2 It's basically by combustion of something.

3 (Defendant's Exhibit Kaley

4 4 marked for

5 identification.)

6 BY MR. LANGLAIS:

7 Q. I'm going to hand you what's been marked

8 Kaley Exhibit 4.

9 (Witness peruses said

10 document.)

11 BY MR. LANGLAIS:

12 Q. (Continuing) Have you had a chance to look

13 at that?

14 A. Yes.

15 Q. Have you seen that organizational chart

16 before?

17 A. Yes, I have.

18 Q. Do you recall if you, if you saw this chart

19 in connection with your--in connection with your

20 response to the information request concerning lead?

21 A. I believe it was included in one of the

22 documents I reviewed, yes.

23 Q. Were you able to identify--have you ever,

24 have you ever looked at whether or not any of these

25 people, any of these--strike that.

1 In your dealings with the Anniston Plant,
2 was this the, the general organizational structure
3 through the existence of, of--I mean through the
4 production of PCBs?

5 A. I don't--I mean, this is from, like, a 1936
6 document or '37, as I recall. I don't really
7 remember, you know, whether that--whether it applied
8 to subsequent years or how long this particular
9 organization applied. I don't really have any idea.

10 Q. Okay, and how, how were you able to tell
11 this was from the 1930's?

12 A. It's just my recollection. As I recall, it
13 was from a very early SMP for biphenyl or some
14 discussion of biphenyl process.

15 Q. So this was in--was, then, one of the SMPs?

16 A. I believe so.

17 Q. What led you to speak with Jerry Brown about
18 the, the lead pot process?

19 A. He's the most knowledgeable person about
20 historical practices and processes at Anniston that I
21 know.

22 Q. Could you describe the PCB production
23 process or the Aroclor production process following
24 the lead pot process?

25 A. Well, basically, the biphenyl is introduced

1 into a reactor, and I'm really not familiar with what
2 kind of reactor, but basically, a heat--reactor to
3 supply heat to the reaction, it's mixed with
4 chlorinated--or with elemental chlorine in the
5 presence of ferric chloride, which is a catalyst in
6 that particular reaction to form the PCBs.

7 Q. From 1964 through, through 1971, when, when
8 Aroclor production stopped at the Anniston plant, did
9 the, did the production process remain relatively the
10 same?

11 A. I'm sure it remained relatively the same. I
12 don't know whether there were minor changes or not,
13 but my understanding is it remained largely the same,
14 yes.

15 Q. Do you recall what role ferric chloride
16 played in the manufacture of, of the PCBs or the
17 Aroclors?

18 A. It's a catalyst.

19 Q. Can you describe for me how it, how it works
20 as a catalyst in that process?

21 A. No, I can't.

22 Q. Are you aware that in Monsanto's, or rather
23 Solutia and Pharmacia's initial disclosures, that you
24 were identified as someone who had personal knowledge
25 regarding the Anniston facility's manufacturing

1 processes?

2 A. It wouldn't surprise me.

3 Q. And you are, you are unable to tell me any
4 specifics about what role ferric chloride would have
5 played in the manufacture of Aroclors?

6 A. Oh, I know what role it played. It played a
7 role of accelerating the reaction to form the PCBs
8 from the reaction of biphenyl and chlorine gas. What
9 I thought you were asking me was the mechanism
10 by--mechanism by which it did that, and I don't know
11 the mechanism by which it does it, but the function is
12 to accelerate and facilitate the reaction.

13 Q. Well, maybe my question wasn't clear, but
14 that's, that's what I was getting at. I, I asked for
15 what role it played.

16 A. Okay. No,--

17 Q. So you answered.

18 A. --it's basically there to facilitate and
19 accelerate the reaction.

20 Q. And ferric chloride was the catalyst that
21 was used from 1964 through 1971?

22 A. I don't know specifically. There--I know at
23 various times, various things were tried. I don't
24 know what the particular timing was on that.

25 Q. Are you aware if any other catalyst had been

1 used in that process?

2 A. My recollection is that they tried aluminum
3 chlorides at one point or another, but I don't, I
4 don't have any specific recollection.

5 Q. Have you ever seen any photographs of the,
6 of the biphenyl production process, process area? Any
7 photographs of the equipment?

8 A. Yes, very poor quality. I think in the same
9 document from which this organization chart came,
10 there were some very poor-quality photographs.

11 Q. Of the, of the, the biphenyl production
12 using the lead pot process?

13 A. Yes.

14 Q. And you believe that those are somewhere
15 within the, one of the SMPs?

16 A. That's my recollection. I don't know
17 whether it's an SMP that it just came from or not.
18 That's my recollection.

19 Q. Was clay used as part of the Aroclor
20 production process?

21 A. I believe some--something called Attapulugus
22 earth, which is a claylike material, was used to
23 filter the PCBs, yes.

24 Q. What was it, what was it filtering out?

25 A. Primarily, water and chloride ions,

1 materials which would cause the electrical qualities
2 to be degraded.

3 Q. Do you know how long--was, was that clay
4 used throughout--between 1964 and 1971?

5 A. I--I'm sorry, I don't know specifically.

6 Q. Do you know what was done with, with the
7 clay after, after it was used to filter out, filter
8 the PCBs?

9 A. My understanding was that it was put in the
10 landfills, drummed and put in the landfills.

11 Q. Now, at some point--what can you tell me
12 about Aroclor production expansions at the Anniston
13 Plant, if anything?

14 A. If you had a more specific question, I might
15 be able to help. I don't know of anything
16 specifically. I mean, I know there were throughout
17 the course of the development, expansions in that, in
18 that process.

19 Q. Can you tell me anything else beyond that,
20 or is that the extent of, of the detail that you know?

21 A. Well, I guess that's the extent of the
22 detail I know without some more specific information
23 on what your questions, where your questions are
24 going.

25 Q. At some point, there was a flaking and

1 packaging facility put in place at the, at the
2 Anniston Plant. Are you aware of that?

3 A. Yes.

4 Q. Do you know when that would have occurred?

5 A. I believe it was in the late 1960's, early
6 1970's.

7 Q. And at some point, a new tank farm which
8 included 11 bulk storage tanks and three blend tanks
9 was put in place?

10 A. I believe I've seen something to that
11 effect. I don't have any specific knowledge of that.

12 Q. Now, this may be a common-sense question,
13 but why, why was the expansion needed, if you know?

14 A. Well, if you are talking about what's called
15 the Aroclor expansion project in the late 1960's and
16 1970's, it was primarily aimed at what are called
17 solid Aroclors, and those are not typically PCBs,
18 those are typically polychlorinated terphenyls.

19 Q. Okay.

20 A. And that's really what it was aimed at, and
21 those were--there was an expanding market for those as
22 plasticizers, and in fact, during a short period, they
23 were used at short substitutes for PCBs in some of
24 Pydraul--some of the hydraulic fluids.

25 Q. In connection with the Aroclor expansion

1 project, was any existing part of the Aroclor facility
2 dismantled?

3 A. I don't recall.

4 Q. Or razed?

5 A. I don't know. I don't recall. Excuse me.

6 Q. Do you know how the facility handled,
7 handled contaminated material, like contaminated metal
8 scraps and things of that nature?

9 A. My understanding is that all contaminated
10 materials were drummed and placed in the landfill.

11 Q. Were all wastes that were put into the, into
12 the landfill drummed?

13 A. That's my understanding, yes.

14 Q. And did those drums rust over time?

15 A. I don't know.

16 Q. Is that--can you, can you come up with a
17 theory as to why, why PCBs were, were detected in the
18 landfills?

19 A. I don't know what you mean by "detected in
20 the landfills."

21 Q. Well, is it not true that PCB contamination
22 was detected in the, in the west end landfill?

23 A. Well, that was because they had cut into
24 that landfill, yes. I mean, there were materials in
25 there that had PCBs.

1 Q. That weren't drummed?

2 A. Apparently, that's correct.

3 Q. And since you weren't around, since you
4 weren't around at the time, you can't testify that,
5 you can't really testify that PCBs or PCB-contaminated
6 material were always drummed; right?

7 A. I don't know that they were always drummed.

8 Q. Was there a--in connection with that flaking
9 process?

10 A. Yes.

11 Q. Can you--first, can you describe the flaking
12 process to me?

13 A. Not really.

14 Q. In general terms?

15 A. I--my understanding is it was basically the
16 material was put in a molten state and then put into
17 some sort of an air convulsive system where the, the
18 droplets coalesced into flakes, but I--you know,
19 that's as detailed as I have.

20 Q. So do you know if there was any emissions
21 associated or any dust associated with that flaking
22 process?

23 A. I'm sure there was some dust associated with
24 it.

25 Q. Do you know if there was a dust collection

1 system?

2 A. I don't recall specifically.

3 Q. Do you know if they ever had any problems
4 with product spilling as a result of the--strike that.
5 Do you know if they had problems with dust escaping
6 from that system and getting all over the equipment?

7 A. I don't know.

8 Q. Can you tell me how Aroclors and Aroclor
9 blends were stored at the plant?

10 A. Not specifically, no.

11 Q. Do you know who would have that information?

12 A. I'm sure Jerry Brown knows.

13 Q. In your mind, is Jerry Brown the most--the
14 person most knowledgeable about the production
15 processes at the--for PCBs at the Anniston facility?

16 A. Probably, yes.

17 Q. Who else would, would have a significant
18 amount of knowledge, in your mind?

19 A. I wouldn't even know. He's the only one
20 that I, that I know of that was, you know, there
21 during any part of the time PCBs were produced.

22 Q. And how did you know that Jerry Brown was
23 the man that had that knowledge?

24 A. I've known Jerry for fifteen years and have
25 had a number of discussions with him, and I know he's

1 somebody that is reliable.

2 Q. Can you tell me what byproducts were
3 produced as part of the PCB production process?

4 A. Primarily, hydrochloric acid.

5 Q. Is that also known as muriatic acid?

6 A. Yes.

7 Q. And did, did the company sell that acid?

8 A. Some of it, yes.

9 Q. Okay, what did they do with the material
10 they didn't sell?

11 A. It was neutralized in limestone beds and
12 discharged.

13 Q. Do you know if the--if Monsanto tested,
14 tested the discharge as it left the limestone beds?

15 A. Certainly did after they became aware of the
16 environmental presence of PCBs in the late 1960's,
17 yes.

18 Q. What effect, if any, would, would the
19 presence of acid have on, on PCBs?

20 A. Not very much. I mean, they are, you know,
21 chemically inert. That's kind of what it means, so--

22 Q. I guess we've already discussed that Montars
23 were kind of a byproduct of the PCB production--

24 A. For some of--

25 Q. --process.

1 A. --it, yes. They were, some of, some of the
2 still bottoms from that process were marked as Montar.

3 Q. Do you know when the, the plant started to
4 operate under a state discharge permit?

5 A. I don't.

6 Q. Who would, who would have the most knowledge
7 about water discharge permits at the Anniston Plant?

8 A. Probably Jerry Brown. If he doesn't, he
9 would know who would.

10 Q. So are you familiar with any of the
11 discharge parameters in connection with either state
12 or federal discharge permits?

13 A. At Anniston?

14 Q. Yes.

15 A. No, sir, not with any specificity at all.

16 Q. Do you know who the person is who would sign
17 off on certifications with respect to discharge
18 results?

19 A. Well, it would be the environmental, the
20 person with the environmental responsibility at the
21 plant in whatever time frame.

22 Q. Let's, let's talk about when you--when you
23 started, I guess, in 1974, did you know who was the
24 environmental person, if any, at the Anniston Plant?

25 A. I have no idea.

1 Q. Okay, now, walk me through, walk me through
2 the Seventies and tell me when it is the first
3 environmental person came on line at Anniston, if you
4 know.

5 A. I don't know.

6 Q. When you became the Director of
7 Environmental Affairs, who was in charge of, of
8 environmental matters at the Anniston Plant?

9 A. Probably Robert Jones.

10 Q. When was the last time you spoke with Robert
11 Jones?

12 A. Probably two or three years ago.

13 Q. Do you know who reported to Mr. Jones?

14 A. No one that I'm aware of.

15 Q. Did Mr. Jones have a staff underneath him,
16 or was he just--

17 A. Not that I'm aware of.

18 Q. Who did Mr. Jones report to?

19 A. I believe the plant manager.

20 Q. Did he, did Mr. Jones report to anyone in
21 St. Louis?

22 A. I don't believe so. I don't know. I don't
23 know the reporting structure at the plant.

24 Q. Do you know the reporting structure when,
25 when you became Director, Environmental Affairs?

1 A. At the plant? Not specifically, no.

2 Q. Okay.

3 A. I mean, I mean obviously, everybody
4 eventually reported up to the plant manager, but I
5 don't know whether anybody had further reporting
6 responsibilities to St. Louis or not.

7 Q. Who reported to you on environmental matters
8 from, from Anniston?

9 A. Well, nobody--I mean, if you mean reported
10 to me on--with, with managerial responsibility, no
11 one.

12 Q. Well, how about, how about in a
13 non-managerial responsibility? I mean--

14 A. I mean, just to talk to me?

15 Q. Well, what I'm trying to determine is, is
16 how, how the St. Louis--how St. Louis kept, kept their
17 thumb on, on the Anniston Plant with respect to
18 environmental matters. I mean as, as the Director of
19 Environmental Affairs, what were your
20 responsibilities?

21 A. Well, my responsibilities were to, as I
22 think I--

23 MR. NASSIF: I object to the form.

24 THE WITNESS: Sorry.

25 MR. NASSIF: Go ahead.

1 BY MR. LANGLAIS:

2 Q. As Direct--go ahead. You can answer.

3 A. All right. My responsibilities, as I
4 described earlier, were basically to be a, a company
5 resource on PCBs and other legacy chemicals. If you
6 are going off the title "Director, Environmental
7 Affairs," assuming I had broader environmental
8 responsibility for the company, that's not correct. I
9 didn't, I did not participate in the management chain
10 for environmental responsibilities at the plant.

11 Q. When you were addressing issues relating to
12 PCBs at the Anniston Plant, who at the plant did you
13 speak, did you speak with?

14 A. Robert Jones occasionally, plant manager,
15 for the directors of remediation when they were there.

16 Q. Who was that?

17 A. Craig Branchfield now.

18 Q. And anyone else prior to Craig Branchfield?

19 A. Prior to Craig was a guy named Alan Faust.

20 Q. Are you familiar with a product called
21 Santocel?

22 A. I've heard of it. I don't know anything
23 about it.

24 Q. Do you know if the Anniston Plant produced
25 Santocel?

1 A. I'm sure it did not.

2 Q. Why, why are you sure it didn't?

3 A. Because I reviewed the processes at the
4 Anniston Plant, and I've never heard of that
5 associated with Anniston.

6 Q. Do you know where that would have been
7 produced? At what other plants?

8 A. I don't know specifically, no.

9 Q. What is Pyranol?

10 A. Pyranol is a General Electric trademark for
11 flame-retardant dielectric fluids.

12 Q. Are you familiar with a production process
13 for Pyranol?

14 A. Well, Pyranol is basically a blend of PCBs
15 with other materials to form GE's dielectric fluids,
16 so I mean to the extent that I'm familiar with the
17 production of PCBs, I'm familiar with the production
18 of Pyranol. It was basically a blend.

19 Q. What component, what other components
20 did--made up Pyranol?

21 A. Mixtures of tri- and tetrachlorobenzenes,
22 and usually there was some kind of a corrosion
23 inhibitor or a chlorine scavenger added.

24 Q. Did Monsanto have dielectric fluids at their
25 plant that they used within, within electrical

1 equipment?

2 A. Uh, which plant?

3 Q. Anniston Plant.

4 A. Uh, I don't know that specifically. I
5 wouldn't be surprised.

6 Q. Did the Anniston Plant produce hydraulic
7 fluids that contained PCBs?

8 A. I don't know. I think all that blending was
9 done in St. Louis. I, I could be wrong, but I don't
10 know that they blended Pydrauls at, at Anniston.

11 Q. You called them Pydrauls?

12 A. Yes.

13 Q. Did the Anniston Plant have any hydraulic
14 equipment that contained Pydraul?

15 A. Not that I'm aware of.

16 Q. Do you know if they had hydraulic equipment?

17 A. Not specifically, no.

18 Q. Do you know how spills were handled at the
19 Anniston facility?

20 A. I have some knowledge of that.

21 Q. How far back can you tell me about how
22 spills were handled?

23 A. I don't--I mean, it's just based on, you
24 know, discussions with Jerry Brown and others. I
25 don't have any specific date as to when I could speak

1 to that specifically.

2 Q. So it's not necessarily personal knowledge,
3 it's just based upon what others have told you?

4 A. Well, I didn't join the company until after
5 they quit making PCBs at Anniston, so--

6 Q. Who told you how PCB spills were handled at
7 the Anniston facility?

8 A. Basically, Jerry Brown.

9 Q. What did Jerry Brown tell you about how they
10 were handled?

11 A. That they were adsorbed onto some material
12 and drummed and placed in a landfill.

13 Q. Do you know what material was used to absorb
14 it?

15 A. I believe some sand was used. I believe
16 sawdust was used occasionally. I don't know what
17 else.

18 Q. Do you know what group would have been in
19 charge of, of cleaning spills?

20 A. Not specifically, no, I don't know that.

21 Q. Do you recall, do you recall Jerry Brown
22 telling you anything about that?

23 A. No.

24 Q. Do you know if Jerry Brown had any
25 responsibility for cleaning up PCB spills?

1 A. For personally cleaning them up? I doubt
2 it, but I don't know.

3 Q. Why is it that you would doubt he had any
4 responsibility?

5 A. Well, I don't think he was ever assigned
6 specifically to the Aroclor process, so that's--that
7 would be somebody either in maintenance or somebody
8 assigned to that process, so I don't, I don't think he
9 would have had any direct involvement.

10 Q. Was Jerry Brown at the Anniston facility?

11 A. During the last, latter years of production
12 of PCBs there, yes.

13 Q. Had he worked at any other Monsanto location
14 prior to that time?

15 A. I have no idea. Well, actually I do. I
16 think he came to Monsanto straight out of school.
17 That's my understanding.

