

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 August 31, 2004

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14 Videotaped Deposition of WILLIAM B. PAPGEORGE,

15 Volume II
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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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18 Videotaped Deposition of WILLIAM B. PAPAGEORGE,
19 Volume II, taken on behalf of the Defendants, at the
20 offices of Husch & Eppenberger, LLC, 190 Carondelet
21 Plaza, Suite 600, in the County of St. Louis, State of
22 Missouri, between the hours of 8:49 A.M. and 12:41
23 P.M. on the 31st day of August, 2004, before J. Bryan
24 Jordan, Certified Court Reporter and Notary Public.

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Papageorge, William; McWane (2) (Former Monsanto Employee)

1 MS. LAVEY: Do we have everybody on the
2 phone that's going to be joining? Do you know,
3 Raakhee?

4 MS. BISWAS: I think not yet. I just sent
5 out the e-mail. I think there's one other person to
6 sign in.

7 MS. LAVEY: We're going to start anyway
8 because it's a quarter of.

9 MR. SCOT: This is John Scott.

10 MR. McMAHON: This is Mike McMahon.

11 MS. LAVEY: Is Karen Pilat on?

12 (No response)

13 MR. TAYLOR: Let's just get started, let
14 them dial in when they dial in.

15 MS. LAVEY: I just need it for the record
16 when they do dial in, they'll just be in at that
17 point.

18 MR. NASSIF: We can take their names at the
19 break as to who's on the phone. Let's go.

20 MS. LAVEY: Yeah, let's get started.

21 THE VIDEOGRAPHER: We're on the record at
22 8:49 A.M. Today's date is August 31st, 2004. My name
23 is Curt Shaw, legal videographer, along with Jerry
24 Jordan. We're at the offices of Husch Eppenberger.
25 The address is 190 Carondelet Plaza, Clayton,

1 Missouri. We're here to continue the deposition of
2 William B. Papageorge, to be taken in the case of
3 Solutia, et al., vs. McWane, et al., currently pending
4 in the Northern District of Alabama, Cause Number
5 CV-03-EWG-1345-E.

6 At this time, would counsel please identify
7 themselves for the record?

8 MS. LAVEY: Wendy Lavey, of Squire, Sanders
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25 MR. McMAHON: Mike McMahon, for Datron and

1 Anchor Metals.

2 MS. BISWAS: Raakhee Biswas, for DII
3 Industries.

4 EXAMINATION (Continued)

5 BY MS. LAVEY:

6 Q. Mr. Papageorge, good morning.

7 A. Good morning.

8 Q. Welcome back.

9 A. Thank you.

10 Q. I wanted to start by asking you about some
11 additional personnel to see whether these names come
12 to mind when you hear them, from the Anniston Plant.
13 The first name is Dur Watson. Do you recall that
14 individual? Dur is D-u-r.

15 A. I do not.

16 Q. Okay. Marvin Nunnelly?

17 A. I don't recall him.

18 Q. Eugene Hill?

19 A. No.

20 Q. Walt Reed?

21 A. I recognize the name. I can't place the
22 person as an individual.

23 Q. Do you recall if he was with the Maintenance
24 Department?

25 A. I do not.

1 Q. Edwin Finley?

2 A. I don't know him.

3 Q. After we concluded yesterday and before we
4 began this morning, did you review any other--any
5 documents in preparation for today?

6 A. I did not.

7 Q. Did you do any other preparation prior to
8 this morning's deposition?

9 A. No.

10 Q. Understanding that I'm a lay person, I'd
11 like to try to understand the biphenyl production
12 process, and I'm going to try to walk through that
13 with you to explain how that production process worked
14 when you arrived at the Anniston Plant in 1965.
15 Before I do that, are there any other personnel
16 responsible for biphenyl production at Anniston that
17 you can think of today, other than Robert Moody?

18 A. I hesitate because my memory is not very
19 clear on this, but it seems to me I recall an
20 individual by the name of East something, replacing
21 Mr. Moody, but that is as close as I can get to
22 identifying that individual.

23 Q. Okay, do you recall any other individuals
24 who worked in that, in that group in the biphenyl
25 production process area?

1 A. Not at the moment.

2 Q. Now, the production of biphenyl would be the
3 first step before you could produce the chlorinated
4 biphenyls; correct?

5 A. I don't know what you mean by "first step."

6 Q. Well, in, in order to produce--in order to
7 manufacture the Aroclors, one had to first manufacture
8 the biphenyls; correct?

9 A. Have to have a source of.

10 Q. Have to have a source of the biphenyls?

11 A. Yes.

12 Q. For the Anniston Plant, they were
13 manufacturing the biphenyl at the Anniston Plant;
14 correct?

15 A. Yes.

16 Q. Okay, and do you recall the type of process
17 that was in place when you arrived in 1965 for
18 biphenyl production?

19 A. I just do not remember the technicalities
20 involved in this operation. It's been awhile. I just
21 do not remember it.

22 Q. Do you recall if that the lead pot process
23 was in place when you arrived in 1965?

24 A. I do not recall any mention of lead at all
25 in the Anniston Plant.

1 Q. What is your general understanding of how,
2 how the biphenyls were produced? I understand you
3 said you don't recall the, the details, but what is
4 your general understanding of, of biphenyl production
5 at Anniston?

6 A. Just depending on my understanding of
7 chemistry, in order to get two benzene rings to join,
8 each of those rings has to lose a hydrogen, and that's
9 as far as I can go in rec--recalling what happened in
10 the process.

11 Q. Do you recall what the raw materials were in
12 the process in order to produce biphenyl?

13 A. Benzene is the only raw material I recall.

14 Q. Okay, and was that in a liquid, benzol form?

15 A. Yes.

16 Q. Okay, and at some point in time, that would
17 have to--as part of the process, that would have to be
18 vaporized, correct? Be a benzene vapor?

19 A. Since I don't recall the process, I don't
20 know if it occurred, a liquid phase or a vapor phase.

21 Q. Okay, so you don't recall a series of, I'll
22 call them pots, for lack of a better word, through
23 which the benzol was, was moved to allow the process
24 to take place?