18 Q. Now, were PCBs, did they have a sticky,
19 tacky feeling to 'em, do you know?

20 A. That depended on the particular product.

21 Q. What would make--well, tell me which
22 products would, would have--would be sticky.

23 A. I would say Aroclor 1254 would be a sticky
24 kind of material. It was still liquid, but it was a
25 very viscous, kind of sticky liquid. Aroclor 1260 had

1 a--was a more waxy material, had a little stickiness
2 to the touch.

3 Q. Do you know if they had difficulty cleaning
4 up the Aroclor 1254?

5 A. I don't know.

6 Q. Do you know if they used any kind of
7 solvents to clean up Aroclor 1254?

8 A. I don't know.

9 Q. Do you know who would know?

10 A. Again, I would, I would direct you to Jerry
11 Brown.

12 Q. Do you know if clay was used to clean up PCB
13 spills?

14 A. I don't know.

15 Q. Have you ever heard of Monsanto keeping,
16 keeping bins of sand around the production facilities
17 for PCBs?

18 A. I haven't heard that specifically, no.

19 Q. Do you know where workers would get sand if
20 they had a spill?

21 A. No.

22 Q. Do you know if Monsanto's Anniston facility
23 ever used slag at their facilities to cover PCB
24 spills?

25 A. I don't know. I've never heard that.

1 Q. You know what I mean by "slag"?

2 A. Well, I mean, I think of slag as the
3 byproduct of coal mining and things like that. I
4 mean, I don't know specifically what you mean, no.
5 I'm answering with what I think it is.

6 Q. Do you know if the Monsanto Anniston Plant
7 ever used the dross to cover, to cover PCB spills?

8 A. The dross from.

9 Q. The lead dross.

10 A. No, that would not be an adsorbent. I can't
11 imagine that that would ever occur.

12 Q. When you came in as the Director of
13 Environmental Affairs, did you take steps to look at
14 the history of PCB production at the Anniston
15 facility?

16 A. Some, yes.

17 Q. Tell me what, if you recall, what you did at
18 that time.

19 A. I don't recall specifically.

20 Q. Did you look into any of the, any of the
21 issues that, that the Anniston facility was having
22 with respect to PCB losses?

23 A. I've had an occasion to review some of the
24 documents from, you know, the time Monsanto became
25 aware of PCB and the environment issue, yes.

1 Q. Did Monsanto's Anniston Plant have a problem
2 with, or rather--strike that. Did they, did they
3 discharge or, I think, in some documents refer to
4 sewer PCBs at the Anniston Plant?

5 A. Well, I think there were, there were PCBs
6 associated with some storm water discharges at times.
7 I don't know that they actually sewered PCBs in the
8 sense of the understanding I would understand the term
9 "sewering PCBs."

10 Q. What do you understand the term "sewering
11 PCBs" to mean?

12 A. To me, that would be taking some amount of
13 PCBs and pouring them down a drain which leads to a
14 sewer system. I'm not aware of that occurring.

15 Q. Are you aware of the, the sewer systems at
16 the Anniston facility lead to the, to the ditch, the
17 11th Street ditch that we discussed earlier?

18 A. Well, the storm water system discharged at
19 the same discharge that eventually would reach 11th
20 Street ditch, yes.

21 Q. Now, was there a series of ditches within
22 the Anniston Plant that would lead to that main 11th
23 Street ditch?

24 A. I don't, I don't know specifically.

25 Would this be a good time for a short break?

1 MR. LANGLAIS: Sure.

2 THE VIDEOGRAPHER: We're off the record at
3 1:58 P.M.

4 (Recess.)

5 THE VIDEOGRAPHER: We're back on the record
6 at 2:03 P.M.

7 BY MR. LANGLAIS:

8 Q. Mr. Kaley, I want to talk about the west end
9 landfill, the facility. Are you familiar with the
10 west end landfill at the Anniston facility?

11 A. Somewhat, yes.

12 Q. Are you familiar with, with the general
13 history of that landfill?

14 A. In general terms, yes.

15 Q. Am I correct that the landfill was, is they
16 first started to use that landfill sometime in the mid
17 1930's and that it was used as a landfill until it was
18 sold to Atlanta Power--Alabama Power Company in 1960?

19 A. Well, it was, it was closed, it was used, it
20 was closed and then it was not exactly sold, there was
21 a land swap basically between Monsanto and Alabama
22 Power for that land, yes.

23 Q. Alabama Power became the owner?

24 A. Yes.

25 Q. Okay. When, when did they stop--you said it

1 was, it was stopped prior to the acquisition by
2 Alabama Power Company. Do you know when, when that
3 would have occurred?

4 A. It was 19, about 1960.

5 Q. So right around the same time--

6 A. Yes.

7 Q. --they acquired it. Did--and during that,
8 during the time that it was used between the mid
9 1930's and 1960, PCBs or PCB-containing material were
10 disposed in that landfill; correct?

11 A. I, I don't know that specifically, but
12 that's, I think, a fair assumption.

13 Q. When, when this swap of land occurred, do
14 you know if Monsanto informed Alabama Power Company
15 that PCBs were present in that landfill?

16 A. Well, they certainly informed that it was a
17 landfill. I don't know whether they informed them
18 specifically as to the contents of the material in
19 there or not.

20 Q. How long did Alabama Power Company--how long
21 were they the owner of, of what we know as the west
22 end landfill?

23 A. From 1960 until Solutia reacquired it or
24 Monsanto reacquired it sometime in the mid 1990's.

25 Q. Explain to me why, why did Monsanto

1 reacquire it?

2 A. Basically, so that we could manage in the
3 recapping of the landfill.

4 Q. Was there, was there a certain event that
5 triggered Monsanto to, to go back and reacquire that
6 property?

7 A. I think we talked earlier, there was Alabama
8 Power was doing some work on the landfill and
9 apparently cut into the--or the landfill, uncovered
10 some materials that they had analyzed, and PCBs were,
11 were measured in those materials.

12 Q. And when you say "cut into the landfill,"
13 can you explain to this to me a little further?

14 A. My understanding is a bulldozer bulldozed
15 through into the cap of the landfill and exposed some
16 of the waste materials.

17 Q. Do you know if there were any photographs
18 taken of that particular event?

19 A. I don't know.

20 Q. You haven't seen any?

21 A. Not--no.

22 Q. Do you know why--was there, in April of
23 1993, do you know why Alabama Power Company did some
24 exploratory testing on that property with respect to
25 PCBs?

1 A. Other than the fact that they had uncovered
2 what looked like to be some kind of waste materials,
3 no.

4 Q. So they uncovered this waste material and
5 they did some testing to determine what it was?

6 A. I believe that's correct, yes.

7 Q. When this material was discovered, did they
8 contact you, someone from Alabama Power Company?

9 A. Contact me personally?

10 Q. Yes.

11 A. No.

12 Q. Do you know who they, do you know who they
13 contacted at Monsanto?

14 A. No, I don't.

15 Q. Do you know who notified ADEM and EPA--

16 A. My--

17 Q. --that PCBs were detected?

18 A. My understanding was it was Alabama Power.

19 Q. Now, you said that Monsanto voluntarily
20 reacquired title of this property; is that correct?

21 A. Yes.

22 Q. Alabama Power Company didn't ask Monsanto to
23 take it back?

24 A. I don't know.

25 Q. So you really don't know whether it was

1 voluntary or not?

2 A. To my understanding, it was voluntary. I
3 don't--you know, that's my understanding.

4 Q. Where did you gain that understanding?

5 A. Just from being marginally involved at the
6 time.

7 Q. What investigation did Monsanto do of the
8 west end landfill?

9 A. Well, we certainly did a lot of PCB sampling
10 on it.

11 Q. And what kind of, what kind of results were
12 you getting in the landfill? Do you recall the
13 levels?

14 A. I don't. That information certainly exists.

15 Q. But you don't recall today?

16 A. No.

17 Q. Now, did Monsanto--now, you state in one of
18 your affidavits that Monsanto, Monsanto upgraded the
19 cap that had been placed on the area prior to its
20 transfer to Alabama Power Company. Do you recall
21 that?

22 A. Yes.

23 Q. What cap are you referring to that was
24 placed on there prior to the acquisition by Alabama
25 Power in 1960?

1 A. Clay, clay cover.

2 Q. Okay, do you have any--are there any
3 documents that, that discuss that?

4 A. Not that I'm aware of.

5 Q. How did you learn that a cap was placed on
6 the property prior to the sale to Alabama Power
7 Company in 1960?

8 A. Probably through discussions with Jerry at
9 the plant.

10 Q. Why would, why would Monsanto put a cap on
11 that landfill, prior to the--

12 A. That's, that's the appropriate way to deal
13 with any landfill, is to cap the land. Once you are
14 done using the landfill, you put a cap on it. That's
15 how the, that's how landfills are closed.

16 Q. That's the way it was done in 1960?

17 A. With a clay cap?

18 Q. Yeah.

19 A. Yes.

20 Q. Do you know any details of, of this clay cap
21 that was put on the landfill in 1960?

22 A. No.

23 Q. And do you believe that Jerry Brown has
24 those details?

25 A. I believe if he doesn't, he would know if

1 they exist, who has them.

2 Q. Sure, because based on discussions earlier,
3 Jerry Brown probably wasn't at Monsanto at the time
4 that that acquisition by Alabama Power Company
5 occurred; right?

6 A. Right, but he has been the environmental
7 person at the plant at some point in his career and
8 would probably be the most knowledgeable about
9 conditions at those landfills.

10 Q. Now, do you believe that the west end
11 landfill was, was a source of the PCBs that are
12 being--that were discovered in the 11th Street ditch
13 and Snow Creek?

14 A. I don't believe it was a significant source
15 of PCBs to those waterways, no.

16 Q. What do you base that, what do you base that
17 on?

18 A. Primarily, just my recollection of the
19 relatively low levels of soils, of PCBs on the soils
20 on the cover of that landfill and the fact that, that
21 there were higher levels discovered in other waterways
22 leading to the 11th Street ditch.

23 Q. Were there storm water controls with respect
24 to that, to that landfill prior to what you call the
25 upgrade in 1995?

1 A. Mm, I don't know.

2 Q. In fact, isn't it true that it's very
3 unlikely that any storm water controls were on that
4 landfill until the upgrade in 1995?

5 A. I said I don't know.

6 Q. In 1960, were people concerned with storm
7 water?

8 A. I'm sure they were somewhat concerned. I
9 don't really know how much or to what extent, no.

10 Q. How about--you seem to know a lot about
11 landfills in the 1960's. Was, was control of storm
12 water from landfills a concern?

13 A. I don't know a lot about landfills in 1960.
14 I know that there was a clay cap put on that, what is
15 now called the west end landfill.

16 Q. And do you know, prior to 1995, were there
17 any fences around this west end landfill?

18 A. Yes, I believe there were.

19 Q. Do you know when, when those fences would
20 have been up?

21 A. I don't know specifically.

22 Q. What makes you think that there were fences
23 around that landfill?

24 A. I seem to recall seeing them.

25 Q. Do you think that those fences would have

1 been installed after--sometime around the same time
2 that Alabama Power Company discovered the, the PCBs in
3 1993?

4 A. I don't believe so. I think it was fenced
5 prior to that.

6 Q. Why would it have been fenced?

7 A. Because Alabama Power had, had electrical
8 lines running across it, high tension lines.

9 Q. Was it fenced in 1960, when, when Monsanto
10 sold the property--or when Alabama Power Company and
11 Monsanto did the land swap?

12 A. I don't know.

13 Q. You haven't seen any documents that would
14 reflect that, have you?

15 A. No.

16 Q. Tell me what, what the upgrade with respect
17 to the west end landfill included.

18 A. I'm not sure I recall specifically at this
19 time. I believe there was an impermeable cover put on
20 top of it, a synthetic fabric and then additional, you
21 know, 12 to 18 inches of clay were put on top of that,
22 but I don't recall specifically.

23 Q. Do you recall whether it involved rerouting
24 of drainage ditches around the landfill area?

25 A. I believe that some of that occurred, yes.

1 Q. Why were the drainage ditches around the
2 landfill area rerouted?

3 A. Well, because during the recovering of the
4 landfill, the recapping of the landfill, I believe the
5 storm water flow, storm water flow was somewhat
6 changed, so it had to be adapted to, to handle the
7 storm water flow.

8 Q. Were those ditches in place before you put
9 on the upgraded cap?

10 A. I don't know.

11 Q. Do you think--well, they, they, would have
12 had to have been, since, since the upgrade involved
13 the rerouting of drainage ditches, right?

14 A. That's a legitimate--yes, that's a fair
15 conclusion.

16 Q. So is it safe to say that the drainage
17 ditches were there to drain storm water away from the
18 landfill?

19 A. Well, they were there to drain storm water.
20 I don't--I mean presumably, it was away from the
21 landfill, yes.

22 Q. Now, in 1991, did the Alabama Department of
23 Public Health issue a notice with respect to
24 consumption of fish in Choccolocco Creek and Snow
25 Creek?

1 A. Not in 1991 that I'm aware of.

2 Q. 1993.

3 A. 1993, yes.

4 Q. And do you recall how--do you recall if
5 Monsanto reacted to that advisory?

6 A. Well, I'm sure we reacted in one way or
7 another. I believe it helped prompt some of the
8 sampling that we were doing in the--in the amendment
9 to up--to get our RCRA permit renewed.

10 Q. Did Monsanto dispute that there was any, any
11 potential danger to human health with respect to the
12 discovery of PCBs in the fish tissue?

13 A. We--I believe that--I don't know whether
14 they disputed it or not, frankly. I don't believe
15 there was any threat to human health from the levels
16 of PCBs in that tissue, but certainly, we agreed with
17 and supported Alabama Department of Public Health's
18 enforcement of the no consumption advisory because the
19 levels were above the FDA tolerance levels.

20 Q. Do you recall what remediation of Snow Creek
21 Monsanto undertook with respect to PCB contamination?

22 A. What, I mean, what part of--any of Snow
23 Creek?

24 Q. Yeah, when was the first time that Monsanto,
25 Monsanto did any remediation of Snow Creek with

1 respect to PCB contamination?

2 A. I'm not aware that they've done any
3 particular, at this point.

4 Q. How about--

5 A. I mean, there was some work done at areas
6 adjacent to, during the construction of the Quintard
7 Mall, there was some work done around Snow Creek, and
8 there was work done adjacent to Snow Creek at the
9 Oxford Park ball fields, but as far as the creek,
10 itself, I'm not aware. I think that's still in the
11 future plans.

12 Q. Are you familiar with the solid waste
13 management units at the Anniston Plant?

14 A. Only in the vaguest of terms.

15 Q. Okay, who would have the most knowledge
16 about the solid waste management units? Would that be
17 Jerry Brown?

18 A. Probably at this point, he would certainly
19 have some of it, say Craig Branchfield may be the most
20 knowledgeable at this point.

21 Q. Are you aware if Monsanto, the Anniston
22 Plant had any other landfills other than the west end
23 landfill?

24 A. Well, certainly, the south landfill south of
25 the plant, sure.

1 Q. And how long did the south landfill operate?

2 A. My recollection is it operated from 1960
3 until it was closed sometime in the late 1980's.

4 Q. Do you know what material went into that
5 landfill?

6 A. A variety of materials from the processes at
7 the plant.

8 Q. Material from the lead pot process?

9 A. It's conceivable that some of the dross or
10 some of the, the other wastes could have gone in there
11 in that belief, four-year period. I think, as it says
12 in my letter, I think that the pots were only used
13 intermittently from 1961 to '64, so I would think not
14 much, but it's possible.

15 Q. What information did you provide to Alabama
16 Power with respect to the west end landfill when they
17 were doing their investigation?

18 A. Did I personally?

19 Q. What information are you aware of that
20 Monsanto provided to Alabama Power?

21 A. Alabama Power or to ADEM?

22 Q. Alabama Power.

23 A. At the transfer--I'm sorry, would you state
24 your--

25 Q. At the reacquisition--

1 A. Would you restate your question, please?

2 Q. When Monsanto reacquired the west end
3 landfill, did Alabama Power contact Monsanto,
4 requesting certain information relating to that
5 landfill?

6 A. I don't know specifically.

7 Q. Do you know when Monsanto first tested storm
8 water runoff from the Anniston Plant for PCBs?

9 A. In--well, I mean, there was some runoff
10 tested in the 1960's, if you are talking about
11 post-Alabama Power in 1993, it was probably late 1993
12 or early 1994.

13 Q. What, if anything, did Monsanto do when they
14 detected PCBs in the storm water runoff in the 1960's?

15 A. Started sampling into the drainage patterns
16 into the flood plains of the various creeks to find
17 out the extent of the contamination and try to
18 identify the source of the low levels of PCBs in that
19 storm water.

20 Q. Are you familiar with, with how much PCBs or
21 PCB waste was entering the environment from the
22 Anniston Plant in the 1960's and '70's?

23 A. I've seen, you know, I've seen documents
24 talking about certain levels in, in the discharge,
25 yes.

1 Q. Was it--and how many, how many pounds do you
2 think that the Anniston Plant was, was losing in the
3 1960's and '70's?

4 A. For the 1970's, very, very small amounts.

5 Q. Well, because they--

6 A. In 19--

7 Q. --closed in 'seventy--they stopped in '71.

8 A. That's correct. 1960s, I mean there were
9 various estimates. I mean I've seen something up to
10 250 pounds a day. I think that was probably a, an
11 outrider, but I have no reason necessarily to dispute
12 that. I don't have any documentation that that's a
13 wrong number, but it was--I mean, it was based on
14 estimates of water flow and reliance on the analytical
15 methods, but I know certainly that number is out
16 there.

17 Q. And that was in the 1960's?

18 A. Late 1960's,--

19 Q. And was that happening--

20 A. --correct.

21 Q. Was that happening every day at the facility
22 or just, just on days when production was occurring?

23 A. I don't even know that it was happening on
24 days that production was occurring. It was one point
25 in time. There are other values that are much lower.

1 I mean, it's just obviously, it's the highest that
2 anybody has found in the documents, so it's the one
3 people like to talk about, but I don't think it
4 necessarily represents daily production.

5 Q. Do you know how many pounds of PCBs or
6 Aroclor losses the Anniston Plant was experiencing
7 during the 1950's?

8 A. No.

9 Q. Have you seen any documents on that?

10 A. No.

11 Q. Who would have that information?

12 A. I don't think that information exists.
13 There weren't methods available to measure PCBs in the
14 plant discharges at that time frame.

15 Q. So Monsanto has no idea how, how much PCB
16 losses that the Anniston Plant was experiencing prior
17 to the 1960's, correct?

18 A. I don't know whether they have any idea or
19 not. There is certainly no data on levels in plant
20 discharges in that time frame.

21 Q. Well, how else would they know?

22 A. I don't know.

23 Q. If they at any time do testing?

24 A. I don't know.

25 Q. Do you know when Monsanto first informed,

1 informed either ADEM or EP--when did Monsanto first
2 inform ADEM that the plant was suffering losses of
3 PCBs to the environment?

4 A. As soon as we found out in the late 1960's.
5 It was, it was IWIC at the time or AWIC, the Alabama
6 Water Improvement Commission, but Monsanto notified
7 them promptly upon the, the measurement and
8 confirmation of the levels in the outflow.

9 Q. Did Monsanto take any steps to notify the
10 residents of Anniston about PCB losses from that
11 facility?

12 A. I'm not aware of any, but we did notify the
13 regulators, which was the appropriate thing to do and
14 still is today.

15 Q. In the 1970's, did Monsanto inform the
16 residents of PCB losses from the, from the Anniston
17 Plant?

18 A. We weren't making PCBs from the Anniston
19 Plant in the 1970's.

20 Q. I understand that, but even though
21 production was not occurring after 1971, isn't it true
22 that, that PCBs were still leaving the, the Anniston
23 Plant and entering into the 11th Street drainage ditch
24 at the very least?

25 A. In retrospect, that may be the case. I'm

1 not sure we were aware of that at the time.

2 Q. Because isn't it true that, that PCBs can
3 get trapped in soils and then over time, they can be
4 released?

5 A. Well, I don't know that they're necessarily
6 released. They can be trapped on soils and moved
7 downstream as those soils are moved downstream.
8 That's one of the mechanisms for transported PCBs in
9 the environment, yes.

10 Q. Did Monsanto continue to test the storm
11 water leaving the Anniston facility in the 1970's?

12 A. Not that I'm aware of.

13 Q. Do you know if Monsanto tested the storm
14 water that was leaving the Anniston Plant in the
15 1980's?

16 A. Not that I'm aware of.

17 Q. How about the 1990's?

18 A. Certainly.

19 Q. Certainly, and that testing, does that
20 testing reveal that PCBs were being released from the
21 Anniston Plant into the 11th Street drainage ditch and
22 Snow's Creek in the 1990's?

23 A. At very trace levels yes.

24 Q. So wouldn't, would you, would you
25 just--wouldn't, wouldn't it make sense that if

1 releases were occurring in the Nineties, that those
2 releases were also occurring in the Seventies and
3 Eighties?

4 A. There's no reason to suggest that's not the
5 case.

6 Q. And would it also make sense that, that the
7 releases would have probably been at higher levels in
8 the Eighties and then at higher levels in the
9 Seventies?

10 MR. NASSIF: I object to the form, and I'll
11 also object calls for speculation on the part of the
12 witness. Go ahead, Bob.

13 A. Not necessarily.

14 BY MR. LANGLAIS:

15 Q. Why? Why wouldn't it?

16 A. Well, I don't, I don't know that there's--we
17 would know any reason why they necessarily would have
18 gone up or gone down. There's low-level contamination
19 on some of the soils adjacent to some of those
20 drainage ditches, and if the leaching were occurring,
21 I don't know any reason why it would--or not leaching,
22 but the washing away were occurring, I don't know any
23 reason it would be accelerated in the '70's or '80's
24 compared to the '90's.

25 Q. And from the year 2000 till today, has--is

1 the facility testing storm waters that leave the
2 Anniston facility?

3 A. Oh, you bet.

4 Q. And are those storm water--are you still
5 detecting PCBs in that storm water?

6 A. No, but there's been, you know, extensive
7 remediation done around the plant, so--

8 Q. So over time, there's a decrease?

9 A. Well, after extensive remediation of the
10 areas that were leading to those storm water
11 discharges, there's been a significant drop, yes.

12 Q. When, when did you do the extensive
13 remediation to cause that drop?

14 A. In the mid 1990's.

15 Q. How do the levels in the early 1990's
16 compare with the levels in the late 1990's, as far as
17 PCBs in storm water leaving the Anniston facility?

18 A. In my recollection of the levels in 19--when
19 we started testing were in the two-, to three-, to
20 six-part-per-billion range. In storm water today,
21 they are nondetectable, I think.

22 Q. What controls did Monsanto have with respect
23 to the south landfill?

24 A. They were different at various times.

25 Q. What storm water controls are you aware that

1 Monsanto had with the south landfill?

2 A. At what time frame?

3 Q. When they first started using it in the
4 1960's.

5 A. I don't know.

6 Q. Is it safe to say they had none?

7 A. I don't know.

8 Q. Do you know who would know?

9 A. Again, I would point you to Jerry Brown.

10 Q. At some point, were, were storm water
11 controls added to the south landfill?

12 A. Various times, yes.

13 Q. Can you tell me what controls were put in
14 place and when?

15 A. I believe there was a sump put in place in
16 the early 1970's. That's the one that springs to
17 mind, and then, of course, extensive controls were put
18 in place in the mid 1990's.

19 Q. Why was a sump put in? What triggered that?

20 A. You know, I don't remember what the, what
21 the triggering incident was for them, and obviously,
22 the, the landfills were capped in the, in the 1980's,
23 so that was, you know that would have affected
24 control, all storm water control, also.

25 Q. But prior to, prior to 1980, was there a cap

1 on the south landfill?

2 A. There may have been on parts. I don't know.

3 Jerry would know the answer to that. Jerry--

4 Q. The south landfill was still in use, right?

5 A. Parts of it were, yes.

6 Q. So you wouldn't cap the landfill if it was
7 still in use?

8 A. Not the parts that were in use, yes.

9 Q. Other than the south landfill and the west
10 end landfill, there any other landfills at the
11 Anniston facility that you are aware of?

12 A. No.

13 Q. Did Monsanto ever send any waste offsite for
14 disposal?

15 A. I don't believe so. I don't--I mean, we do
16 now, I believe, maybe some, but I don't think, you
17 know, during the time PCBs were being manufactured, I
18 do not believe it was sent offsite.

19 Q. Are you aware if Monsanto ever did any
20 burning of, of waste materials in any of the
21 landfills?

22 A. There was a, what was called a TP
23 incinerator on the south landfill for a period of
24 time.

25 Q. And what was the purpose of that

1 incinerator?

2 A. It was basically burning paper and wood
3 trash.

4 Q. It wasn't to incinerate PCB waste?

5 A. No.

6 Q. Would there be any concern--how would, how
7 would burning of, of material in that--you call it TP?

8 A. Mm-hmm.

9 Q. How would burning of material in there
10 affect any underlying PCBs in that area?

11 A. I didn't--I don't know.

12 Q. Could, could, could that have an effect on
13 PCBs?

14 A. I suppose it could increase volatility if
15 there were some on those soils for a very short time
16 until they were volatilized. I don't really know.

17 Q. Did the Monsanto plant have, have issues
18 with dust control at any of--at either of the
19 landfills that we've discussed?

20 A. I'm not aware of anything to that, to that
21 effect.

22 Q. Do you know if--

23 A. I don't know.

24 Q. Do you know if Monsanto had measures to
25 control dust from the west end landfill?

1 A. I don't know. I mean, certainly, we did
2 during--you know, I mean certainly, we did during
3 construction of the, of the cap. I mean, dust
4 controls were instituted during the--

5 Q. Sure.

6 A. --to the upgrade of the cap, but prior to
7 that, I don't know.

8 Q. For example, 1930 to 1960, you aren't aware
9 of any dust control measures that were taken?

10 A. I don't know.

11 Q. You say in your affidavit that following
12 your reacquisition of the west end landfill, that
13 Monsanto unexpectedly detected PCBs in storm water
14 runoff. Why would that be unexpected?

15 A. Because we had no reason to believe that
16 there was official soils containing PCBs that would be
17 contributing to PCBs in the land--in the storm water.

18 Q. Did you, did you think that, that all the
19 PCBs were well contained within those landfills?

20 A. Yes.

21 Q. They were in metal drums? Right?

22 A. Yes. I believe they still are.

23 Q. Okay, and metal drums don't rust?

24 A. I don't know whether they do in--under
25 landfill conditions or not, but when they're under a

1 clay cap, they're not going to be--you know, there's
2 no mechanism for the PCBs to get to the surface.

3 Q. What can you tell me about issues relating
4 to emissions of PCBs from the Anniston facility? Do
5 you have any personal knowledge about that?

6 A. I'm not sure what you mean by your question.

7 Q. Did one of the--you said one of your jobs
8 was to address issues relating to PCBs at the Anniston
9 facility; is that correct?

10 A. I don't know whether I said that or not. I
11 assume it--I mean, it wasn't anything that specific,
12 but certainly, I mean my involvement in the 1985 and
13 subsequent to 1993 did involve some issues with regard
14 to those, those questions.

15 Q. Does the, does the Monsanto facility
16 currently test emissions, the Anniston facility,
17 emissions, are emissions from that facility currently
18 tested for PCBs?

19 A. Storm water is tested.

20 Q. How about air emissions?

21 A. We have some air sampling of the fence line
22 of the facility.

23 Q. Okay, and what--did that--did you also do
24 some sampling of air emissions during the 1990's?

25 A. We started, I believe we started in about

1 1998, I think, is when that started.

2 Q. Prior to that time, are you aware of any air
3 emission sampling at the Anniston facility?

4 A. No.

5 Q. With respect to PCBs,--

6 A. No.

7 Q. --vapors?

8 A. No. There--well, there was some minimal
9 sampling done in the early 19--late 1960's at emission
10 points where fugitive emissions were occurring in the
11 process.

12 Q. Okay, there was no fence line testing done
13 at that time?

14 A. No, there was none.

15 Q. Can you--what can you tell me about the,
16 about the PCB vapors in terms of how, how far PCV--PCB
17 vapors would travel if they, if they are, like,
18 aerosolized or become vapors?

19 A. Well, I don't--I mean, that's so general, I
20 don't know really how to answer that. I mean
21 certainly, large amounts are going to precipitate out
22 almost immediately. They're going to vaporize, the
23 vapors are going to travel in a, in a way consistent
24 with the wind direction, and if they were contributing
25 to PCB levels, you would see some sort of plume away

1 from the plant that's not seen in the soil sample, so
2 I don't think PCB air transport from the plant has
3 been an issue at any point in the process, but the
4 other side of that is, obviously, small amounts of
5 PCBs can get in the atmosphere and be transported
6 great distances, so I--that's the local and the global
7 answer.

8 Q. Wouldn't--strike that.

9 MR. LANGLAIS: What time we looking at?

10 MR. NASSIF: It's 2:30.

11 THE VIDEOGRAPHER: Counsel, this would be a
12 good time for a tape change.

13 MR. LANGLAIS: Okay.

14 THE VIDEOGRAPHER: This will end tape number
15 3 in the deposition of Robert Kaley II. We're off the
16 record at 2:35 P.M.

17 (Pause for tape change.)

18 (Recess.)

19 THE VIDEOGRAPHER: We're back on the record
20 at 2:46 P.M. This will given tape number 4 in the
21 deposition of Robert Kaley II.

22 BY MR. LANGLAIS:

23 Q. Mr. Kaley, I want to talk about the
24 operating period for the south landfill. Isn't it
25 true that the--that at least portions of the south

1 landfill were used in the late 20's, 30's, '40's
2 through the '60's, '70's and '80's and not just
3 started in the 1960's?

4 A. I'm not aware of Monsanto using it during
5 that time frame.

6 Q. If there are documents that, that state
7 contrary to your position, that it was begun in the
8 '60's, would you have any reason to dispute those
9 documents?

10 A. I would have to see the documents to know
11 the answer to that.

12 Q. Where did you gain your information about
13 the south landfill?

14 A. Just what I've learned over the, you know,
15 the past ten years dealing with the issues down there.

16 Q. Did it involve the review of, of any
17 documents?

18 A. Not that I recall, no.

19 Q. Who, whose disc--who do you have discussions
20 with with respect to that south landfill?

21 A. Again, primarily, Jerry, Jerry Brown.

22 Q. He wasn't there in the '30's, '40's and
23 50's, as we know; right?

24 A. That's correct.

25 Q. You had mentioned earlier that there was a

1 follow-up letter to your letter which we have marked
2 as Kaley 1.

3 A. Yes.

4 Q. That was a letter prepared by Craig
5 Branchfield?

6 A. That's correct.

7 Q. When was that letter sent to you?

8 A. I, I don't recall specifically.

9 Q. Was it, was it sent before, or after January
10 31st, 2003?

11 A. Oh, I'm sure it was before that.

12 Q. Okay, why wouldn't you have sent a letter?

13 A. I don't know the answer to that.

14 Q. Okay.

15 A. I mean Craig, Craig--it was primarily
16 dealing with sampling issues, and sampling results,
17 and Craig was--had more direct responsibility for
18 those, and also had, had taken over more of the
19 responsibility for communications at that point.

20 Q. Did that letter change anything that you had
21 stated in your letter?

22 A. No, it reinforced it.

23 Q. And what do you believe was in
24 Mr. Branchfield's letter that reinforced what you
25 stated?

1 A. Primarily, additional sampling results that,
2 that showed that, that lead was not associated with
3 discharges from the Monsanto facility.

4 Q. Did you undertake any other investigation in
5 connection with Mr. Branchfield's letter?

6 A. No.

7 Q. Did you review Mr. Branchfield's letter
8 prior to it being sent?

9 A. I don't believe so.

10 Q. Did you speak with Mr. Branchfield?

11 A. I don't recall having done so. With regard
12 to his letter, I don't recall having done so.

13 Q. Did you know that Mr. Branchfield was
14 sending a follow-up letter to yours?

15 A. I'm not sure.

16 Q. Are you familiar with the 1996 NPDES permit
17 for the Anniston facility?

18 A. Just not much more than the fact that we
19 have an NPDES permit.

20 Q. Do you happen to know any of the parameters
21 for that permit?

22 A. I believe there's a measurement parameter,
23 measurement--a measurement-only parameter for PCBs,
24 but I don't know what it is.

25 Q. Do you know if there are any parameters with

1 respect to metals?

2 A. I wouldn't be surprised, but I don't know
3 what they are.

4 Q. Do you know if lead would be one of those
5 metals?

6 A. I don't know.

7 Q. Again, that's something that Jerry Brown
8 would know?

9 A. Um, 1996, NPDES, I don't know whether he
10 would or not. I don't know--whoever the environmental
11 manager is. Craig would know.

12 Q. Do you know if the Anniston facility had an
13 NPDES permit prior to that time?

14 A. I, I believe they did yes.

15 Q. And do you know if that permit had
16 parameters with respect to lead?

17 A. I don't know.

18 Q. Do you know if the Anniston facility had any
19 problems with mercury?

20 A. There was certainly mercury used at the
21 plant. I don't know that there were, quote,
22 "problems" with it.

23 Q. How was mercury used?

24 A. It was used in a process to manufacture
25 chlorine.

1 Q. Are you familiar with that process?

2 A. Somewhat, yes.

3 Q. When was that process first performed?

4 A. I want to say 1952.

5 Q. And how long, how long was that process
6 performed from 1952 through--

7 A. 1969. It ended in 1969.

8 Q. Can you describe what role mercury played in
9 that process?

10 A. It was basically a process involving
11 electrolysis of sodium chloride, and mercury was one
12 of the electrodes. It's what's called a moving
13 electrode in that particular process.

14 Q. Have there been detectable levels of mercury
15 at the Anniston plant?

16 A. No, not necessarily. No, the levels
17 are--they're detectable, but I don't think they're
18 necessarily above background levels.

19 Q. Do you know when, when mercury started to be
20 tested at the Anniston Plant?

21 A. In the 1990's, when we were doing our
22 testing.

23 Q. So it's your testimony that mercury wasn't
24 used at the Anniston Plant after 1962?

25 A. '69.

1 Q. '69? That's your testimony?

2 A. To my knowledge, that's the case, yes.

3 Q. Did, did the Anniston Plant have any issues,
4 either at or prior to your arrival, with respect to
5 mercury losses to the environment?

6 A. I'm not sure what you mean, prior to my
7 arrival.

8 Q. Okay, at--in your--based upon your knowledge
9 of the facility and the historical--I guess this would
10 be historical question, are you aware of any problem
11 that the Anniston Plant had with respect to mercury
12 impacts to the environment from its Anniston Plant?

13 A. No, I'm not aware of any impact to the
14 environment based on mercury discharges from the
15 plant.

16 Q. Do you know if the Anniston facility tests
17 or has tested for mercury within the 11th Street
18 drainage ditch?

19 A. I don't know specific. I, I believe they
20 have, yes.

21 Q. And do you know if they, they detected
22 mercury in the drainage ditch?

23 A. I don't recall. I wouldn't be surprised if
24 they detected mercury. It's detectable in background
25 levels throughout the country, so I wouldn't be

1 surprised if they detected it. I don't believe they
2 detected it at elevated levels.

3 Q. Elevate--

4 A. Elevated above background.

5 Q. Is the--if you know, is the Anniston Plant
6 located within a flood plain?

7 A. I do not believe the plant, itself, is in
8 the flood plain of any body of water for which a flood
9 plain is defined, meaning primarily Snow Creek and,
10 and Choccolocco Creek.