25 A. I recall these tanks which were called,

1 could be called pots--

2 Q. Okay.

3 A. --in which reaction, chemical reaction was
4 taking place. Fairly common for many, many chemical
5 processes.

6 Q. Presumably, when you arrived there in 1965,
7 you did tour the biphenyl production area, did you
8 not?

9 A. Yes.

10 Q. Do you recall whether any of those biphenyl
11 units contained molten lead?

12 A. No, as I mentioned earlier, I just never
13 associated a plant with lead.

14 Q. Did you ever come to understand that the
15 lead pot process had been used at the Anniston Plant--

16 A. No.

17 Q. --in the past?

18 A. The first time I've heard lead associated
19 with the Anniston Plant was at these discussions we've
20 had here.

21 Q. Well, I haven't brought them up yet, so what
22 discussions do you mean?

23 A. Well, you asked questions about them.

24 Q. Today. Okay.

25 A. That's the first time I've heard lead and

1 Anniston mentioned in the same discussion.

2 Q. Do you know if the lead pot process was in
3 use at the Krummrich?

4 A. No, I do not.

5 Q. And as you sit here today, you are unable to
6 identify any living individual who would have
7 knowledge about the biphenyl production process at the
8 Anniston Plant?

9 A. That is correct.

10 Q. Do you know for how long biphenyls were
11 produced at the Anniston Plant?

12 A. No, I do not.

13 Q. Are you familiar with documents referred to
14 as standard manufacturing processes, or SMPs?

15 A. Yes.

16 Q. Who would have the responsibility for
17 developing standard manufacturing processes?

18 A. I don't recall any specific individual or
19 job title that associated with that. It was generally
20 a, a group effort with the research chemist who
21 developed some idea of a process in the laboratory and
22 transferring that to something that could be used in a
23 larger scale in the plant, and then the individuals
24 representing manufacturing would contribute, based on
25 their experience, with other chemical manufacturers

1 regarding the size of these tanks or pots, as we
2 called them, and the frequency of starting a
3 particular batch of the material, and when is it
4 completed, what do you do with it after that, and so
5 on, so it's a group effort, really. I don't know of
6 any one person designated.

7 Q. Was it typically at the plant level that the
8 SMPs were generated or at the headquarters level?

9 A. I don't know that I'd--would use the word
10 "typical." It happened in both areas.

11 Q. Okay.

12 A. At random, almost.

13 Q. Do you recall when you arrived in 1965, I
14 know you said you don't--you are not, you are not
15 familiar with the actual production process. Do you
16 recall how many biphenyl units were in operation at
17 the time when you arrived?

18 A. Well, my definition of a unit is the entire
19 activity.

20 Q. Yes.

21 A. Just the one unit.

22 Q. Okay, so within--you don't have any picture
23 in your mind when you are looking at the biphenyl
24 production area,--

25 A. Mm-hmm?

1 Q. --you don't have a picture in your mind of a
2 certain number of collections of pots that would
3 include preheaters, converters, fractionating columns,
4 and a series of close?

5 A. You asked if I have a certain number. No,
6 it's just a collection of--

7 Q. Okay.

8 A. --typical manufacturing equipment for that
9 type of chemical process.

10 Q. Okay.

11 A. Several tanks, pipelines, pumps, columns to
12 conduct distillations, and so on.

13 Q. Specifically with the biphenyl production
14 area, again not talking yet about the Aroclor portion
15 of the process, are you familiar with the term
16 "preheater" being used with respect to those tanks?

17 A. I'm familiar with the expression "preheater"
18 because it's a very common function performed in many
19 ways. I do not associate it necessarily only with the
20 biphenyl unit. I--

21 Q. How about the term "converter pot"?

22 A. That's another popular expression that
23 describes the piece of equipment where one chemical
24 joined with other chemicals produce the desired end
25 result or chemical.

1 Q. Do you associate that term with the biphenyl
2 production process at all?

3 A. Well, a little bit; not too, too much, no,
4 hmm-mm.

5 Q. But if I asked you what the conversion
6 products are in the production of biphenyl coming off
7 the converter pot, you don't recall that, I suppose?

8 A. Not the details, no.

9 Q. Do you recall that Santowax and biphenyl
10 were both conversion products?

11 A. I'm having difficulty with your using the
12 word "conversion." All chemical reactions are
13 conversions from one type of chemical to another, so
14 everything in a chemical plant is a conversion.

15 Q. Are you familiar with Santowax being one of
16 the byproducts of the biphenyl production process?

17 A. I'm familiar that it is a product produced,
18 but I don't think of it as a byproduct. It was made
19 deliberately--

20 Q. Okay.

21 A. --and referred to as Santowax.

22 Q. What was the primary purpose of Santowax,
23 its use? Do you recall?

24 A. As best I recall, a plasticizer.

25 Q. Mr. Papageorge, I'm going to hand you a

1 document and ask that it be marked as Exhibit 9, ask
2 you to take a few minutes to look at it as soon as
3 we've marked it.

4 (Defendant's Exhibit 9
5 marked for
6 identification.)

7 (Witness peruses said
8 document.)

9 MS. LAVEY: For the record, the document
10 that we've marked as Exhibit 9 has Bates labels
11 numbers DSW 048614 through DSW 048654. The document
12 also has another Bates range sequence of MWV 018257
13 through MWV 018297, and the document is dated
14 September 17th, 1957; at least, the first pages.

15 (Witness peruses said
16 document.)

17 A. I have scanned the exhibit.

18 Q. Okay, thank you, Mr. Papageorge. Is this a
19 document that you have ever seen before today?

20 A. I don't remember seeing it, but it's typical
21 of this type of document.

22 Q. Okay. I'd like to try to identify a few
23 names on here, if I could, with you. If you would
24 return to the second page of the document, which is
25 DSW 048615, you'll see that page is a distribution

1 list. I know the type is hard to read. The first
2 item, here, is Director of Manufacturing, Organic
3 Chemicals Division, an H. L. and perhaps Hinckler?

4 A. Minckler.

5 Q. Minckler?

6 A. M-i-n-c-k-l-e-r.

7 Q. Do you know what the "H" stood for, first
8 name?

9 A. Howard.

10 Q. Howard? Do you recall over what period of
11 time Mr. Minckler was the Director of Manufacturing at
12 the Organic Chemicals Division, approximately?