11 Q. Do you know if the Anniston Plant has, has
12 historically flooded?

13 A. I've never heard that. I don't know,
14 though.

15 Q. Do you know who Alan Topol is? TOP-ohl?

16 A. TOPE-uhl (Phonetic)? Yes.

17 Q. TOPE-uhl? Who is Alan Topol?

18 A. He's an attorney.

19 Q. Do you know who Dustin Minor is?

20 A. Yes.

21 Q. Is who is Dustin Minor?

22 A. He's an attorney for the EPA.

23 Q. In the--I understand that in the 1970's,
24 Alabama Power constructed a power substation on the
25 property that they acquired from you, the west end

1 landfill property?

2 A. I certainly know they constructed--I don't
3 know about the date, but I know they did construct a
4 substation on that property, yes.

5 Q. Are you aware if, if Alabama Power Company
6 approached Monsanto at the time of that construction
7 with respect to the historical use of that area?

8 A. I'm not aware of that,--

9 Q. Is it your--

10 A. --if they did, or whether they did.

11 Q. Is it your testimony that the Alabama
12 company knew that that was a landfill when they
13 acquired title to the property?

14 A. Yes.

15 Q. Do you know when Monsanto constructed its
16 waste treatment facility at the Anniston site?

17 A. Well, it was sometime subsequent to 1960,
18 because that was one of the bases for the land swap,
19 was that we used the land we got from Alabama Power
20 for the construction of the waste treatment facility
21 and they, they did their--the construction on some of
22 the land that they swapped from us, so I don't really
23 know specifically, but it was sometime subsequent to
24 1960.

25 Q. What waters were treated in that treatment

1 facility, if you know?

2 A. Primarily, waters from the parathion
3 process.

4 Q. Were storm waters treated in that treatment
5 facility?

6 A. I do not believe so, no.

7 Q. Do you know how the parathion waters were
8 treated?

9 A. Not specifically.

10 Q. Is it your understanding that that treatment
11 system only involved the adjustment of pH?

12 A. I don't know what, what was involved.

13 Q. In 1970, Monsanto apparently installed some
14 curbing and diking around the Aroclor manufacturing
15 area. Are you aware of that?

16 A. I believe I heard that, yes.

17 Q. What was the purpose of that additional
18 diking and curbing?

19 A. I don't know.

20 Q. Who would know that?

21 A. I would think Jerry would be knowledgeable
22 about that.

23 Q. Do you know who reported to Jerry?

24 A. I don't know, no, I don't know if anyone
25 did.

1 Q. And I think you testified earlier that Jerry
2 reported to the environmental manager of the plant?

3 A. No.

4 Q. I mean the plant manager; I'm sorry.

5 A. That's my understanding, yes. I believe
6 that's correct.

7 Q. You--

8 A. I mean, certainly, at the time--I'm sorry.

9 Q. That's okay.

10 A. At the time he was environmental manager, I
11 believe he reported to the plant manager, he had other
12 responsibilities, and I don't know who he reported to
13 during those other times.

14 Q. Did Monsanto undertake to treat storm water
15 runoff from the biphenyl and polyphenyl manufacturing
16 areas at the Anniston Plant?

17 A. During what time frame?

18 Q. During the time that PCBs, or rather,
19 biphenyl and policy phenyls were being manufactured.

20 A. Well, biphenyls and polyphenyls are still
21 being manufactured.

22 Q. At the Anniston Plant?

23 A. Yes, biphenyl and polyphenyls are still
24 being manufactured at the Anniston Plant.

25 Q. Do you know historically if, if the Anniston

1 Plant has treated surface water from those
2 manufacturing areas?

3 A. I don't know specifically.

4 Q. Are you familiar with how the construction
5 of Highway 202 changed storm water run off from the
6 Anniston Plant?

7 A. In only the most general terms.

8 Q. What do you--tell me what you know about
9 that.

10 A. Well, I mean basically, the Highway 202 was
11 cut through what had been the toe of the south
12 landfill, and those materials were moved up into the
13 landfill and, and covered, and so that would have
14 changed the storm water. It could no longer flow down
15 the, the whole face of that landfill. It was directed
16 into ditches which ran under Highway 202 after its
17 construction.

18 Q. And how did the Anniston facility handle
19 off-spec products throughout its history?

20 A. I don't know.

21 Q. Do you know if there was any, any system in
22 place to recycle or reuse those off-spec products?

23 A. I believe--are we talking about--which
24 products are we talking about, in the first place?

25 Q. Biphenyl.

1 A. Biphenyl, itself?

2 Q. Mm-hmm.

3 A. I don't know. I don't know. I would be
4 speculating.

5 Q. How about PCBs?

6 A. Same answer.

7 Q. Do you know how they handled waste residues?

8 A. Other than drumming them, putting them in
9 the landfill, no. I mean, that's what my
10 understanding of how those residues were handled.

11 Q. Was that typical to, to drum waste like that
12 in the 1930's? Do you know?

13 A. I believe it would have been. I mean, you
14 have to transport them somehow, and drumming would
15 have been the way to transport them.

16 Q. How did they get the drums to the, to the
17 landfill?

18 A. I don't know.

19 Q. They probably trucked them, right?

20 A. I would--that would be a safer assumption,
21 but I don't know.

22 Q. They could have just as easily put the waste
23 in the back of the truck and dumped it in the
24 landfill, couldn't they?

25 A. No, because then you have a contaminated

1 truck.

2 Q. Yeah, but at the time, the company clearly
3 wasn't concerned with, with PCB contamination, or
4 they--

5 A. Well, we're both--

6 Q. --wouldn't have been--

7 A. --speculating--

8 Q. --dumping it in the landfill.

9 A. --at this point--I don't know. I told you I
10 don't know. I don't know.

11 Q. In your, in your work with Monsanto, are you
12 aware of any, any companies that have received Montars
13 from the Anniston facility?

14 A. No, I'm not aware of any specific companies.

15 Q. Do you know if that, those Montars were sold
16 locally?

17 A. I don't know.

18 Q. Do you know how the Montars were used?

19 A. In vague terms.

20 Q. What do you--how do you--what can you tell
21 me about that?

22 A. Oh, the only thing I know that I've heard or
23 read is that they were used in, like, adhesives
24 and--hot melt adhesives and used in, like, asphalts
25 for roofings and things like that.

1 Q. And do you think they were also used as
2 asphalt to pave roads and things of that sort?

3 A. I've never heard that. I doubt it.

4 Q. Was there an area in the plant that, that
5 scrap metal would be sent to?

6 A. I don't know.

7 Q. Do you know what chaff is? I know we
8 discussed chat earlier, but do you know what chaff is?
9 C-h-a-f-f?

10 A. I know what it is to me. I thought it was,
11 like, leftover plant material from, like, when you
12 handle wheat. That's how I think of it, is
13 what's--after you've thrashed wheat, you are left over
14 with chaff.

15 Q. How about with respect to the Anniston
16 facility? Have you ever heard that term used with
17 respect to Anniston?

18 A. No.

19 Q. The Anniston Plant, I mean.

20 A. I understand. No, I haven't.

21 Q. Now, the muriatic acid or the hydrochloric
22 acid that, that the company produced, was that a
23 product that was marketed?

24 A. Sometimes, yes.

25 Q. Okay, for the most part, was that something

1 that the company just disposed of?

2 A. I don't know the relative percentages of
3 what was, what was sold.

4 Q. Who would have that information?

5 A. I don't know.

6 Q. Are you aware of any Anniston--any former
7 employees that worked at the Anniston facility prior
8 to 1964?

9 A. Not that I could come up with a name of.

10 Q. Do you think you knew at one time and you
11 just forgot?

12 A. I probably heard names, but I don't know
13 anybody specifically.

14 Q. Do you know who William Taffee is?

15 A. I've heard the name.

16 Q. When was the last time you spoke to
17 Mr. Taffee?

18 A. I don't believe I ever have.

19 Q. Are you aware that Mr. Taffee apparently has
20 been told by his physician or based upon his
21 physician's evaluation that he's not available for
22 interview?

23 A. No.

24 Q. Do you know who Gene Arnett is?

25 A. I've heard the name.

1 Q. How about Robert Jones?

2 A. Robert Jones I know.

3 Q. I believe you talked about Mr. Jones

4 earlier; is that correct?

5 A. That's correct.

6 Q. And I believe you mentioned Allan Fost

7 (Phonetic) earlier?

8 A. Faust, yes.

9 Q. Faust, what is Mr. Faust's role in Monsanto?

10 Is he still employed by Monsanto?

11 A. Yes--or no, he's employed by Solutia.

12 Q. Okay, and, and what is his role currently in

13 Solutia?

14 A. He has some environmental responsibility for

15 some plants.

16 Q. Did he have at any point environmental

17 responsibility for the Anniston Plant?

18 A. He had remediation responsibility. He was a

19 remedia--he was a remedial manager, there, at that

20 plant for a period of time.

21 Q. And so were he and Jerry Brown kind of

22 counterparts?

23 A. No.

24 Q. Who handled regular environmental regulatory

25 matters at the Anniston facility?

1 A. During most of this time frame, Robert
2 Jones.

3 Q. Do you know when he started there?

4 A. I don't.

5 Q. Do you believe Mr. Jones would have been
6 there in the '60's?

7 A. Oh, I know he wasn't.

8 Q. Okay. Do you know if there was anyone in
9 place prior to Mr. Jones?

10 A. His environmental manager?

11 Q. Yes.

12 A. There are certain--I mean, Jerry Brown was
13 there at some point. Prior to that, I don't know, and
14 I don't know whether--there were probably
15 intermediaries between Jerry and Robert.

16 Q. Can you name any other individuals who had
17 environmental regulatory--who handled environmental
18 regulatory matters, other than Robert Jones and Jerry
19 Brown?

20 A. I don't believe I know any of the others,
21 no.

22 Q. Would Jerry Brown have been the individual
23 responsible for waste disposal at the facility, at the
24 Anniston facility?

25 A. He may have been at some point. I don't

1 know.

2 Q. Was there, was there a particular person put
3 in charge of waste disposal?

4 A. I'm going to say "when," but the fact is
5 that's not going to change my answer because I don't
6 know.

7 Q. Okay. I'm looking at Monsanto's, or rather,
8 Solutia's responsible to CERCLA Section 104(e), and I
9 believe this is what you were referring to before when
10 you were talking about there was a lead information
11 request and a PCB information request?

12 A. That's my understanding, yes.

13 Q. Did you take part in, in responding to the
14 PCB information request?

15 A. I believe so, yes.

16 Q. Did you, did you prepare all the answers or
17 just some of the answers?

18 A. I think just some of the answers. I don't
19 really specifically recall. I'd have to look at the
20 document and--

21 Q. Do you recall there being any meetings with
22 you, Jerry Brown, Gene Arnett, Alan Faust, Craig
23 Branchfield, and Robert Jones, with respect to the
24 CERCLA 104(e) responses as they relate to PCBs?

25 A. I'm sure there was not a single meeting

1 involving all those people because I don't believe
2 I've ever met Mr. Arnett.

3 Q. How did you come to assist with a response
4 concerning PCBs?

5 A. Well, I was, during that time had corporate
6 responsibility for PCB issues for Solutia, so I was
7 part of the team or whatever it was that put together
8 that response.

9 Q. Who gave the final okay to the, to the
10 responses to the PCB information request? Was that
11 you?

12 A. I--not necessarily, no. I'm sure it wasn't
13 me. I would assume it would have been one of the
14 environmental attorneys, but I really don't know the
15 answer.

16 Q. Putting aside--who was the last, who was the
17 last Solutia employee--and I'm not talking about
18 attorneys now--who was the last Solutia employee to
19 review, if you know, the PCB responses to the PCB
20 information request?

21 A. I have no idea.

22 Q. Had you ever heard that William Taffee was,
23 was in charge of waste disposal beginning in 1969 at
24 the Anniston Plant?

25 A. I may have. I don't recall that

1 specifically.

2 Q. And that prior to, prior to him being in
3 charge of waste disposal, that there was no one at the
4 Anniston Plant who was responsible or in charge of the
5 waste disposal?

6 A. I--if that's what it says there, that's
7 fine. I have no knowledge of that.

8 Q. Do you know when the when Highway 202 was
9 relocated?

10 A. I should, but I can't give you a date as I
11 sit here today. I must have heard it a hundred
12 times--

13 Q. Okay.

14 A. --but I don't know.

15 Q. The 11th Street ditch at the facility, have
16 you come across anything that indicated that that
17 ditch had to be dredged at any time during Monsanto's
18 operation of the Anniston Plant?

19 A. I told you this morning we dredged it in
20 1989.

21 Q. I'm talking about not dredging for purposes
22 of remediation, I'm talking dredging for purposes of,
23 of just maintaining the ditch.

24 A. I'm not aware of that.

25 Q. Did the chlorine manufacturing process

1 produce any waste, to your knowledge?

2 A. I don't recall as I sit here. I don't know.

3 Well, that's not true; I do know. I know there was
4 something similar to the dross we talked about, there
5 was mercury dross that developed in those, in those
6 cells at times that had to be disposed of.

7 Q. Can you describe for me how, how you contend
8 PCBs from the Anniston facility get into the soils of
9 residential homes in Calhoun County?

10 A. I think there's not a single answer to that
11 question. I think there are many ways they got into
12 soils in those homes.

13 Q. Can you tell me, can you tell me those many
14 ways?

15 A. Well, I believe the ones near the plant on
16 the plood flain (sic)--plood flain--the flood plain
17 may have been transported by flood waters in the
18 streams. I believe some of the soils in the yards are
19 clearly associated with fill.

20 Q. Fill from where?

21 A. I don't--I mean, some of it appears to be
22 associated with foundry sand. Some of it appears to
23 be associated with, possibly, material taken from Snow
24 Creek.

25 Q. Have you seen any documents that indicate or

1 reflect that any of the foundry sand or other
2 materials from foundries contained PCBs?

3 A. Prior to their use as fill?

4 Q. At, at any point.

5 A. Well, I mean there's material that is,
6 clearly looks to be foundry sand that has PCBs in it
7 that we found in some of the residential yards, yes.

8 Q. So the documents you are referring to are
9 basically test analyses--

10 A. Yes.

11 Q. --that, that your company has performed?
12 How about, how about other documents that reflect PCBs
13 being present in foundry sand?

14 A. I'm not aware of any other documents.

15 Q. When did you first--that theory on the
16 foundry sand, is that something that you developed?

17 A. I don't know that I developed it myself, no.

18 Q. When did you first hear that?

19 A. I don't recall.

20 Q. Is it your testimony that, that no lead from
21 the Anniston Plant--that--is it your testimony that
22 lead detected in residential properties did not come
23 from the Monsanto Anniston Plant?

24 A. I've seen nothing to suggest that it did, so
25 that would be my testimony, yes.

1 Q. Are you aware that in the initial
2 disclosures that your attorneys provided to the
3 defendants in this case, you are identified as someone
4 who has knowledge how PCBs got into soils in Calhoun
5 County?

6 A. I wasn't necessarily aware of that
7 specifically.

8 Q. You don't actually have any personal
9 knowledge about that, right?

10 A. I don't know what you mean by "personal
11 knowledge." I didn't watch the PCBs move into the
12 properties. I mean, I didn't see the soils put in the
13 yards, if that's what you mean. I've looked at
14 analytical data, I've thought about the transport
15 properties of PCBs, and how they move and how they're
16 known to move, and have come to that conclusion.

17 Q. You've seen--have you not seen documents
18 that show that PCBs from the Monsanto Anniston Plant
19 have made their way into soils in Calhoun County?

20 A. I'm sorry, I don't understand your question.

21 Q. Okay, you've, you've seen documents that
22 show that PCBs from the Anniston Plant have, have
23 contaminated soils in Calhoun County, correct?

24 A. I have seen analytical data in patterns
25 which would suggest that the PCBs detected in those

1 soils were a result of discharges from the Anniston
2 Plant, that is correct.

3 Q. Okay.

4 A. But not--that doesn't account for all of the
5 PCBs in all of the yards in Calhoun County.

6 Q. What portion do you think the--I'll call
7 your foundry fill theory, what portion of, of the PCBs
8 that are found throughout Calhoun County do you think
9 are attributable to, to that theory?

10 A. Well, it's not my theory, but--and I don't
11 know what the proportion is. I haven't done an, an
12 analysis of, of what the relative proportions of those
13 might be. I don't know.

14 Q. Isn't it true that, that from the time the
15 Anniston facility started manufacturing PCBs in the
16 late 1920's through 1971 when they stopped
17 manufacturing PCBs and even after, that there were
18 millions of pounds of PCBs that left the Anniston
19 Plant over the course of all those years?

20 A. I wouldn't agree with that. I have no idea
21 what number, what the number is.

22 Q. You wouldn't agree that--how about hundreds
23 of thousands of pounds?

24 A. I don't know what the number is.

25 Q. Didn't you testify earlier that--you gave me

1 a number of 250 pounds per day?

2 A. I said that was the highest number that has
3 been identified in the, in the documents and that I
4 did not believe that, that reflected, necessarily
5 reflected normal daily production.

6 Q. Wouldn't you agree with me that, that the
7 Anniston Plant would likely be the largest contributor
8 of PCB contamination in Calhoun County?

9 A. Only in the waterways leading from our
10 plant.

11 Q. So is it your testimony that, that Monsanto
12 would only be responsible for those PCBs within,
13 within the flood plain?

14 MR. NASSIF: Objection. It calls for a
15 legal conclusion. Go ahead.

16 A. Okay, could you--I'm sorry, could you repeat
17 that question?

18 BY MR. LANGLAIS:

19 Q. The PCBs that are detected in the flood
20 plain, are you familiar with the flood plain?

21 A. Generally, yes.

22 Q. The PCBs detected in the flood plain, whose
23 PCBs are those?

24 A. I don't know.

25 Q. You don't think they would be from Monsanto,

1 do you?