13 A. Approximately? No, I don't remember
14 beginning dates or ending dates, so--

15 Q. Was he a Director of Manufacturing when you
16 were at Anniston?

17 A. Yes.

18 Q. At the time you arrived in 1965 or sometime
19 later?

20 A. He was Director of Manufacturing when I
21 arrived at the Anniston Plant.

22 Q. Okay, was he still the Director of
23 Manufacturing when you left the Anniston Plant in late
24 1969?

25 A. Yes.

1 Q. Also listed under item 1 is R. S. Wobus?
2 W-o-b-u-s, as best I can read it? Does that name
3 sound familiar to you?

4 A. It's familiar, but not in any real depth.
5 The name is familiar, but I don't associate it with
6 any specific activities or--

7 Q. You don't know if he was also the Director
8 of Manufacturing in the Organic Chemicals Division?

9 A. I do not.

10 Q. Okay. The next one is Anniston Plant
11 Manager, D. B. Hosmer. I know we spoke of him
12 previously. He was the plant manager in Anniston
13 prior to you; is that correct?

14 A. Oh, yes.

15 Q. Mr. Hosmer? Okay.

16 A. Not immediately prior.

17 Q. Okay. Who was--remind me, who was plant
18 manager immediately prior to you?

19 A. John McClain.

20 Q. McClain, and Mr. Hosmer was plant manager
21 prior to that?

22 A. He was prior to that, but I don't know if
23 there was another individual between the two.

24 Q. Okay. The production superintendent is
25 listed as a J. E. Crouch. Is that name familiar to

1 you?

2 A. I recall being aware of that name, but I
3 don't have any recollection at all of meeting the man
4 or associating him with any activities I was involved
5 with.

6 Q. Do you know what the first name was?

7 A. I'd be guessing. No.

8 Q. Under "Biphenyl Plant Supervisor," there is
9 a name Jack Kleeghorn or Kleghorn. Is that name
10 familiar to you at all?

11 A. I've heard of the name, but I've never met
12 the person.

13 Q. Is that because he was a, a biphenyl plant
14 supervisor prior to your time as plant manager?

15 A. Yes.

16 Q. So to your knowledge, he was not there when
17 you arrived in 1965?

18 A. That's true.

19 Q. Numbers 8 and 9 on this page refer to a
20 Standards Department. What was the Standards
21 Department at the Anniston Plant?

22 A. It really represents an individual who was
23 assigned the task of keeping a--I'm going to call it a
24 library of all the procedures that were followed in
25 the plant and that were approved and became the

1 standard method.

2 Q. So it was not necessarily the people who
3 prepared the standards but more the, the keeper of the
4 records?

5 A. Yes, he's a custodian of the, the documents.

6 Q. On the next page, DSW 048616, there is a
7 reference in the top right-hand corner to the Safety
8 Review Committee. This page, for the record, is
9 referring to a 1964 amendment to the 1957 document.
10 Do you know what the Safety Review Committee is or
11 was?

12 A. I don't know at that point in time, 1957,
13 the members, but I'm aware of the type of activity
14 which is common, which was common in Monsanto's
15 plants, where individuals were appointed to serve on
16 the committee based on their knowledge, and
17 understanding, and experience as it might relate to
18 what was being considered, and it's also--it also
19 addresses the safety considerations, what materials
20 are used, are they explosive, are they harmful to
21 health, and so on, so that is a common activity for
22 every material handled by Monsanto at that time.

23 Q. Was there a Safety Review Committee at the
24 Anniston Plant in the period that you were there as
25 plant manager?

1 A. There was no standing committee. It was a
2 committee appointed for a specific review.

3 Q. Okay, so the committee could be composed of
4 different people for each different production process
5 that was under review?

6 A. That's correct.

7 Q. Okay. Would those individuals be drawn from
8 the production processes, the production
9 superintendents at that level at the plant, or are
10 these people drawn from Monsanto headquarters?

11 A. Both.

12 Q. If you turn two more pages, this would be at
13 page 3 of this amendment dated July 27th, 1964, which
14 I realize is prior to your arrival, it's DSW 048618.
15 Again, there's a list of names that are very difficult
16 to read. Some of these we have already identified and
17 talked about. You'll see, for example, plant manager
18 is listed as J. R. McClain as of 1964, which you had
19 identified as the plant manager prior to your time.

20 A. Yes.

21 Q. What was Mr. McClain's first name?

22 A. John.

23 Q. And then you will see a department
24 supervisor listed at the top. I'm not sure if you can
25 read that.

1 A. Yes.

2 Q. I'll let you try before I try to read it for
3 you. What name is there?

4 A. Bruce Severson.

5 Q. Bruce Severson: Okay, and what is a
6 department supervisor?

7 A. He is an individual assigned the task of
8 managing the operations related to a specific
9 department which, in turn, is involved with a specific
10 type of operation.

11 Q. In the hierarchy of the plant organization,
12 who would the department supervisor report to?

13 A. He reports to the production superintendent.

14 Q. Do you know which department Bruce Severson
15 was a supervisor in? Let me, let me take that one
16 back. Was Mr. Severson there when you arrived in
17 1965?

18 A. Yes.

19 Q. Now, do you--was he a department supervisor
20 at that time?

21 A. Yes.

22 Q. Okay, do you know what department he was
23 supervisor for?

24 A. He was responsible for the biphenyl
25 manufacturing department.

1 Q. Would his supervisory duties, if you know,
2 be limited to the biphenyl production area or would it
3 also include the Aroclor processes?

4 A. At this point in time, I don't know what
5 other departments he supervised.

6 Q. Do you know how long he was a department
7 supervisor?

8 A. I do not.

9 Q. Was he still a department supervisor when
10 you left in 1969?

11 A. I don't remember specifically. I believe by
12 then, he had another assignment, but I'm guessing
13 quite a bit, here. It was different than when I
14 arrived, is all I know.

15 Q. Do you know if Mr. Severson is still living?

16 A. I do not. No, I take that back. I think
17 he's deceased. He's deceased.

18 Q. Do you have any idea approximately how many
19 individuals would have worked for Mr. Severson as the
20 supervisor of the biphenyl department?