2 A. The PCBs in the flood plains in the streams
3 leaving our plant, some of those certainly are
4 Monsanto.

5 Q. Some of them.

6 A. I don't know what the relative proportion
7 may or may not be.

8 Q. Do you have any other, any other knowledge
9 as to how PCBs got into soils in Calhoun County?

10 A. Not specific, other than their apparent
11 association with foundry sands.

12 Q. Right and you--that's based on what someone
13 told you, right?

14 A. Well, no, I've seen the sands and I've seen
15 the analytical results.

16 Q. Have you seen any documents that reflect
17 that, that what you believe are sands contained PCBs
18 when they were placed into those, into those
19 residential yards?

20 A. No, I don't believe any of those materials
21 were sampled for PCBs before they were placed in
22 residential yards.

23 Q. What makes you think PCBs were in there in
24 the first place?

25 A. Because they're there now, and they're

1 associated with those sands, and it's a consistent
2 finding.

3 Q. You have no personal knowledge of how, how
4 PCBs would have found their way into the, into these
5 foundry sands; correct?

6 A. Not specific, no.

7 Q. So it's really speculation on your part that
8 because you find PCBs and because you may find foundry
9 sands, that the PCBs came with the foundry sand?

10 A. I think that's more than speculation.

11 Q. Well, elaborate for me.

12 A. Well, I think it's a justifiable conclusion
13 from the analytical findings and the observation, the
14 visual observation of those samples.

15 Q. When did you first--when did you first--you
16 said you didn't develop this theory; correct?

17 A. I don't--no, I don't think I developed it
18 personally, no.

19 Q. Are you aware if Monsanto at any time
20 informed the City of Anniston POTW that PCBs were,
21 were getting into the sewer leading from the Anniston
22 Plant?

23 A. I'm not aware that--if PCBs are getting into
24 the sewer leading from the Anniston Plant, and if they
25 are, I'm not aware whether they contacted the local

1 POTW or not.

2 Q. Do you have any knowledge of whether
3 historically, PCBs from the, from the Anniston Plant
4 entered the, the city sewer drains?

5 A. The sanitary sewers?

6 Q. Mm-hmm.

7 A. I don't believe they did, but I don't know
8 specifically.

9 Q. Why would you think that they--that that
10 didn't happen?

11 A. I, I can't imagine a mechanism by which that
12 would happen.

13 Q. So is it your testimony that, that storm
14 water would have just gone into the drainage ditch and
15 nowhere else?

16 A. Yeah, I believe storm water would have gone
17 so the storm water drainage and not into the sewer
18 system.

19 Q. Do you know when the sanitary sewer system
20 was installed?

21 A. No.

22 Q. If I told you that Monsanto's Anniston Plant
23 connected to Anniston POTW sometime in the 1950--1958
24 to 1960 time period, does that ring any bells for you?

25 A. No.

1 Q. Who do you think of, of the following
2 individuals would have the most information with
3 respect to the sewer system at the Anniston Plant?
4 Jerry Brown, Gene Arnett, Alan Faust, Craig
5 Branchfield, or Robert Jones?

6 A. I would have to pick on Jerry again.

7 Q. Do you know where Jerry lives?

8 A. In a town, I think it's called Hamlin,
9 Alabama, near Anniston.

10 Q. Now, you said earlier that you were--you had
11 some knowledge of the solid waste management units at
12 the Anniston facility; is that correct?

13 A. I know there are some.

14 Q. When did that term of art come into play,
15 solid waste management units?

16 A. I believe it's, I believe it's associated
17 with the RCRA regulations which I believe were in the
18 early 1980's.

19 Q. What was your, what was your title in the
20 early 1980's?

21 A. Senior Research Specialist.

22 Q. What involvement did you have with any of
23 the solid waste management units at the Anniston
24 facility when you became Director of Environmental
25 Affairs for Monsanto?

1 A. None.

2 Q. Who had the responsibility over the solid
3 waste management units? Would that have been Jerry
4 Brown?

5 A. And whoever was the environmental manager.
6 Jerry Brown certainly would have had for some time.

7 Q. Do you know if Monsanto's Anniston Plant
8 ever sold or gave away its scrap metal?

9 A. I don't know.

10 Q. Do you know who would have been in charge
11 of, of such a thing, scrap metal at the facility?

12 A. If I don't know they did it, I wouldn't know
13 who would have been in charge of it, if they did it.

14 Q. Do you know if the Anniston facility kept
15 records or logs of spills of PCBs or biphenyl at the
16 Anniston facility at any time?

17 A. I don't know.

18 Q. Have you seen any such logs?

19 A. No.

20 Q. Do they currently maintain logs of, of
21 product spills and things of that nature?

22 A. I don't know.

23 Q. Who would know that information?

24 A. Whoever the plant environmental manager is,
25 or the plant manager, someone currently active at the

1 plant, with some environmental responsibility or
2 process responsibility. I don't know.

3 Q. I'm going to read some lawsuits, some, some
4 lawsuit citations, and you tell me if you've had any
5 involvement in any of these; okay?

6 A. Involvement in what sense? Advising the
7 attorneys?

8 Q. With respect to the PCB issues.

9 A. Okay.

10 Q. Dyer, et al., vs. Monsanto Company.

11 A. Yes.

12 Q. What was your involvement, what was your
13 involvement in that lawsuit?

14 A. Providing technical support to the
15 attorneys.

16 Q. Do you know what that lawsuit involved?

17 A. Yes.

18 Q. What did it involve?

19 A. Landowners on along Choccolocco Creek and
20 Lake Logan Martin in Alabama.

21 Q. Do you know if those matters were settled?

22 A. They were.

23 Q. Were you involved in Shelter Cove
24 Management, Inc., et al., v. Monsanto Company?

25 A. Uh, yes.

1 Q. And what did that case involve?

2 A. That was a single-plaintiff landowner on
3 lake Logan Martin, I believe.

4 Q. And was that case settled?

5 A. I believe it was settled as part of the Dyer
6 settlement.

7 Q. Were you involved in the Wilson v. Monsanto
8 Company case?

9 A. I mean, these are all related cases, so the
10 answer is going to be the same so all of them.

11 Q. Okay.

12 A. Yes.

13 Q. How about Sewell v. Monsanto?

14 A. Yes.

15 Q. How about McKaig (Phonetic) v. Monsanto?

16 A. Same, and I know it exists. I mean, I
17 didn't--I don't know that I had--on any of those, I
18 don't know that I had specific, you know--okay, I'm
19 telling you about McKaig now, but it was all technical
20 support around issues around those landowners around
21 the lake.

22 Q. And these--and so far, all these cases
23 settled?

24 A. I couldn't guarantee that every one of them
25 has. There were some cases out there, for instance,

1 McKaig, I'm not sure whether McKaig has or not because
2 I think it had a different set of attorneys than Dyer
3 and the others.

4 Q. In connection with the, with the cases that
5 have settled, do you know if those settlement involved
6 the purchase of, of the individuals' properties?

7 A. On the ones we've talked about so far, they
8 did not.

9 Q. How about--I believe it's pronounced Doak,
10 D-o-a-k, v. Monsanto.

11 A. Frankly, that one doesn't ring a bell.

12 Q. Payton v. Monsanto Company? P-a-y-t-o-n?

13 A. Yes. That's a different lake. That's Lay
14 Lake.

15 Q. Where is Lay Lake located?

16 A. It's downstream of Lake Logan Martin.

17 Q. And is that Lay Lake downstream of
18 the--Monsanto's Anniston facility?

19 A. Very far downstream, yes.

20 Q. And that case settled?

21 A. I believe it just recently settled, yes. It
22 had been dismissed and then was reactivated, but I
23 believe that it has settled.

24 Q. How about Mars Hill Missionary Baptist
25 Church v. Monsanto?

1 A. Yes.

2 Q. And again, was that a, was that a property
3 acquisition case?

4 A. Well--

5 Q. Let me, let me back up.

6 A. It was settled, and as terms of the
7 settlement, we did receive that property.

8 Q. How about Abernathy v. Monsanto?

9 A. Yes.

10 Q. Do you know what that case involved?

11 A. Personal injury and property damage claims
12 of Anniston residents.

13 Q. And that case has settled; correct?

14 A. Yes.

15 Q. And did you testify in that case in court?

16 A. Yes.

17 Q. Do you know how many days you testified? Do
18 you recall?

19 A. Portions of two days, I believe, as I
20 recall.

21 Q. Do you know when that would have been?

22 A. January or February of 2001. I don't know.
23 I don't really remember specifically.

24 Q. Did you get to see a copy of your transcript
25 with respect to that testimony?

1 A. I, I don't recall having reviewed that, the
2 transcript of that.

3 Q. So far, is that the only case, the Abernathy
4 case, out of the ones that I've mentioned that
5 actually went to trial?

6 A. Out of the ones you've mentioned so far,
7 that's correct.

8 Q. How about Long v. Monsanto?

9 A. That's rolled into Abernathy.

10 Q. And is Abbott also rolled into Abernathy?

11 A. I'm not sure.

12 Q. How about Nelson v. Monsanto?

13 A. I believe that was rolled into Tolbert, but
14 I'm not sure.

15 Q. How about Brown v. Monsanto?

16 A. I don't know about that one.

17 Q. Massey v. Monsanto?

18 A. I don't know the status of that one.

19 Q. How about Owens and Adam v. Monsanto?

20 A. Yes.

21 Q. Have those cases settled?

22 A. Yes.

23 Q. And were those involve--involving personal
24 injuries?

25 A. Uh, no, those were primarily, those were

1 only property damage, as I recall.

2 Q. Now, in those personal injury cases, those
3 individuals, is it--are you aware that those
4 individuals had their blood tested for PCB levels?

5 A. Well, I'm aware that thousands of people had
6 their blood tested for--I mean, that was--yes.

7 Q. All right, are you aware of any former
8 Monsanto employees that had PCBs detected in their
9 blood?

10 A. Yes.

11 Q. Can you give me the names, if it's more than
12 one?

13 A. I don't remember. There was one guy, there
14 was a guy named Norville Bush. That's the only name I
15 can think of.

16 Q. Do you know if Mr. Bush is still alive?

17 A. He's not.

18 Q. Do you know what he died of?

19 A. Old age, I believe.

20 Q. Can you recall any other names?

21 A. I'm sorry, I can't.

22 Q. Are you aware of any union grievances filed
23 by any, any employees of Monsanto with respect to PCBs
24 in the workplace?

25 A. To my understanding, there's been none.

1 Q. How about the lawsuit of Bowie v. Monsanto?

2 A. That was rolled into Abernathy.

3 Q. Heinz v. Monsanto?

4 A. That was rolled into Owens, I believe. I
5 don't know what the proper term is, but--

6 Q. And you believe Owens settled, correct?

7 A. Oh, I know it did.

8 Q. And since those were personal injury cases,
9 there was no property acquisition involved; correct?

10 A. No, they were not personal injury cases.

11 Q. Okay.

12 A. Owens was property damage cases, and there
13 was property acquisition involved for some few number
14 of the Owens plaintiffs.

15 Q. How about Moore v. Monsanto?

16 A. Don't know, don't recall the outcome of that
17 one.

18 Q. Do you know what kind of case that was?

19 A. It was personal injury, I believe.

20 Q. Do you know if that case went to trial?

21 A. No, that did not go to trial.

22 Q. How about Swift v. Monsanto?

23 A. Um, I don't recall the outcome of that one.

24 Yeah, I do. Yes, I do.

25 Q. Okay.

1 A. I think it's settled.

2 Q. Is that a property contamination case?

3 A. Yes, it was. It was a business property.

4 Q. How about Hinton, H-i-n-t-o-n, v. Monsanto
5 Company?

6 A. That was dismissed by the Alabama Supreme
7 Court.

8 Q. Do you know why that was dismissed?

9 A. Because the claims they were alleging were
10 not allowed under Alabama law.

11 Q. How about Balkom, B-a-l-k-o-m, v. Monsanto?

12 A. I believe that's the Sauget case that, one
13 Sauget case that was dismissed by the plaintiffs that
14 we talked about earlier this morning.

15 Q. Champion v. Monsanto?

16 A. I don't recall one. Oh, yes, that was
17 rolled into one of the other bigger cases; I don't
18 remember which one.

19 Q. Was that a property case or a personal
20 injury case?

21 A. I believe--I'm not going to--I don't know.

22 Q. Okay.

23 A. I don't remember.

24 Q. Campbell v. Monsanto?

25 A. Don't know.

1 Q. How about Ingraham v. Monsanto?

2 A. Not familiar with that one.

3 Q. Are you familiar with a product known as
4 ferro-manganese?

5 A. I've heard the term.

6 Q. Is it your testimony that that process did
7 not involve lead?

8 A. That would be my understanding, but I'm not
9 very knowledgeable about that process.

10 Q. Do you recall whether there were any SMPs or
11 SOPs in connection with the ferro-manganese process?

12 A. I've never seen it.

13 Q. Are you familiar with a product known as
14 ferro-silicon?

15 A. Same line of answers.

16 Q. Ferro-phosphorus?

17 A. Same answer.

18 Q. And silico-manganese?

19 A. Same answers.

20 Q. So you are unable to say whether or not
21 those processes involved the use of lead?

22 A. I have no reason to believe they did based
23 on the terms in the, in the names of the products, but
24 I don't have specific knowledge.

25 Q. So you were--were you able to just look at

1 the term "biphenyl" and able, able to determine
2 whether or not that process involved lead just by
3 it's--just by the name of the product?

4 A. No.

5 Q. What drew you to look closer to the biphenyl
6 process?

7 A. The frank answer is the request from ADEM
8 to--for more information on the lead pot process.

9 Q. How did you know that the lead pot
10 process--were you aware of the lead pot process prior
11 to that request?

12 A. I was not.

13 Q. Who directed you to look at the biphenyl
14 SMPs in connection with, with doing a response to that
15 lead information request?

16 A. Yen--I directed myself to try to do that, to
17 try to find out what information was available.

18 Q. So did you sit down and look at all the
19 company's SMPs?

20 A. I don't know that I looked at all of them.
21 I looked at, certainly, the ones that I referenced and
22 maybe some others, to the point where I thought it was
23 sufficient to answer ADEM's request for information.

24 Q. Right, but I'm just curious if you are able,
25 you are not able to look at a particular product name

1 and know whether or not that involved lead, yet
2 somehow you were, you were drawn to look deeper into
3 the biphenyl product process, and what I'm trying to
4 understand is what, what caused you to look deeper
5 into that process.

6 A. I believe I just answered that question. We
7 received a request from ADEM about information--
8 somehow, they'd gotten information that there was a
9 lead pot process, and we were requested to provide
10 information on that, and I was elected, chosen to do
11 the research to be able to provide a response to that.

12 Q. Do you know why, why the company didn't ask
13 Jerry Brown to do the response?

14 A. Well, he was a retiree in the first place,
15 and it wasn't directly in his line of, of
16 responsibility, and it was mine.

17 Q. Well, can you tell me about the product
18 known as phosphoric acid?

19 A. It is a product used in the food industry
20 and other industries, the soap industry.

21 Q. Was it produced at the Anniston Plant?

22 A. Yes, it was.

23 Q. Did that process involve the use of lead?

24 A. I have no information that it did. It was a
25 byproduct of the ferro-phosphorus process or

1 eventually became the product of the ferro-phosphorus
2 process.

3 Q. Do you recall seeing any SMPs or sops in
4 connection with phosphoric acid?

5 A. I do not.

6 Q. How about sodium phosphate? Does that
7 product ring a bell?

8 A. I've heard of it. I don't know--I mean, it
9 would be--it's the sodium salt of phosphoric acid, so
10 it would be--

11 Q. Do you know if the Anniston--I'm sorry, go
12 ahead.

13 A. I forget what I was going to say. Sorry.

14 Q. Do you know if the Anniston Plant produced
15 sodium phosphate?

16 A. I don't know specifically. I would suspect
17 they did, if they were producing phosphoric acid.

18 Q. And is it your testimony that that process
19 did not involve, that process did not involve the use
20 of lead?

21 A. I have no evidence that it did, or no
22 information that it would have, so--

23 Q. You can't say either way?

24 A. I, I really wouldn't. I have no
25 information.

1 Q. How about trisodium phosphate? Is that a
2 product that was produced at the Anniston Plant?

3 A. I don't know.

4 Q. How about monoammonium phosphate?

5 A. Don't know.

6 Q. Diammonium phosphate?

7 A. They all could have been. I mean, they're
8 all just basically derivatives of phosphoric acid.
9 They could have been or not. I don't really recall
10 specifically as I sit here.

11 Q. How about tetrasodium pyrophosphates?

12 A. Same answer.

13 Q. Calcium carbide?

14 A. I believe that was produced at Anniston, but
15 I don't, I don't have any information about it.

16 Q. Do you know how that's manufactured?

17 A. No, I don't.

18 Q. Did you come across any SOPs or SMPs about
19 calcium carbide process?

20 A. No.

21 Q. Are you able to testify either way as to
22 whether that process involved the use of lead?

23 A. No.

24 Q. How about aluminous abrasives?

25 A. Don't know. I know they did manufacture

1 abrasives at Anniston.

2 Q. What's the difference between biphenyl and
3 terphenyl?

4 A. Biphenyl is two benzene rings. Terphenyl is
5 three benzene rings hooked together.

6 Q. Were terphenyls manufactured at the Anniston
7 Plant?

8 A. Yes.

9 Q. And did--how were terphenyls manufactured
10 prior to 1964?

11 A. I'm sure they were manufactured in the same
12 process as biphenyls in the lead pot process. I mean,
13 it's all same basically the same process, and that,
14 that was largely the reason for the distillation
15 column, was to separate the biphenyl from the
16 terphenyls.

17 Q. And Santowax C?

18 A. There were--that is certainly one of the
19 products. I am--I don't have sorted out in my mind
20 what the various Santowax products are.

21 Q. How about hydrogenated terphenyls?

22 A. Where that--I'm sorry, I've lost track of
23 what the question is. Were they--

24 Q. That's okay. Were they products produced at
25 the Anniston Plant?

1 A. Yes.

2 Q. How were those different from just regular
3 terphenyl?

4 A. They have--they are put in a reactor so that
5 some of the double bonds have hydrogens added across
6 them so they have more hydrogens than, than the
7 terphenyl, itself.

8 Q. Now, when you said they're put into a
9 reactor, I mean, can--do you have any other details on
10 how those were made?

11 A. I don't know.

12 Q. Are you able to testify as to whether or not
13 lead was used in, in the manufacture of those
14 materials?

15 A. No, I do not believe it was, I mean other
16 than the fact that it was used to manufacture the
17 biphenyl that was--and terphenyls that was eventually
18 hydrogenated.

19 Q. Okay. Monocalcium phosphate?

20 A. Same with the others. I--you know, once you
21 have phosphoric acid you can--

22 Q. Right.

23 A. --make any of those things very easily.

24 Q. Have you heard of a product called Sterox?

25 A. I've heard of it.

1 Q. And do you know if that was a product
2 manufactured be Anniston Plant?

3 A. Don't recall that specifically, no.

4 Q. Do you know what, what Sterox is?

5 A. I don't. I should, but I don't as I sit
6 here. I mean, it was used in soaps, so it's probably
7 a derivative of phosphoric acid, so it very likely was
8 manufactured there.

9 Q. How about phenyl? Was that manufactured at
10 the Anniston Plant?

11 A. Well, again, without--"phenyl," there's no
12 such thing as phenyl. Phenyl is basically a pre--I'm,
13 I'm sorry, I--it may be--

14 Q. Oh, I understand.

15 A. --dancing. It's basically a prefix
16 indicating that it has a benzene ring in it; like
17 biphenyl has two benzene things.

18 Q. Right.

19 A. Phenyl, itself, is, unless somebody was
20 using that to describe--now, are you saying "phenyl"
21 or "phenol"?

22 Q. No,--

23 A. This says--

24 Q. -y-l. P-h-e-n-y-l.

25 A. I, I don't know what somebody meant by that.

1 To me, that, as a chemist, that has no meaning.

2 Q. Yeah. Could be a typo. How about phenols?

3 A. I don't know that phenols were produced
4 there. Well, that's not--Paranitrophenol was
5 certainly produced there.

6 Q. Right. We discussed that earlier. That
7 goes by "PNP"?

8 A. Correct.

9 Q. And how were, how were--how was PNP
10 manufactured? Do you know that process?

11 A. Not as I sit here.

12 Q. Is that a process that involved the use of
13 lead?

14 A. No.

15 Q. Do you recall seeing any SMPs or SOPs about
16 PNP?

17 A. I don't recall, but I'm sure they exist. I
18 mean, it was manufactured up to about two or three
19 years ago, so--

20 Q. How about diphenyl methane isocyanates?

21 A. I have seen reference to the various
22 isocyanates being produced there, but I don't have any
23 specific information.

24 Q. Do you recall ever seeing any SOPs or, or--

25 A. I don't.

1 Q. --SOPs (sic)?

2 A. I don't.

3 Q. With respect--just a general question with,
4 with respect to SOPs and SMPs, what's the earliest,
5 earliest SMP or SOP that you recall seeing?

6 A. I think I've seen them from the '30's for,
7 for, like, Aroclors, PCBs.

8 Q. Is there any reason why there wouldn't be
9 SMPs or SOPs for, for some of these doc--for some of
10 these products that I've discussed?

11 A. Not that I know of.

12 Q. Is there--are, are those documents
13 maintained in St. Louis somewhere?

14 A. Sometimes. You know, the older ones, it's,
15 it's just hard to say where they--if they, if they got
16 lost in the shuffle, where they got lost in the
17 shuffle. Some were maintained in St. Louis, some were
18 maintained at the plants. You know, if a product was
19 sold, the current--the terms of sale may have involved
20 the transfer of the SMPs to the, to the purchasing
21 company. I just don't know. I mean, there's lots of
22 reasons that, that something that appears to have
23 maybe ought to be there might not be. I don't know.

24 Q. Do you have any, any knowledge with respect
25 to the document retention policies at Monsanto?

1 A. I have some. I mean, I haven't read the
2 manual for a long time.

3 Q. Now, I know, for example, that United Mine
4 Workers of America has a repository that's maintained
5 by a--by Penn State. Does Monsanto have any kind of
6 relationship with any libraries where historical
7 Monsanto documents are maintained?

8 A. Not outside the--

9 Q. As part of a repository?

10 A. Sorry. Not outside the company that I'm
11 aware of.

12 Q. Are you familiar with a product called
13 bicyclohexyl?

14 A. I've heard it, but I really have no
15 familiarity with it.

16 Q. How about phenylcyclohexane?

17 A. Same answer.

18 Q. You've heard of it but--

19 A. Right.

20 Q. --have no knowledge?

21 A. Right.

22 Q. Do you recall seeing any SMPs or SOPs in
23 connection with either of those two?

24 A. No.

25 Q. What is Santosol, Santosol 300?

1 A. I don't know.

2 Q. Have you heard of a prod--product called
3 Therminol?

4 A. Yes.

5 Q. What are Therminols?

6 A. They're heat transfer fluids.

7 Q. So is that one of the PCB blends that
8 we--you referred to earlier?

9 A. Well, the, the Therminol question is very
10 complicated because there were Therminols, there was a
11 series, Therminol F-R series which were PCB-containing
12 heat transfer fluids. In fact, they were just renamed
13 fluids. They weren't--they were pure PCB fluids.
14 They were just named as Therminols for the heat
15 transfer application, but there continue--there have
16 been and continue to be Therminol products that do not
17 and did not ever contain PCBs. That's a current
18 Solutia trademark, and they still market
19 non-PCB-containing Therminol fluids.

20 Q. Okay. Do you have any knowledge with
21 respect to response costs or remediation costs?

22 A. You know, I've heard some at some point or
23 another, but I really don't have that information.

24 Q. The reason I ask that is--oh, I'm sorry, I
25 misread this. This says here these are the initial

1 disclosures that say that you have knowledge with
2 respect to product sales information.

3 A. I think that's in general terms of what the
4 various uses of the products were. I don't, I don't
5 have any specific knowledge of, you know, who bought
6 what and in what volumes.

7 Q. Since leaving Monsanto in January of 2003, I
8 believe you said--

9 A. July.

10 Q. July.

11 A. Sorry, yes, July.

12 Q. It's July?

13 A. Yes.

14 Q. July 31st?

15 A. Yes.

16 Q. Okay, I think you may have said January
17 earlier, but that's okay.

18 A. Sorry.

19 Q. That's okay. Since July of 2003, can you,
20 can you walk through any work you've done for
21 Monsanto, Pharmacia, or Solutia?

22 A. I've continued to provide technical support
23 to attorneys in defense of various litigations.

24 Q. And how are you paid for that technical
25 support?

1 A. I was on an hourly rate for awhile. Now,
2 I'm on a retainer.

3 Q. What was your hourly rate?

4 A. \$175 an hour.

5 Q. How long did that hourly rate--how long was
6 that in play?

7 A. About seven months, eight months.

8 Q. Over the period of those seven months, how
9 much, do you recall approximately how much you were
10 paid under that hourly rate?

11 A. I don't recall.

12 Q. Can you describe for me the retainer
13 agreement that you are currently under?

14 A. I have a nonexclusive retainer agreement
15 with the Husch Eppenger law firm to provide
16 technical support in support of Pharmacia litigation.

17 Q. And so you have been paid--are you paid a
18 lump sum every year?

19 A. I'm paid monthly.

20 Q. What's your, what's your monthly payment?

21 A. Thirteen thousand dollars, \$13,500 a month.

22 Q. And is that money that you earn irrespective
23 of whether or not you provide any technical support
24 during that particular month?

25 A. Yes, it is.

1 Q. How long have you been on that retainer
2 agreement with the Husch firm?

3 A. Since June, I believe, of this year.

4 Q. And do you, do you receive any other
5 payments through Monsanto for any consulting work?

6 A. No, just--other than--if I have direct
7 expenses, they're on top of that retainer, but other
8 than that, no.

9 Q. So essentially, you are being, you are being
10 paid to be here today as part of the retainer;
11 correct?

12 A. I am being paid my retainer and I'm here
13 today. I'm not being paid to be here today.

14 Q. Right.

15 A. I would be paid whether I were here today or
16 not.

17 Q. Right. What were you earning
18 for--approximately, what were you earning from
19 Monsanto at the time of your retirement? What was
20 your annual salary?

21 A. About \$140,000 a year.

22 Q. Have you personally been to any of the
23 locations where Monsanto or Solutia and Pharmacia have
24 undertaken remediation of residential properties?

25 A. In Anniston?

1 Q. Mm-hmm.

2 A. Yes.

3 Q. Okay, how many different, how many, how many
4 places would you say you visited?

5 A. Well, before remediation, probably half a
6 dozen. After remediation, none.

7 Q. Do you recall the properties that you
8 visited before remediation?

9 A. They were ones in the east side area very
10 near the plant, during the, you know, the property
11 purchase program in the mid 1990's.

12 Q. So when you stated earlier that you, you
13 saw, you saw sands or foundry sands taken--did you
14 state earlier that you actually saw foundry sands
15 taken from residential--

16 A. No, I saw foundry sands that had been taken
17 from residential properties. I didn't stand there and
18 watch them take the stands. I have seen the retained
19 samples from those sampling.

20 Q. Someone brought you a container and you
21 looked at it and--

22 A. Well, it was--they didn't bring it to me; I
23 was at the plant and saw it there.

24 Q. How did you--who determined that, that it
25 was foundry sand?

1 A. I think a number of, of our people, the
2 consultants that have been involved in the remediation
3 are basically the ones that have come to those
4 conclusions.

5 Q. You didn't make that determination; right?

6 A. No.

7 MR. LANGLAIS: Do you need a break?

8 A. I'm fine.

9 BY MR. LANGLAIS:

10 Q. Are you familiar with Technical Services
11 Department monthly reports?

12 A. I've seen some of them, yes.

13 Q. How long has Monsanto been, been using--how
14 long has Monsanto or Solutia been using Technical
15 Service--Services Department monthly reports?

16 A. I don't know.

17 Q. Do you know if those report--were those
18 reports still being issued at the time of your
19 retirement from Solutia?

20 A. I, I don't know.

21 Q. Was--at the time of your retirement, was
22 there still a department called Technical Services
23 Department?

24 A. I mean, that would have been an individual
25 plant thing. I don't know.

1 Q. In response to one of the interrogatories,
2 it discusses the lead pot process, and it says "The
3 lead pot process was run in equipment that was totally
4 enclosed. This, in essence, represents air pollution
5 control, and all equipment involved in the
6 enclosing--in enclosing the process could therefore
7 represent air pollution control equipment." Do you
8 agree with that statement?

9 A. Yeah, generally, I think it's a correct
10 statement.

11 Q. Besides the lead trap, what air pollution
12 control was there in the lead pot process?

13 A. I think says it says it was basically a
14 totally enclosed process. When it was operating, it
15 was not open to the atmosphere.

16 Q. Has--have any other heavy metals been
17 detected at the Anniston Plant above what you would
18 normally find as far as background levels?

19 A. I don't know what you mean by "any other,"
20 but--

21 Q. Other--we discussed, we discussed, we
22 discussed mercury.

23 A. But that was at background levels.

24 Q. Okay.

25 A. It wasn't above background levels. I

1 believe there have been sporadic detections of some
2 metals in some of the samples. I'm not really
3 conversant with those data on a point-by-point basis.

4 Q. Do you recall what those metals would have
5 been? Cadmium?

6 A. I don't recall. My, my recollection is
7 arsenic was one that, that had been above background
8 for some reason, but I don't really, I don't really
9 recall.

10 Q. Who is Jerry Hopper?

11 A. He's a--works, well, he worked at the
12 Anniston Plant as a variety of--he was a laboratory
13 technician for awhile, I believe. I believe he
14 helped--he worked in the environmental section for
15 while awhile, and then he worked, also worked in
16 remediation for awhile.

17 Q. Do you recall if he works for Solutia?

18 A. I believe he's retired from Solutia, but he
19 may be consulting for them. I don't know. I know he
20 was doing some work after his retirement.

21 Q. Do you know what kind of work he was doing?

22 A. Um, he was somehow involved in remediation,
23 with the remediation group. I don't know
24 specifically.

25 MR. LANGLAIS: He's got to change it.

1 THE VIDEOGRAPHER: This will end tape number
2 4 in the deposition of Robert Kaley II. We're off the
3 record at 4:01 P.M.

4 (Recess.)

5 THE VIDEOGRAPHER: We're back on the record
6 at 4:15 P.M. This begins tape number 5 in the
7 deposition of Robert Kaley II.

8 BY MS. LAVEY:

9 Q. Mr. Kaley, can you describe for me the
10 structure of corporate-level environmental within
11 Solutia, if you know?

12 A. Today?

13 Q. At the time you, at the time you left, at
14 the time you left in, I guess it was July of 2003.

15 A. Well, it's not very structured. There is
16 a--someone who is now, I guess, a VP of environmental
17 health--environment, health and safety at the time,
18 I'm not sure what his title was, and reporting to him
19 are a number of people, a remediation manager, I guess
20 a, an epidemiologist, maybe a product acceptability
21 manager, probably somebody to do with labeling. Have
22 I got environment, health, and safety? There must be
23 a safety person in there somewhere, too.

24 Q. Environmental health and safety, and then
25 you've got reporting to that person, I have labeling,

1 remedial manag--remediation manager, epidemiologist,
2 product acceptability manager.

3 A. That, that's pretty much it right now.
4 There, this should--there's a safety guy in there
5 somewhere, too.

6 Q. And this is at the, the corporate level.
7 How about at plant level? How does the plant--how do
8 the plant level environmental people tie into this
9 corporate structure?

10 A. You know, I don't really know at this point.
11 I, I think they have some, what I guess would be
12 termed dotted-line responsibilities to let the
13 corporate people know what, what's going on and what
14 the issues are, but I think they're--my understanding
15 is their direct reports are to the plant managers, but
16 you know, the organization has got so lean since I
17 left, I wouldn't even when I was there, necessarily,
18 but it's gotten so lean that it's, it's got sort out,
19 frankly.

20 Q. When you--now, can we go back in time and
21 discuss how the corporate environmental was
22 structured? How was it different from July of 2003?

23 A. Well, it really wasn't--I don't know if the
24 structure was all that different. It's was just there
25 were more people in those boxes, whereas now, you

1 know, there were--each of those was a group,
2 primarily, and now each of those is essentially a
3 person, so I don't know if the structure was a whole
4 lot different.

5 Q. So it sounds like what, what you were saying
6 is that there were environmental people at some point
7 within the individual plants who reported to the plant
8 manager, and then did the plant managers then report,
9 report into someone in this, in this corporate
10 environmental--

11 A. No, the plant--

12 Q. --structure?

13 A. I'm sorry.

14 Q. Go ahead.

15 A. The plant managers would have reported up
16 through the manufacturing organization. The
17 environmental health and safety people at the plants
18 would have reported on a dotted line or had functional
19 reporting responsibilities to the corporate but not
20 administrative reporting responsibilities.

21 Q. Sure.

22 A. That's my understanding.

23 Q. What do you mean by "administrative
24 reporting"?

25 A. You know, who, who determines whether you

1 get a raise or not, who determines what your rating
2 is, you know, you know, when you can take vacations,
3 those kinds of things.

4 Q. Who is, if you know, Charles Chapman?

5 A. He's an employee at the Anniston Plant.

6 Q. Do you know if Mr. Chapman is still there?

7 A. I believe he is.

8 Q. And do you know what his, what his job is?

9 A. No, I don't. I mean he's, he's a plant
10 worker. I mean, he works out in the process. He has
11 a real job.

12 Q. How old of a man is Mr. Chapman?

13 A. I would say he's--I'm going to say
14 fifty-ish.

15 Q. Do you know how long he's been with the
16 company?

17 A. I don't.

18 Q. Do you know who Gene Jesse is?

19 A. Yes.

20 Q. Who is Mr. Jesse?

21 A. Well, he's retired, in very ill health, was
22 an environmental manager during--when I knew him in
23 the late 1980's, in the corporate environmental policy
24 staff here in St. Louis, but I also know he was a
25 former plant manager at Anniston.

1 Q. How was it that you know Mr. Jesse is in
2 very ill health?

3 A. I've just heard that, people talking.

4 Q. Is this a recent thing?

5 A. I think he's had prostate cancer. I think
6 it's prostate cancer I think he's been suffering from
7 for several years.

8 Q. Do you know who Tom Lackey is?

9 A. I know the name. He's an employee or was an
10 employee at the plant. I don't know whether he's
11 current or not.

12 Q. Do you know if he ever worked at the
13 St. Louis plant, I mean the St. Louis--out of the
14 St. Louis corporate offices?

15 A. I don't believe so.

16 Q. Okay, it was just the Anniston Plant that
17 you recall?

18 A. As far as I know, yes.

19 Q. Do you know who Eugene Wright is?

20 A. I've heard the name, yes.

21 Q. Do you know if--what Mr. Wright did for the
22 company?

23 A. He had--in, in the, the time frame when the
24 PCB issues were coming, you know, coming to be
25 understood, he had some sort of environmental

1 responsibility at the plant.

2 Q. I want to make sure I've got the spelling
3 correctly. You said you worked with--was it
4 Jack--maybe you didn't mention his name; Jack
5 Kleghorn?