21 A. I do not.

22 Q. Later down that page, there's an
23 identification of an individual for Research Group
24 Leader.

25 A. I see that.

1 Q. Are you familiar with that name?

2 A. I recall the name. I do not recall the
3 person.

4 Q. Okay, I'm reading it as R. W. Bucknell.

5 A. Bucknell, yes.

6 Q. -nell with an "e"?

7 A. -n-e-l-l.

8 Q. Do you recall his first name?

9 A. No, I'd be guessing.

10 Q. Was he at the Anniston Plant when you
11 arrived in 1965?

12 A. No, he would be at Monsanto's Research
13 Center in St. Louis.

14 Q. The next name, the individual identified as
15 a research manager, an H. L. Hubbard, are you familiar
16 with that individual?

17 A. Harold Hubbard.

18 Q. Was he also in St. Louis?

19 A. Yes. He is Mr. Bucknell's supervisor.

20 Q. To your knowledge, did either Mr. Bucknell
21 or Mr. Hubbard work at the Anniston Plant?

22 A. I'm sorry?

23 Q. To your knowledge, did Mr. Hubbard or
24 Mr. Bucknell ever work at the Anniston Plant?

25 A. Not that I recall, no.

1 Q. The last name on here is identified as--I'm
2 not sure I can read this, either--a something
3 production manager, perhaps a technical production
4 manager. The name is listed as J. A. Mullendor?

5 A. Mullendor, John Mullendor.

6 Q. Was Mr. Mullendor at the Anniston plant?

7 A. He was at the Anniston Plant, yes.

8 Q. So the reference to a technical production
9 manager, that's a position in Anniston, rather than in
10 St. Louis?

11 A. It's my recollection he was part of the
12 Technical Services Department.

13 Q. Reporting to Mr. Fuhrmeister?

14 A. Right, maybe not directly but in
15 Mr. Fuhrmeister's group.

16 Q. As best you recall, was he part of the
17 Technical Services Department when you arrived in
18 1965?

19 A. Yes.

20 Q. And was he still there when you left in
21 1969?

22 A. No.

23 Q. Do you know if Mr. Mullendor is still
24 living?

25 A. I do not.

1 Q. I skipped a name I wanted to do on the
2 previous page. This is on DSW 048617. It's got a
3 page 2 up on the top, you'll see down at the bottom a
4 signature block says, "Originated by a J. H. Haupt?
5 Haupt?

6 A. Haupt, Vince Haupt.

7 Q. Vince Haupt. What was Mr. Haupt's position,
8 if you recall, in 1965, when you arrived at the plant?

9 A. He was a member of the Technical Services
10 Department, reporting to Mr. Fuhrmeister, assigned
11 this particular activity that's reported here that he
12 signed off on.

13 Q. Was it, was it--was that a typical job
14 responsibility of the Technical Services Department,
15 to compile the standard manufacturing processes and
16 their amendments?

17 A. I'm hesitating because I don't know what you
18 mean by "compile." It's not just a collection of
19 papers, it's a--

20 Q. Develop or prepare; how about I use those
21 words instead?

22 A. An individual who studies the process,
23 understands what's going on and is requested to come
24 up with a different approach, and he then develops a
25 procedure that he signed off on just like Mr. Haupt

1 did on this one.

2 Q. Was Mr. Haupt still in the Technical
3 Services Department when you left in late 1969?

4 A. As best I remember, yes.

5 Q. Do you know if Mr. Haupt is still living?

6 A. I do not.

7 Q. Do you know how long he remained at the
8 Anniston Plant after you left?

9 A. I do not.

10 Q. I'd like to direct your attention,
11 Mr. Papageorge, to a particular page, and I'll ask
12 whether that flow drawing refreshes your recollection
13 at all of the biphenyl process. It is on DSW 048627.
14 I'm not quite halfway through the document. These are
15 not numbered. I'm afraid I can't--I think that's it
16 right there that you have on your--I think it's that
17 page.

18 A. 627?

19 Q. Yes.

20 A. I have it.

21 Q. Yes, sir. I know you reviewed the entire
22 document to see if it looked familiar to you, but I'd
23 like you to review this particular flow sheet for a
24 few minutes and then I'll ask you if, if that
25 refreshes your recollection at all as to the biphenyl

1 production process.

2 A. It shows features that I would expect in a
3 process of this type. I am personally very puzzled by
4 the reference to lead as shown in the rectangle area,
5 "lead trap."

6 Q. You have not heard of a lead trap before as
7 part of the biphenyl production process?

8 A. I never associated lead with anything at the
9 plant, so I have difficulty with that.

10 Q. We probably did this yesterday: What month
11 did you arrive at the Anniston Plant in 1965?

12 A. I don't remember the specific month. I
13 associate it with entering my children in school for
14 the Spring term. We had to rush to get them
15 registered, so it was early in the year is the best I
16 can come up--

17 Q. But sometime in the first half of 1965?

18 A. Yes.

19 Q. Rather than the last half?

20 A. Yes.

21 Q. Okay. Are you familiar at all with the term
22 "lead dross," d-r-o-s-s?

23 A. No. Well, I've heard of the term but not
24 with, connected with my duties.

25 Q. In what context have you heard of the term?

1 A. I don't remember the specific occasion when
2 I heard of it; I just don't remember. In my mind, I
3 associate it with iron slag and--

4 Q. Okay.

5 A. --a general term that would come up when
6 we'd discuss in general the kinds of processes that
7 exist in the world.

8 Q. If you could turn to the third-from-the-last
9 page, which is marked as DSW 048652 and it appears to
10 be some kind of form at the top of which says,
11 "Monsanto Chemical Company Production Cost Standards."

12 A. I see that, mm-hmm.

13 Q. I'm not asking particularly with this actual
14 document, but if you wiped out all the typed-up--with
15 the typewriting and looked at the form, have you seen
16 this type of form before?

17 A. Yes.

18 Q. Was that in use at the time you were at the
19 Anniston Plant?

20 A. Yes.

21 Q. Who would be responsible for producing--for
22 filling out this type of form?

23 A. The responsibility is--was centered on the
24 production superintendent involved with this
25 particular process. He, in turn, would assign

1 individuals with the proper information and knowledge
2 to contribute to this form the necessary information.
3 Like, for example, it shows amount of material, and
4 that would involve the production supervisor, or the
5 cost of the material, that would involve the
6 purchasing agent, so there would be different people
7 involved as a small group to come up with this
8 summary.