6 A. Oh, heavens, no.

7 Q. Is Mr. Kleghorn deceased?

8 A. I don't know. I believe so, yes, but I
9 don't know. He, he was a real old-timer at the plant.

10 Q. And--

11 A. I never worked with him.

12 Q. Who is Robert Cheever, C-h-e-e-v-e-r?

13 A. I know the name. He--when I knew him, he
14 was, I think, environmental manager at the Queeny
15 Plant.

16 Q. Are you familiar with someone named--someone
17 in Purchasing named W. G. Adams?

18 A. No.

19 Q. How about J. J. Andrews?

20 A. No.

21 Q. A person with the first initial D. and last
22 name Arras, A-r-r-a-s?

23 A. No.

24 Q. J. W. Baker?

25 A. I know, I knew A. J. Baker, but I don't know

1 about the middle initial, and he didn't have anything
2 to do with Anniston.

3 Q. I have, here, noted that J. W. Baker was--he
4 was a research group leader for Aroclors?

5 A. Oh, okay, yes, he was in St. Louis. A
6 different J. Baker, but yeah, I know who that is.

7 Q. Um, do you know if Mr. Baker still works for
8 the company?

9 A. I doubt it. I don't know, but I doubt it.
10 He was, he was approaching retirement age when I knew
11 him.

12 Q. Do you know an R. E. Beal, B-e-a-l?

13 A. No.

14 Q. How about a J. T. Bell? I guess also known
15 as Toby Bell?

16 A. I've heard the name. I don't--I think he's
17 retired. I don't know whether he's alive or not, at
18 Anniston, from Anniston.

19 Q. How about Paul Benignus?

20 A. I know Paul.

21 Q. And do you know if Paul still works for the
22 company?

23 A. Oh, no, he's been retired twenty years or
24 more.

25 Q. And what did Paul do, if you know?

1 A. He was basically a technical marketing kind
2 of guy for electrical fluids.

3 Q. Howard S. Bergin?

4 A. I know the name. He was management in the
5 Aroclor process or the Aroclor business for awhile.

6 Q. How about an L. R. Birchfield?

7 A. No.

8 Q. R. M. Blowers?

9 A. No.

10 Q. N. Bodger?

11 A. No.

12 Q. Lloyd Bosch?

13 A. I know the name. He was, he was way up
14 there. He may have been Chairman of Monsanto for
15 awhile, or else very high in one of the businesses.

16 Q. Ed Bowles or Bowles?

17 A. No.

18 Q. Calvin Bowman?

19 A. No.

20 Q. Gerald Bratsch?

21 A. I've heard the name. I don't know where--I
22 don't know--he was in the business end of things,
23 marketing or business end of things.

24 Q. L. Briggs?

25 A. No.

1 Q. J. O. Bright?

2 A. No.

3 Q. R. H. Buck?

4 A. No.

5 Q. C. F. Buckley?

6 A. Yes, I knew him.

7 Q. Who is Mr. Buckley?

8 A. He was environmental manager or some such at
9 the Sauget plant.

10 Q. What does the "C." stand for?

11 A. I knew him as Clarey. I don't know whether
12 that's a name or an abbreviation.

13 Q. R. W. Bucknell?

14 A. No.

15 Q. J. P. Buff?

16 A. No.

17 Q. K. J. Buturla?

18 A. No.

19 Q. H. C. Carder, C-a-r-d-e-r?

20 A. No.

21 Q. D. Casey?

22 A. No.

23 Q. J. W. Colgan?

24 A. No.

25 Q. How about an R. Cook?

1 A. No.

2 Q. J. L. Corder?

3 A. No.

4 Q. C-o-r-d-o-r--d-e-r?

5 A. No.

6 Q. F. M. Corich, C-o-r-i-c-h?

7 A. No.

8 Q. And you, I believe you mentioned John

9 Craddock earlier.

10 A. Yes.

11 Q. Do you know where Mr. Craddock--is

12 Mr. Craddock still alive?

13 A. Yes.

14 Q. And do you know where he lives?

15 A. St. Louis.

16 Q. Do you know how old Mr. Craddock is?

17 A. I'm going to say 65 to 70.

18 Q. J. E. Crouch?

19 A. No.

20 Q. D. Danna, D-a-n-n-a?

21 A. No.

22 Q. W. Dietrich?

23 A. W Dietrich: No.

24 Q. H. Disley, D-i-s-l-e-y?

25 A. No.

1 Q. W. B. Dunlap?

2 A. No.

3 Q. C. Durgin?

4 A. No.

5 Q. C. K. Eastman?

6 A. No.

7 Q. An A. Ellenberg?

8 A. No.

9 Q. F. Enoch?

10 A. No.

11 Q. N. W. Farrar, F-a-r-r-a-r?

12 A. Martin Farrar, yes.

13 Q. Who was Martin Farrar?

14 A. Director of research for plasticizers in
15 St. Louis.

16 Q. Is Mr.--what does the "M" stand for?

17 A. Martin.

18 Q. Martin. I'm sorry. Do you know how old of
19 a man Martin is?

20 A. I believe he's deceased.

21 Q. Okay. L. Faulkner?

22 A. Not that has anything to do with Monsanto.

23 Q. Edwin or Ed Findley?

24 A. No.

25 Q. C. F. Foster?

1 A. No.

2 Q. Dr. J. C. Francis?

3 A. J. C--no.

4 Q. How about an L. C. Fuhrmeister,
5 F-u-h-r-m-e-i-s-t-e-r?

6 A. He was at the Anniston Plant in the early
7 '70's, I believe.

8 Q. Do you know if he's still alive?

9 A. My recollection is that he's not. I could
10 be wrong, but--

11 Q. Okay. H. D. Gableman?

12 A. No.

13 Q. R. J. Gordon?

14 A. Um, there was a Dick Gordon that was in
15 research at Monsanto. I don't--other than that, I
16 don't know, here in St. Louis.

17 Q. R. J. Green?

18 A. Again, there was a researcher named
19 R. something Green here in St. Louis.

20 Q. Do you know what the "R." stood for?

21 A. The one I knew was Richard, but I don't, I
22 don't know if that's even him.

23 Q. R. L. Hadworth?

24 A. No.

25 Q. H. L. Harden?

1 A. No.

2 Q. H. N. Harris?

3 A. No.

4 Q. Vince Haupt, H-a-u-p-t?

5 A. No.

6 Q. A. T. Hawkins?

7 A. No.

8 Q. D. S. Havercroft?

9 A. No.

10 Q. R. A. Haydel, H-a-y-d-e-l?

11 A. No.

12 Q. R. L. Hedworth?

13 A. No.

14 Q. R. C. Herman?

15 A. No.

16 Q. Eugene Hill?

17 A. No.

18 Q. Paul Hodges?

19 A. Yes.

20 Q. Do you know if Mr. Hodges still works for--

21 A. No, he's retired; my guess, deceased. He
22 was kind of like product acceptability guy for
23 one--some of the fluids; I don't remember which ones.

24 Q. I have him listed as a Manager of
25 Environmental Engineering. Does that make sense?

1 A. No, but I may have known after he
2 was--people change jobs, obviously, so that doesn't
3 really make sense.

4 Q. How about Fred Holzapfel, H-o-l-z-a-p-f-e-l?

5 A. I think I've heard that name, but I don't
6 know anything about him. I think it's Holzapfel.

7 Q. H. J. Horner?

8 A. Hap Horner? Yeah, he was at the Krummrich
9 Plant. I think he was in charge of the analytical lab
10 at Krummrich.

11 Q. D. B. Hosmer?

12 A. Dennis Hosmer was in the business groups
13 here in St. Louis.

14 Q. He's no longer with the company?

15 MR. NASSIF: Dead.

16 A. Dead, I'm sure.

17 MR. NASSIF: Deceased.

18 BY MR. LANGLAIS:

19 Q. R. E. Howard?

20 A. No.

21 Q. W. B. Howard?

22 A. No.

23 Q. H Hubbard?

24 A. No.

25 Q. W. H. Hunter?

1 A. No.

2 Q. D. W. Jackson?

3 A. No.

4 Q. R. C. Johannsen?

5 A. R. C? No.

6 Q. J. Johnson?

7 A. No.

8 Q. J. Jones?

9 A. No.

10 Q. G. W. Gor--Jordan?

11 A. No.

12 Q. R. W. Kaltenrider?

13 A. No.

14 Q. K-a-l-t-e-n-r-i-d-e-r?

15 A. No.

16 Q. R. E. Keller?

17 A. Yes.

18 Q. Who is R. E. Keller?

19 A. He was the Manager of Applied Sciences when
20 I first joined the company. He was my one level above
21 where I reported.

22 Q. Do you know how old of a man Mr. Keller
23 would be?

24 A. He's got to be 75 or 80.

25 Q. What's the "R. E." stand for?

1 A. Robert E. I don't know what the "E" is.

2 It's Robert.

3 Q. W. B. Kennedy?

4 A. No.

5 Q. A. J. Koenig, K-o-e-n-i-g?

6 A. No.

7 Q. R. M. Kountz, K-o-u-n-t-z?

8 A. No.

9 Q. W. Kuhn, K-u-h-n?

10 A. I've heard the name. I don't know what,
11 what his status or what he did.

12 Q. L. C. Lahman, L-a-h-m-a-n?

13 A. No.

14 Q. J. C. Landwehr, L-a-n-d-w-e-h-r?

15 A. He was at the plant in the early '70's, I
16 believe he's deceased.

17 Q. V. T. Langdon?

18 A. No.

19 Q. Arthur Lanier?

20 A. No.

21 Q. J. C. Larkin?

22 A. No.

23 Q. How about Arthur E. Leisy, L-e-i-s-y?

24 A. R. Leisy, heard the name. Thinking product
25 here in St. Louis. I don't, I don't know. He would

1 be quite old if not deceased.

2 Q. F. MacDonald?

3 A. No.

4 Q. Jack Malloy?

5 A. Yes.

6 Q. Who is Jack Malloy?

7 A. He was--had some environmental
8 responsibility at the Sauget plant.

9 Q. Do you know if Mr. Malloy is still alive?

10 A. I don't.

11 Q. J. W. Mashek, M-a-s-h-e-k?

12 A. No.

13 Q. N. Mason?

14 A. No.

15 Q. How about E. Mather?

16 A. I've heard the name. I don't know anything
17 about it.

18 Q. A. G. McCarty?

19 A. No.

20 Q. John R. McClain?

21 A. No.

22 Q. Does, or did Monsanto have a facility in
23 West Virginia?

24 A. Yes.

25 Q. Have we discussed that today?

1 A. No.

2 Q. What does that West Virginia facility, what
3 did they do?

4 A. Primarily manufactured rubber chemicals.

5 Q. Do you know if they manufactured biphenyl or
6 PCBs at any time?

7 A. I'm sure they did not.

8 Q. Do you know a--I just have a last name,
9 McCluskey?

10 A. No.

11 Q. Jim McGee?

12 A. No.

13 Q. Gerald Miller?

14 A. Gerald Miller, Gerald Miller, yeah, I think
15 there was a Gerald Miller at the Anniston Plant.

16 Q. Do you know how old of a man Mr. Miller
17 would be?

18 A. I don't.

19 Q. Howard Minckler?

20 A. He was in upper management in one of the
21 business groups here in St. Louis.

22 Q. Do you know if Mr. Minckler is still alive?

23 A. Do not know.

24 Q. Robert Moody?

25 A. Don't know.

1 Q. Gary L. Moore?

2 A. Don't know.

3 Q. J. E. Mundy?

4 A. No.

5 Q. That's M-u-n-d-y.

6 A. No.

7 Q. J. A. Mullendore?

8 A. No.

9 Q. Person with a last name Nagel, N-a-g-e-l?

10 A. No.

11 Q. A. C. Nethercott?

12 A. No.

13 Q. O. J. Norris?

14 A. No.

15 Q. Marvin Nunnelly?

16 A. No.

17 Q. E. A. O'Neil?

18 A. No.

19 Q. D. A. Olson?

20 A. No--maybe. There was a Donald, I think was

21 a sales rep, salesperson in the--may have been in the

22 Aroclor business.

23 Q. How about R. W. Peterson?

24 A. No.

25 Q. J. C. Price?

1 A. No.

2 Q. Walter Reed?

3 A. No.

4 Q. A. F. Regan, R-e-g-a-n?

5 A. No.

6 Q. W. R. Richard?

7 A. He was Director of Research for Electrical

8 Fluids; deceased.

9 Q. D. W. Richmond?

10 A. No.

11 Q. W. D. Robinson?

12 A. No. Uh--I knew a Dean Robinson was in
13 research. I don't know he had anything to do with
14 PCBs.

15 Q. I have a W. D. Robinson who was in the
16 biphenyl research group; he was a group leader.

17 A. Could have been. Could be the same guy.

18 Q. And what does the "W" stand for?

19 A. I don't know. I only knew him as "Dean." I
20 think he went by "Dean."

21 Q. Do you know if Dean is still alive?

22 A. I don't.

23 Q. Do you know how old of a man he would be?

24 A. Seventy-plus.

25 Q. Do you think that would have been here in

1 St. Louis or--

2 A. It was definitely here in St. Louis if it's
3 the guy I'm thinking of was in St. Louis.

4 Q. D. A. Roper?

5 A. No.

6 Q. R. L. Sandstedt? S A N D S T E D T?

7 A. No.

8 Q. J. H. Saunders?

9 A. No.

10 Q. James R. Savage?

11 A. Savage was, again in the product business
12 group here in St. Louis.

13 Q. Do you know if Mr. Savage is still alive?

14 A. Do not know. I never knew him: Just know
15 the name.

16 Q. Harvey Schulte?

17 A. No.

18 Q. R. S. Wobus?

19 A. No.

20 Q. R. Williams?

21 A. No.

22 Q. M. J. Williams?

23 A. No.

24 Q. Hilliard Williams?

25 A. Hill Williams, yeah, he was--I believe he

1 was Director of Corporate Research here in St. Louis
2 for awhile.

3 Q. Do you know if he did any if he was ever at
4 the Anniston plant?

5 A. I don't think so.

6 Q. Do you know if Mr. Hill--I mean Mr. Williams
7 is still alive?

8 A. Do not know.

9 Q. Do you know how old of a man he would be?

10 A. Again, 70-plus.

11 Q. B. R. Williams?

12 A. No.

13 Q. B. J. Williams?

14 A. No.

15 Q. E. P. Wheeler?

16 A. Elmer Wheeler, he was an industrial
17 hygienist in the Medical Department here in St. Louis:
18 Deceased.

19 Q. M. E. Webb, two b's?

20 A. No.

21 Q. Person by the name of Dur Watson, D-u-r
22 Watson?

23 A. No.

24 Q. Paul Ward?

25 A. No.

1 Q. Doyle Walker?

2 A. No.

3 Q. W. Wade?

4 A. No.

5 Q. W. Voss?

6 A. No.

7 Q. Fred Turner?

8 A. No.

9 Q. T. Tucker?

10 A. No.

11 Q. E. Tucker?

12 A. E. Tucker was probably the Scott Tucker that

13 I talked about that I reported to when I first

14 came--it was E. Scott Tucker--

15 Q. Mm-hmm?

16 A. --when I first came to St. Louis:

17 Analytical chemist.

18 Q. How old of a man would, would Scott Tucker
19 be?

20 A. Probably 65.

21 Q. Do you know if he's still living?

22 A. He is.

23 Q. Is he still in the St. Louis area?

24 A. No.

25 Q. Where is Mr. Tucker living?

1 A. South Carolina.

2 Q. Tom Townsend?

3 A. No.

4 Q. A person by the name of R. Thomas?

5 A. No.

6 Q. J. F. Stigley?

7 A. No.

8 Q. R. P. Stephens?

9 A. No.

10 Q. J. E. Springgate?

11 A. He was upper management at Monsanto. I
12 guess he might have had the Fluids Group for awhile.

13 Q. R. C. Sprague?

14 A. No.

15 Q. Robert Sodem?

16 A. No.

17 Q. J. E. Smith?

18 A. No.

19 Q. A. H. Smith?

20 A. No.

21 Q. D. B. Shearn, S-h-e-a-r-n?

22 A. No.

23 Q. S. K. Shanahan?

24 A. No.

25 Q. B. O. Seversen?

1 A. No.

2 Q. M. Sep--Sepulveda, S-e-p-u-l-v-e-d-a?

3 A. No.

4 Q. K. Schutzenhofer, S-c-h-u-t-z-e-n-h-o-f-e-r?

5 A. No.

6 Q. And D. Schulz?

7 A. No.

8 Q. Can you name anyone who would be in the

9 Purchasing Department of St. Louis?

10 A. No.

11 Q. In any of your, your jobs with Monsanto,

12 were you ever--did you ever have to order any

13 materials, either for the lab or--

14 A. I may have. I don't recall specifically.

15 Q. Do you know, can you describe for me how the

16 structure of purchasing within Monsanto is?

17 A. Is?

18 Q. At the time, at the time you retired.

19 A. No.

20 Q. How about prior to, at any time?

21 A. All I remember, when I first came, if we

22 needed something at the laboratory we needed to fill

23 out a purchase requisition and hand it in to somebody

24 and then it went its own merry way, so I don't really

25 know.

1 Q. Okay. Have you ever seen any aerial
2 photographs of the Anniston facility?

3 A. Yes.

4 Q. Do you recall when you saw those?

5 A. Over the past, you know, ten years or so.

6 Q. Do you know what periods of time those were
7 aerial photographs of?

8 A. No, I don't specifically recall.

9 Q. Were they recent aerial photographs or were
10 they from the 1960's?

11 A. Both, or maybe even earlier.

12 Q. Do you recall how many aerial photographs
13 you've seen?

14 A. I'm going to say half a dozen, maybe.

15 Q. Where did you, where did you see those
16 aerial photographs?

17 A. Most of them, hanging at the plant, various
18 offices.

19 Q. The last time you went to the Anniston
20 facility was when?

21 A. Last March.

22 Q. And when you were there last March, did
23 you--do you recall seeing the aerial photographs
24 hanging on people's walls?

25 A. There may have been one in the conference

1 room that I was in. I don't really--I don't have a
2 specific recollection.

3 Q. Now, do you recall there being any site
4 plans for the facility outside of those prepared for
5 the remedial activities?

6 A. I've never seen any.

7 Q. How about, do you know what a Sanborn map
8 is?

9 A. No.

10 Q. Have you ever done any consulting work for
11 Pharmacia?

12 A. I mean, I'm a consultant for Pharmacia now.

13 Q. Well, has Pharm--your--has Pharmacia paid
14 you for any consulting work?

15 A. Not directly, no.

16 Q. Has Solutia paid you for any consulting work
17 directly?

18 A. Yes.

19 Q. And that's different from your being paid
20 through the Husch firm?

21 A. Um, it was prior to my arrangement with
22 Husch, yes.

23 Q. Was it prior to your hourly arrangement?

24 A. No, it was part of that.

25 Q. Have you ever done any consulting work for

1 Monsanto out of the arrangement you have with Husch?

2 A. No.

3 Q. Have you done any consulting work for any
4 other companies, other than Monsanto, Pharmacia,
5 Solutia, have you done any other consulting outside of
6 that context?

7 A. Yes.

8 Q. Who have you done consulting for?

9 A. I have agreements with those companies not
10 to disclose. Do I--

11 MR. LANGLAIS: I'll sign a confidentiality
12 agreement. I can agree that we can keep this portion
13 of the, of the deposition confidential.

14 MR. NASSIF: I'll tell you what: Why don't
15 you let me talk with him today, because I don't know
16 the names of those companies, either.

17 MR. LANGLAIS: Okay.

18 MR. NASSIF: And why don't you let me talk
19 with him overnight, and then we'll see what we're
20 going to do. We could always send you an agreement
21 and then send the information to you because, you
22 know, if you have questions about what he does for
23 them, then I think that would probably be privileged
24 information, but I wouldn't know because I don't know
25 what he's done for them.

1 MR. LANGLAIS: I understand. That's fine.

2 BY MR. LANGLAIS:

3 Q. Can you tell me how the analytical methods
4 for testing of PCBs has changed since you first
5 started doing testing in 1974?

6 A. Sure.

7 Q. Can you walk me through how those analytical
8 methods have changed since 1974?

9 A. Well, in 1974, they were essentially gas
10 chromatographic methods using packed columns, using
11 electron capture detectors that were very
12 temperamental and had huge memory effects. In other
13 words, if you analyzed a sample that had a lot of
14 PCBs, you probably couldn't analyze another sample the
15 rest of the day because even if you injected just pure
16 solvent, you'd still get PCBs coming out from the
17 column. In about the early 1980's or, well, in the
18 mid 1970's, they improved the, the electron capture
19 detector so that it, it was, it was more sensitive and
20 wasn't nearly as temperamental, reduced the
21 sensitivity to some extent. At about that same time,
22 there were two developments that, that advanced the
23 technique; the development of commercially available
24 gas chromatographs hooked to mass spectrometers, and,
25 and that, that helped provide a lot of selectivity for

1 the analytical method, although it didn't really
2 change the sensitivity very much, and then the
3 development of what are called capillary columns, as
4 opposed to packed columns, those continued to develop
5 until the mid 1980's. They're, they're pretty much de
6 regeur these days. They're pretty much the state of
7 the art; what everybody uses is capillary columns.
8 The mass spectrometers have continued to, to be
9 improved in and sensitivities have continued to, to
10 decrease, so I mean, we were looking in, in the 19,
11 late 1960's, early 1970's at, at doing
12 part-per-million, high part-per-billion analyses with,
13 with very poor accuracy and very poor precision, down
14 to be able to do parts per billion fairly routinely in
15 the mid to late 1970's, parts, you know, parts per
16 trillion in the 1980's, and you know, they're doing
17 parts per quadrillion for some things now in the
18 1990's and 2000's. A lot of that depends on the
19 particular sample. Obviously, you can always, you can
20 always do better in a clean water sample because you
21 don't have things that interfere with it. You usually
22 do worse in, you know, human tissues, or animal
23 tissues, or dirty soils that have a lot of other
24 materials that could interfere with the analysis, so
25 there's a lot of the parameters that impact those

1 detection limits.

2 Q. Right. Do you recall ever seeing any
3 written organizational charts for, for Monsanto or
4 Solutia?

5 A. Any ever?

6 Q. Well,--

7 A. Yes.

8 Q. --I showed you one earlier that you said was
9 from the '30's, but I'm looking for something, I
10 guess, a little more recent.

11 A. Not, not specifically, no. I mean, I'm sure
12 they must exist somewhere for some organizations, but
13 I, you know, I don't, I don't have any and I don't
14 know that I've seen any recently.

15 Q. Up until July of 2003, you maintained an
16 office here in St. Louis as part of Monsanto?

17 A. Solutia, yes.

18 Q. Right?

19 A. I'm sorry.

20 Q. Do you recall ever seeing any aerial
21 photographs of the Anniston facility there?

22 A. No.

23 Q. Do you know how long Monsanto had an Ad Hoc
24 Committee with respect to PCBs?

25 A. For a period of several months.

1 Q. Was that only--when, when did they have that
2 committee?

3 A. Late 1969.

4 Q. Has there been any, any other PCB committees
5 within Monsanto or Solutia?

6 A. Well, the Ad Hoc Committee basically
7 morphed, developed into a more formal organization in
8 the 1970 time frame, you know, and then once Bill
9 Papageorge took over as manager for the PCB issues, I
10 think that formal committee kind of dissolved. Other
11 than that, I don't know of any committees to deal with
12 PCB issues in any of the organizations.

13 Q. Do you recall there being any kind of
14 complete or executive committee that dealt with
15 liability matters for Monsanto?

16 A. I don't know of anything.

17 Q. Do you recall there being any kind of audit
18 committee with respect to, like, environmental audits
19 and--

20 A. Well, certainly, the company does, the
21 environmental groups do do environmental audits of the
22 plants.

23 Q. Do you recall how far back those audits
24 occurred?

25 A. I don't really. It wouldn't have been much

1 before 1980 or so, if even that soon.

2 Q. When you were doing your research on the
3 lead pot process, did you come across anything that
4 discussed how the, how the lead dross was removed?

5 A. I don't recall anything.

6 Q. Did you ever see anything that, that
7 discussed dipping out of the, of the lead dross?

8 A. I seem to have a recollection of something
9 like that. Again, that may have been in this same
10 document that this organization chart came out of. It
11 seems to me there was something in there with regard
12 to that.

13 Q. Do you know what a conversion promoter is?

14 A. No, I could--no, I mean, I could speculate,
15 but no, not necessarily.

16 Q. I mean is--

17 A. It is--

18 Q. I'm sorry.

19 A. It's probably some sort of a catalyst to
20 accelerate the conversion process.

21 Q. Do you know what lead carryover is in
22 connection with the lead pot process?

23 A. I know what those terms mean. I don't know
24 specifically what that's referring to. I mean, that
25 would--in my view, that's what the lead trap would do,

1 would be to trap out the lead carryover from the
2 converter.

3 Q. Can you tell me what a sojourn,
4 s-o-j-o-u-r-n, pot is in connection with the lead pot
5 process?

6 A. I don't know what that means to a chemical
7 engineer.

8 Q. Have you ever heard the term "outage" with
9 respect to the lead pot process?

10 A. No.

11 Q. In your review of the documents relating to
12 the lead pot process, did you ever come across
13 anything that discussed the buildup of carbon in the
14 pipes of the, of the lead pot process equipment?

15 A. I don't recall that.

16 MR. LANGLAIS: What time we looking at?

17 MS. O'NEAL: Ten till.

18 MR. LANGLAIS: Ten till 5:00? We may be at
19 a good stopping point, but give me a second.

20 (Pause.)

21 BY MR. LANGLAIS:

22 Q. Do you know if the Anniston Plant had any
23 forklifts? Do you recall ever seeing any documents
24 discussing forklifts at the Anniston Plant?

25 A. No, certainly no documents, no.

1 Q. Do you recall anyone discussing any
2 forklifts at the plant?

3 A. No.

4 Q. Do you know how they moved barrels around?

5 A. I would presume with forklifts, but I don't
6 really know.

7 Q. Are forklifts usually hydraulic?

8 A. I believe so.

9 Q. If they--just assume with me that there were
10 forklifts at the Anniston Plant. Would they have used
11 the--was it Pydraul?

12 A. Yes, it was Pydraul. No, I doubt that they
13 would have used Pydraul.

14 Q. Why wouldn't they have used their own
15 product?

16 A. Well, because it was expensive compared to
17 oil-based hydraulic fluids, and you only used the
18 Pydraul products in situations where fire was a
19 danger.

20 Q. So what hydraulic equipment would require
21 the use of Pydraul versus the less expensive?

22 A. Foundries. That's what it was developed for
23 was, was foundries.

24 Q. And how did you come to learn that
25 information?

1 A. That's--I mean, I don't know specifically
2 how I came to know it, but that's certainly the big
3 automotive companies and others--I mean, it was
4 developed because of the concerns for, for flammable
5 hydraulic fluids in situations where you had lot
6 metals.

7 Q. What were the--do you know the percentage of
8 PCBs, were there PCBs in the Pydraul?

9 A. In some of the Pydrauls, certainly in the
10 days when we made PCBs prior to 1971, when Monsanto
11 phased out of all the nonelectrical uses, the Pydrauls
12 did contain PCBs.

13 Q. Did Monsanto continue to use--is Pydraul the
14 brand name?

15 A. It's a trade name, yes.

16 Q. Did Monsanto continue to use Pydraul like
17 they used Therminol?

18 A. Yes.

19 Q. So you can't just simply look at something,
20 without knowing the date, if you see the word
21 "Pydraul," you don't know whether it was Pydraul that
22 contained PCBs or Pydraul that, you know, didn't
23 contain PCBs? Correct?

24 A. Like, every--like, both the Therminols and
25 Pydrauls had suffixes associated with them, so it

1 wasn't just Pydraul. It was Pydraul AE or Pydraul
2 SE30 or something. The Therminols all had Therminol
3 55 or Therminol FR1, so if you knew either--if you
4 knew the date, but more specifically, if you knew the
5 particular Pydraul product, then you--there were ways
6 to find out or are ways to find out the compositions.

7 Q. Do you know the suffixes for Pydrauls that
8 contain PCBs?

9 A. Oh, there are dozens of them. I don't--

10 Q. Do you know any off the top of your head?

11 A. I certainly should. There was Pydraul 625,
12 Pydraul 310, Pydraul AC, Pydraul A200, I mean there
13 are, I mean there are literally dozens of them.

14 Q. And is it your testimony that the Pydrauls
15 you just mentioned with those suffixes, those
16 contained PCBs?

17 A. Yes.

18 Q. What is Pyranol, as opposed to Pydraul?

19 A. As we discussed this morning, Pyranol is
20 General Electric's trademark for fire retardant
21 dielectric fluids.

22 Q. So only General Electric would have
23 received that?

24 A. Those fluids were General Electric fluids,
25 yes.

1 Q. Would you--are you aware if Monsanto sold
2 any PCB-containing fluids that would go into
3 transformers directly to any of the foundries?

4 A. The foundries in Anniston? I'm not aware of
5 any information to that effect.

6 Q. Is it, is it typical--is it--can I assume
7 that with respect to the dielectric-containing
8 equipment like transformers, that any PCB material
9 that would have gone into those would have been sold
10 to the manufacturer of, of those units, as opposed to
11 someone who just has those at their facilities?

12 A. I don't--I don't believe that's a safe
13 assumption.

14 Q. Okay.

15 A. I mean--

16 Q. Do you have information contrary to that?

17 A. Yeah. Some of the larger utilities
18 certainly bought the fluids on their own to service
19 their own electrical equipment.

20 Q. But when you say "larger utilities," you
21 mean like Alabama Power Company; correct?

22 A. Typically, yes.

23 Q. But as far as, as far as companies like, you
24 know, some of the foundries that, maybe, had
25 transformers at their facilities, you haven't seen any

1 information that they purchased any of those materials
2 directly from Monsanto?

3 A. I haven't seen such information but I, you
4 know, I can't exclude that possibility.

5 Q. Did you ever see any documentation that,
6 that discusses employees' leaving with PCBs stuck to
7 the bottom of their feet, bottom of their shoes?

8 A. No, I can't imagine that.

9 Q. How were the PCBs and the PCB-containing
10 products packaged and transported? Do you know?

11 A. In a variety of methods: Small drums,
12 55-gallon drums, railroad tank cars, whatever was
13 appropriate for the volume being purchased.

14 Q. As part of the filling of those drums and
15 the tank cars, do you know if there was any kind of
16 capture, air capture, emissions capture system?

17 A. I don't know.

18 Q. Who would have information about that?

19 A. Jerry Brown may.

20 Q. Do you know how the, the biphenyls were
21 transported from the Anniston facility to other
22 Monsanto facilities?

23 A. I, I don't know specifically.

24 Q. And I think you said earlier that the
25 biphenyls were, they were sold to people other than

1 the other Monsanto facilities; is that correct?

2 A. Oh, yes.

3 Q. It wasn't just the precursor to making the
4 PCBs, it was people--what was the use of just the
5 biphenyls?

6 A. Well, actually, for awhile, it was used as a
7 coating on the--remember in the old days, they had the
8 green wax paper, and citrus fruit was actually used as
9 a fungicide on the green wax paper? That was one of
10 the larger uses. It also was used as a, as a heat
11 transfer fluid in its own right.

12 Q. Are you familiar with something known as a
13 process safety audit of Aroclor process?

14 A. Not specifically, but I wouldn't be
15 surprised if there is such a thing.

16 MR. LANGLAIS: This is a good time to stop
17 as any.

18 MS. LAVEY: It's 5:00 o'clock.

19 THE VIDEOGRAPHER: This ends today's session
20 of the deposition of Robert Kaley II. We're off the
21 record at 5:02 P.M.

22 (Whereupon, at 5:02 P.M., the
23 deposition was recessed to the
24 following day.)
25

1 Page 356 Line 25 Should Read: TP = tepee

2 Reason for change:

3 Transcription error

4 Page 357 Line 3 Should Read: TP = tepee

5 Reason for change:

6 Transcription error

7 Page 364 Line 15 Should Read: monitor = Monter

8 Reason for change:

9 Transcription error

10 Page 394 Line 12 Should Read: milligram = kilogram

11 Reason for change:

12 Transcription error or misspoken

13 Page 394 Line 20 Should Read: million = billion

14 Reason for change:

15 Transcription error or misspoken

16 Page 406 Line 10 Should Read: in its abatement =

17 Reason for change: and its embayment

18 Transcription error

19 Page 406 Line 24 Should Read: your = our

20 Reason for change:

21 Transcription error

22 Page 412 Line 11 Should Read: Emile = Emelle

23 Reason for change:

24 Spelling

25

1 Page 428 Line 22 Should Read: she's = he's

2 Reason for change:

3 Transcription error

4 Page 482 Line 25 Should Read: superficial = surficial

5 Reason for change:

6 Transcription error

7 Page Line Should Read:

8 Reason for change:

9

10 Page Line Should Read:

11 Reason for change:

12

13 Page Line Should Read:

14 Reason for change:

15

16 Page Line Should Read:

17 Reason for change:

18

19 Page Line Should Read:

20 Reason for change:

21

22 Page Line Should Read:

23 Reason for change:

24

25

Gore Perry Gateway & Lipa St. Louis, MO
(314) 241-6750 621-4790 621-2571 621-8883

1 Comes now the witness, ROBERT GEORGE KALEY II, Volume,
2 and having read the the foregoing transcript
3 of the deposition taken on the 9/29/2004,
4 acknowledges by signature hereto that it is a,
5 true and accurate transcript of the testimony given
6 on the date hereinabove mentioned.

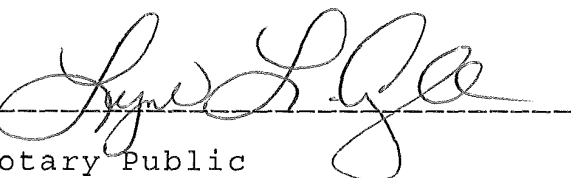
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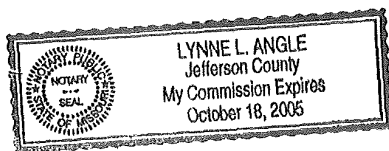
10 ROBERT GEORGE KALEY II, Volume
11

12 Subscribed and sworn to me before this

13 27th day of October, 2004.

14 My Commission expires
15

16 
17
18 Notary Public



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1 State of Missouri)

2) SS.

3 City of St. Louis)

4 I, J. Bryan Jordan, a Notary Public in
5 and for the State of Missouri, duly commissioned,
6 qualified and authorized to administer oaths and to
7 certify to depositions, do hereby certify that
8 pursuant to Notice in the civil cause now pending and
9 undetermined in the In the United States District
10 Court For the Northern District of Alabama, to be used
11 in the trial of said cause in said court, I was
12 attended at the offices of Husch & Eppenberger, LLC,
13 in the County of St. Louis, State of Missouri, by the
14 aforesaid witness and by the aforesaid attorneys, on
15 the 29th day of September, 2004.

16 The said witness, being of sound mind
17 and being by me first carefully examined and duly
18 cautioned and sworn to testify the truth, the whole
19 truth, and nothing but the truth in the case
20 aforesaid, thereupon testified as is shown in the
21 foregoing transcript, said testimony being by me
22 reported in shorthand and caused to be transcribed
23 into typewriting, and that the foregoing pages
24 correctly set forth the testimony of the
25 aforementioned witness, together with the questions

1 propounded by counsel and remarks and objections of
2 counsel thereto, and is in all respects a full, true,
3 correct and complete transcript of the questions
4 propounded to and the answers given by said witness;
5 that signature of the deponent was not waived by
6 agreement of counsel.

7 I further certify that I am not of
8 counsel or attorney for either of the parties to said
9 suit, not related to nor interested in any of the
10 parties or their attorneys.

11 Witness my hand and notarial seal at
12 St. Louis, Missouri, this 13th day of October, 2004.

13
14
15 J. Bryan Jordan

16 Certified Court Reporter No. 00532

17 State of Missouri

18 My License expires: January 1, 2005

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