9 Q. What would happen to the form after it was
10 filled out? Would it go to a, a particular office
11 once it's filled in?

12 A. Oh, it'll be available to anybody that's
13 interested in this for various purposes, and it would
14 be part of that standards--

15 Q. The, sort of the document repository--

16 A. Yes,--

17 Q. --of the Standards Department?

18 A. --it would be available in the, let's call
19 it the, the library that has this kind of information
20 available to those who have a need for it.

21 Q. And with that repos--would that library, so
22 to speak, retain these records for a period of time,
23 or would they be sent to Monsanto headquarters?

24 A. There was a, a record retention program. I
25 don't recall the specifics that applied to this type

1 of document, but it does refer to the types of
2 document, and time to keep it, and time to send it
3 forward, and so on,--

4 Q. Okay.

5 A. --so there is a procedure.

6 Q. Was there--there was a written record
7 retention policy when you were in Anniston?

8 A. Yes.

9 Q. Was that a, was that a policy developed at
10 the Anniston Plant, or was that something that
11 Monsanto developed and passed around to all of its
12 individual plants?

13 A. It's a Monsanto Company program.

14 Q. Do you recall if that program changed in any
15 way when you were in Anniston?

16 A. I don't remember any specific changes, but I
17 do know changes do occur, have occurred.

18 Q. Okay. While you were the plant manager,
19 who, who is responsible for acquiring raw materials
20 needed for production processes at the plant?

21 A. I don't remember the name of the individual,
22 but there was a superintendent of warehousing,--

23 Q. Okay.

24 A. --and he kept records on the inventory. He
25 had been given by the manufacturing management

1 suggestions on when to reorder, when his inventory
2 reached a certain level, he would inform the
3 purchasing agent to reorder material XYZ.

4 Q. When you say he would inform the purchasing
5 agent, you mean the superintendent of warehousing--

6 A. Warehousing.

7 Q. --would inform--

8 A. Or his helpers.

9 Q. --somebody within that department?

10 A. Yes.

11 Q. And I know, we talked about that department
12 yesterday, and you didn't recall the name of the
13 superintendent yesterday.

14 A. I still can't.

15 Q. You still don't today?

16 A. That's true.

17 Q. Okay, is the purchasing agent, then,
18 somebody who worked in a different department? Is
19 there a purchasing department?

20 A. Yes. I didn't mention that yesterday.
21 Mr. Phillips was the--I've forgotten his first name.
22 Phillips was the purchasing agent for the plant.

23 Q. So he was--he has the responsibility, then,
24 for purchasing all raw materials for all processes at
25 the Anniston Plant?

1 A. Yes.

2 Q. Did he have individuals who worked for him,
3 or is he a one-man show?

4 A. No, he had at least two people working for
5 him.

6 Q. And he was the purchasing agent when you
7 arrived in 1965?

8 A. Yes.

9 Q. Do you know how long he had been there?

10 A. No, I don't.

11 Q. Was he still there when you left in 1969?

12 A. Yes.

13 Q. I know you said you didn't recall his first
14 name. Do you know if Phillips is one "l" or two
15 "l's"?

16 A. Two "l's."

17 Q. And do you know if Mr. Phillips is still
18 living?

19 A. I do not.

20 Q. Do you have any idea how long he continued
21 to work at the Anniston Plant after you left?

22 A. I do not.

23 Q. Okay, did you have no further dealings with
24 Mr. Phillips once you were no longer plant manager?

25 A. That is correct.

1 Q. Okay. In the context of purchasing the raw
2 materials, you indicated that somebody at the
3 production area for the particular unit would let the
4 warehousing superintendent's office know that they
5 needed more of XYZ material and that then the
6 warehousing superintendent would contact the
7 purchasing agent and say go buy it. I think--is that
8 more or less accurate? If it's not, correct me.
9 I'm--

10 A. Well, keep in mind that the warehousing
11 superintendent is not aware of any particular
12 ingredient that might be required in the plant until
13 he is told by the people who need it--

14 Q. Mm-hmm?

15 A. --to make another product. When that need
16 is defined, it is passed on, then, to the purchasing
17 person for the first purchase, "I need ingredient
18 XYZ," and once that gets to the warehouse, the
19 individual in charge of warehousing is told when that
20 material reaches this low level, please arrange to
21 contact the purchasing man to reorder. Also, when the
22 particular process is expanded where you made X pounds
23 for the past ten years, you are now going to go to Y
24 pounds, that change in need is relayed to both the
25 warehousing people who receive it, and store it, and

1 the purchasing people who order it.

2 Q. Okay. Do those requests come through you as
3 plant manager, or are you not in that, that loop of
4 requesting of the raw materials?

5 A. No, I'm not in that loop. The people
6 involved I hold responsible to do that. That's what
7 they're there for.

8 Q. So are there--if there are requisition forms
9 to be signed, that would be done at the production
10 level, not at your level as plant manager?

11 A. True.

12 Q. Okay. Does--are you familiar with the term
13 "carbon trap" in connection with the biphenyl process?

14 A. First I've heard of it.

15 Q. Okay. Are you aware of occasions when the
16 pipes or equipment in the biphenyl production area
17 would need to be periodically cleaned out?

18 A. I'm very aware of that type of situation
19 occurred in every chemical plant. The cause and the
20 material that causes blockages varies, but it's not an
21 uncommon activity, and that's the extent of it. The
22 people that are running the unit discover this defect
23 or this impediment to their production, and they take
24 the necessary actions to open up the pipeline or
25 whatever is involved.

1 Q. If there is a need for cleaning out of
2 pipes, and so forth, would that be handled, then, by
3 the production unit, or through the Maintenance
4 Department, or someone else?

5 A. It depends, again, on the type of blockage,
6 the material that's in there, and whether the unit is
7 designed in such a way that you can introduce
8 something to unblock, like high-pressure air or flush
9 it out water, or if they can't get to it with the
10 system as it's designed, they call the maintenance
11 people who will come in and disconnect the pipeline
12 and take it out somewhere where they can drill through
13 the obstacle or whatever is their problem, so it, it
14 will vary.

15 Q. Do you have any specific recollection of
16 that type of activity in connection with the biphenyl
17 operations?

18 A. Not a specific regulation. It was almost a
19 routine part of running the process.

20 Q. Are you familiar with the buildup of carbon
21 deposits within the piping at the biphenyl production
22 unit?

23 A. I'm not familiar with the reference to
24 carbon. I do recall there were blockages.

25 Q. Do you recall what was done to clear those

1 blockages, whatever they were?

2 A. Not in detail, no.

3 Q. Do you recall the Flexi?

4 A. No.

5 Q. I believe you indicated yesterday the
6 biphenyl production process would operate 24 hours a
7 day, seven days a week; is that correct?

8 A. Yes.

9 Q. Were there occasions when during the time
10 that you were plant manager, that the biphenyl
11 production process was halted for some reason?

12 A. Oh, there were periods when production would
13 be halted, but I don't recall any, any incident that I
14 would call dramatic or very unusual.

15 Q. What type of events would cause the biphenyl
16 production process to, to need to halt?

17 A. Well, these blockages we talked about,
18 depending on the severity, instead of accomplishing
19 the, the cleanup in a day's time, it may take a week.
20 It'll vary with the type of problem. A failure of any
21 piece of equipment, especially a key piece that took
22 awhile to repair, might create a, a longer period of
23 time of non-production. I don't know how else to
24 describe that. It will vary. There are things that
25 happen that are unexpected, and there are incidences

1 that happen as part of the, the process.

2 Q. Do you recall any fires or explosions
3 occurring at the biphenyl plant while you were plant
4 manager?

5 A. No.

6 Q. Were there any strikes by the union during
7 the time that you were plant manager?

8 A. Yes.

9 Q. When was that?

10 A. I don't remember the exact period, but I'm
11 going to say that it occurred about 1966-67.

12 Q. Do you remember what the reason was for the
13 strike?

14 A. The only reason I know that what I had
15 offered the union committee was not to their liking
16 and they decided to impress me with a strike, and much
17 of that, I think, was really a personal kind of thing,
18 too. I don't know how to--

19 Q. What do you mean by that?

20 A. The desegregation of the work force was the
21 emotional issue, and I was perceived as the Yankee
22 with the odd last name who came down to mix the black
23 and the white workers, and that was an emotional issue
24 that many in the plant could not accept, and this was
25 part of the emotions that existed, and they decided to

1 turn down my offer.

2 Q. Were both black and white workers in the
3 same union?

4 A. Yes.

5 Q. And the entire work force struck?

6 A. It included--other than the supervisors and
7 the foremen, the maintenance and production
8 individuals, as well as custodians and whatever, were
9 part of the union. Another group that was excluded
10 was the guards. We had uniformed guards in the
11 parking lots. They did not belong to the union.

12 Q. How long did the strike last?

13 A. I don't remember the exact time. A couple
14 of weeks. It was more than a few days.

15 Q. Did production continue throughout the, the
16 strike?

17 A. Yes.

18 Q. Did you bring in other workers, or did the
19 supervisors continue the production?

20 A. The supervisors continued the production,
21 shipping, all of the activities.

22 Q. Did you, yourself, then run any of the
23 production areas during that period of time?

24 A. I didn't run that, but I chuckle because
25 when I was not negotiating with the representatives of

1 the union, I had some free time, so in addition to
2 going out and seeing how things were going and who
3 needed help, I ended up cleaning up restrooms.

4 Q. I could see why you chuckled.

5 (Witness laughs.)

6 Q. (Continuing) Do you remember the names of
7 the individuals who were part of the negotiating
8 committee that, that rejected your offer and led to
9 the strike?

10 A. I don't remember names, no, I don't.

11 Q. I should have asked you this yesterday, but
12 you didn't have an assistant plant manager, did you?

13 A. No.

14 Q. Okay. Did you have administrative staff
15 working for you, like a secretary when you were plant
16 manager?

17 A. I had a secretary, yes.

18 Q. Okay, who was your secretary?

19 A. I should remember her name.

20 Q. Does the name B. Henderson sound familiar?

21 B. Henderson?

22 A. No, she was a secretary in the office group,
23 but not to me. B.--no, I just cannot remember.

24 Q. Do you know who she was a secretary for?

25 B. Henderson?

1 A. B. Henderson. I'd be guessing.

2 Q. Okay. Did you have the same secretary
3 throughout the time you were plant manager?

4 A. Yes.

5 Q. Did she continue as the secretary after you
6 left for Mr. Jesse?

7 A. Yes.

8 Q. Had she been there prior to your arrival in
9 1965?

10 A. Yes.

11 Q. I know you don't recall her name, but do you
12 happen to know whether she is still living?

13 A. I do not.

14 Q. I'm going to hand another exhibit to you,
15 another document, Mr. Papageorge, and recognizing that
16 the cover sheet shows a date of 1948, I'm still going
17 to ask whether it's a document that you've seen before
18 in the--in connection with your duties as plant
19 manager of the Anniston Plant. We could mark this as
20 Exhibit 10.

21 (Defendant's Exhibit 10
22 marked for
23 identification.)

24 MS. LAVEY: For the record, Exhibit 10 has
25 Bates range numbers DSW 462477 through DSW 462620.

1 (Witness peruses said
2 document.)

3 BY MS. LAVEY:

4 Q. And certainly, I'm not suggesting that you
5 necessarily need to look through a hundred-plus pages,
6 but enough to feel comfortable to tell me whether or
7 not it's a document that you had occasion to see as
8 plant manager.

9 A. I see nothing in this document that helps me
10 recall ever seeing it.

11 Q. Okay. You can set that aside.

12 Although you are not familiar with the lead
13 pot process, are you familiar with the--a term
14 "tubular biphenyl reactor"?

15 A. I'm not.

16 Q. And we may move through these very quickly
17 if you've not seen any of them, but we'll go through
18 this process anyway. I'm going to hand you another
19 document we'll mark it as Exhibit 11. For the record,
20 the document is entitled "Process for the Manufacture
21 of Diphenyl & Santowax Compiled by E. Mather, November
22 1950, Bates range DSW 462055 through 462197.

23 (Defendant's Exhibit 11
24 marked for
25 identification.)

1 Q. (Continuing) Again, I'll ask you to take a
2 few moments to look at it and if you can, determine
3 whether or not it's a document you have seen before.

4 (Witness peruses said
5 document.)

6 A. I have scanned quickly the document, and I
7 cannot say I saw this exact document, because it
8 resembles so many in format involving not only the
9 Aroclor process but all processes at the plant. To
10 me, it's very typical of the kind of document that we
11 held at the plant that referred to each chemical
12 process at the plant.

13 Q. Do you know who E. Mather is or was?

14 A. I'm sorry, who?

15 Q. E. Mather. It's the individual's name on
16 the--

17 MS. LAVEY: Oh, you've handed out a
18 different one. I'm sorry. Which one are we on?

19 MR. NASSIF: For the record, we're on
20 "Standard Manufacturing Process for Aroclor," issued
21 October 22nd, 1957.

22 MS. LAVEY: Let's go off the record for a
23 second.

24 MR. NASSIF: Reissued September 1966.

25 THE VIDEOGRAPHER: This will end tape number

1 of the deposition of William B. Papageorge. We are
off the record at 10:22 A.M.

(Recess.)

(Defendant's Exhibit 11
re-marked for
identification.)

(Mr. Michael Wetmore attends
the deposition.)

THE VIDEOGRAPHER: We're back on the record
at 10:12 A.M. This begins tape number 2 in the
deposition of William B. Papageorge.

BY MS. LAVEY:

Q. For the record, I want to clarify the
Exhibit 11, which is "Process for the Manufacture of
Diphenyl and Santowax, Compiled by E. Mather," dated
November 1950, Bates range DSW 462055 through DSW
462197. The witness was previously handed the wrong
document, so the questions and his answers, after we
last started talking about Exhibit 11, effectively
should be stricken. They were not on the right
document, so we'll start over on Exhibit 11.

MS. LAVEY: Mr. Papageorge, I'll again just
ask you to take a brief moment, here, to look at this
document, and when you've completed that brief review,
let me know whether it's a document that you had

1 occasion to receive or review as plant manager at the
2 Anniston Plant.

3 (Witness peruses said document.)

4 MR. NASSIF: Do you recall the question,
5 Bill?

6 THE WITNESS: No, I don't.

7 BY MS. LAVEY:

8 Q. The question pending was whether or not,
9 after you've taken a look at this document, whether it
10 is a document that you have seen before today.

11 A. I do not recall ever seeing this document.

12 Q. Is this the type of document also that would
13 have been, while it was in use, kept at the library,
14 so to speak, at Anniston?

15 A. I have difficulty answering that because of
16 the age--

17 Q. Okay.

18 A. --the transfer could have occurred, but I
19 don't know that it did or not.

20 Q. Did the, what you refer to as the library in
21 Anniston, did it only retain copies of the standard
22 manufacturing processes and similar-type documents
23 that were in active use at the time, or was it also an
24 archive source?

25 A. It was also a matter of retaining some of

1 the older documents that at least a group of
2 individuals at the plant decided might prove valuable,
3 therefore keep them handy in the plant. Once the
4 group agreed that that is so antiquated, we can't
5 conceive ever needing it locally, send it to the
6 archives.

7 Q. Where was that archives located?

8 A. In the St. Louis area.

9 Q. Was there an individual responsible for the
10 library in Anniston when you were there as plant
11 manager?

12 A. There was an individual, but I at the moment
13 can't recall the specific person, but it came under
14 the Technical Services Department supervision.

15 Q. Do you recall the name E. Mather that's on
16 page 1 of this document?

17 A. I do not.

18 Q. Do you know the name A. M. Ellenberg?

19 A. I do not.

20 Q. How about C. B. Durgin?

21 A. I do not.

22 Q. Do you recall there being an issue at all
23 with biphenyl production of metals impurities in the
24 product?

25 A. No, never. Hmm-mm.

1 Q. Are you familiar with the term "entrainment"
2 within the gas stream at the biphenyl production
3 process? Does the term "entrainment" mean anything to
4 you?

5 A. I have an understanding of the meaning of
6 the word "entrainment," but I do not associate that
7 with any specific chemical process. It can happen
8 whenever you have gas and liquid.

9 Q. What is your understanding of entrainment?

10 A. It's the presence of a gas in a liquid
11 stream.

12 Q. Do you know if water was used in connection
13 with the biphenyl production process?

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

15 Q. Do you know if there was cooling water,
16 water used in connection with the condensers?

17 A. Well, cooling waters are associated with--I
18 do not specifically recall it as it ties into the
19 biphenyl process.

20 Q. You can set that document aside. I'm going
21 to hand you another document which we will now label
22 as Exhibit 12, entitled "Standard Manufacturing
23 Process for Aroclor Blends," issued August 1968. Bates
24 range is DSW 053329 through DSW 053441. I'll ask you,
25 Mr. Papageorge, to take a moment to look at it. My

1 first question will be whether it's a document that
2 you have seen before once you've had a chance to
3 review it.

4 (Defendant's Exhibit 12
5 marked for
6 identification.)

7 (Witness peruses said
8 document.)

9 BY MS. LAVEY:

10 Q. (Continuing) Is that a document you've seen
11 before, Mr. Papageorge?

12 A. I do not recall seeing this specific
13 document with its detailed information, but it is very
14 similar to many other documents of a similar type
15 involving the processes at the plant, but this, the
16 details in this type of document are something I just
17 cannot remember.

18 Q. As the plant manager, would you typically
19 have received a standard manufacturing process
20 document that was developed when you were plant
21 manager?

22 A. I would receive the finished document, but
23 while it was being prepared, I would receive a
24 proposed document and then later, the appendices, and
25 additions, and amendments, so I was, in a way, tuned

1 into the process before the final version was issued.

2 Q. Okay, would you comment on its development
3 or were you just receiving copies?

4 A. Oh, I would comment if, if I read something
5 that I didn't understand or didn't approve of.

6 Q. Do you have any recollection specific, then,
7 to this standard manufacturing process for Aroclor
8 blends?

9 A. I don't recall any.

10 Q. This indicates on the first page that it was
11 prepared by M. J. Williams as a p-r-o-d, I assume it's
12 production foreman. Do you recognize that name?

13 A. I remember Mr. Williams as the foreman, but
14 I just, I cannot remember his first name.

15 Q. What was he the foreman of?

16 A. The, at least the part of the Aroclor
17 process that would involve mixing it with other
18 ingredients to produce different products based on
19 what the customers are requesting.

20 Q. Do you know if Mr. Williams was at the
21 Anniston Plant when you arrived in 1965?

22 A. Yes.

23 Q. Was he still there when you left at the end
24 of 1969?

25 A. I don't remember that.

1 Q. Also on this first page, there's an
2 indication that it's reviewed by someone named
3 R. A. Haydel?

4 A. Haydel, mm-hmm.

5 Q. Do you recall that individual?

6 A. I recall the name, but I--and that's about
7 it.

8 Q. Based on your understanding of how standard
9 manufacturing processes were put together and
10 reviewed, the fact that Mr. Haydel is identified here
11 as someone who reviewed it, does that indicate to you
12 where he was a production supervisor? Can
13 you--knowing how these are put together, can you
14 identify what he would be a supervisor of?

15 A. Yes. He, he was, as I think I said earlier,
16 involved with part of the Aroclor process that
17 required mixing, blending with other ingredients
18 according to customers' needs, so that would be in a
19 way a branch of the Aroclor department.

20 Q. That's--I think that you had indicated that
21 with respect to Mr. Williams. Is there, is there a
22 difference between the production foreman and the
23 production supervisor?

24 A. Well, the foreman reports to the supervisor,
25 so you notice the foreman prepared it, and his boss,

1 the supervisor, looked it over--

2 Q. Okay.

3 A. --and reviewed it.

4 Q. And the next name, there, is another
5 Mr. Williams?

6 A. Yes.

7 Q. An H. L. Williams.

8 A. Hilliard.

9 Q. Hilliard?

10 A. Hilliard Williams.

11 Q. And he was the production superintendent of
12 what, at least as of this point in time?

13 A. Of, I'm going to call it all of the
14 chemicals other than the parathion, malathion
15 activities. He is the person that took over the
16 position that Robert Moody had.

17 Q. Okay. Was he still in that position when
18 you left at the end of 1969?

19 A. I don't remember.

20 Q. Do you know what his prior position was
21 before he became production superintendent?

22 A. I don't remember.

23 Q. On the second page, you'll see a
24 distribution list, DSW 053330, the fourth person down
25 is just a title identified as "Plant Manager." At the

1 point in time, August 1968, that would be you;
2 correct?

3 A. Correct.

4 Q. If you go in a few pages, it's the fifth
5 page in, DSW 053333, which appears to be a tentative
6 Amendment C, dated July 28, 1970, by that time,
7 Mr. Papageorge, you were no longer at the Anniston
8 Plant; correct?

9 A. That is correct.

10 Q. This page states as an objective, quote,
11 "Make Aroclor blends to replace the plasticizer grade
12 liquid Aroclors which will be discontinued 31st of
13 August 1970." Do you know why plasticizer grade
14 liquid Aroclors were going to be discontinued as of
15 that date?

16 A. I don't have that reference. I'm confused.
17 What page is that?

18 Q. The bottom is listed as DSW 053333,--

19 A. Oh.

20 Q. --there's a heading that says, "Objective."

21 A. Oh. What was your question, again?

22 Q. Do you know why the plasticizer grade liquid
23 Aroclors were intended to be discontinued as of that
24 date in 1970?

25 A. Aroclors were sold as plasticizers, and

1 generally, the use of those plasticizers were such
2 that control from escape into the environment was
3 virtually impossible. For example, they would appear
4 as an ingredient in the traffic lane paint on the
5 highways, so management decided in early--I'm
6 sorry--yeah, early 1970 to discontinue that sales
7 activity, and when that decision was instituted, there
8 was no need for some of those so-called
9 plasticizer-grade liquid Aroclors.

10 Q. Are there a particular numeric Aroclor
11 sequence assigned for plasticizer grade liquid
12 Aroclors?

13 A. Not a particular one. Some are more popular
14 than others because of their color, or consistency,
15 other characteristics.

16 Q. These would be 1200, Aroclor 1200s?

17 A. Some are 1200s, some 4000s, some 5000s.

18 Q. The same page indicates an approval of a
19 Safety Review Committee. I know we spoke earlier
20 about what that Safety Review Committee might be. At
21 least in this context, it is--there are three
22 individuals on there we've already talked about:
23 Mr. Landwehr, the other two individuals are
24 P. K. Ward--

25 A. Paul Ward.

1 Q. Paul Ward?

2 A. Mm-hmm.

3 Q. What was his position, if you recall?

4 A. He was a member of the plant safety
5 committee or group.

6 Q. Was that a standing committee, or was that a
7 committee that was in place throughout--

8 A. It's more of an assignment. He is hired as
9 a safety engineer to help the plant with safety
10 matters.

11 Q. And there's one individual who would have
12 that position?

13 A. As I remember, he reported to Mr. Schulte
14 there.

15 Q. What was Mr. Schulte's position?

16 A. He was the head safety engineer, and
17 Mr. Ward reported to him.

18 Q. Okay, was there anybody else working within
19 that safety group?

20 A. Not that I remember.

21 Q. Okay, were Mr. Ward and Mr. Schulte there in
22 1965 when you arrived?

23 A. As best I remember, yes.

24 Q. Did you tell me that Mr. Schulte's first
25 name was? I'm sorry if you did. Do you remember what

1 the "H" stood for?

2 A. Harvey.

3 Q. Harvey? Do you know if either Mr. Ward or

4 Mr. Schulte are living today?

5 A. I do not.

6 Q. Do you know who J. L. Corder is?

7 A. Corder, I don't recall him.

8 Q. How about G. W. Miller?

9 A. Gerald Miller was a member of the Technical
10 Services Department at the plant. I think he was
11 involved, as I remember, he was involved with the
12 chemical analytical testing programs.

13 Q. Do you recall if he was there in 1965 when
14 you arrived?

15 A. I think Mr. Miller arrived after I arrived.

16 Q. Do you know if Mr. Miller is still alive?

17 A. I do not.

18 Q. Were the individuals responsible for the
19 production of various Aroclor blends, would they all
20 be part of the Aroclor department or was that a
21 standalone department?

22 A. No, it would be the Aroclor department.

23 Q. Are you familiar with the term "Attapulgus
24 earth"?

25 A. Yes.

1 Q. What do you understand that to be?

2 A. It's a type of naturally-occurring clay.

3 Q. Do you recall how Attapulugus earth was
4 utilized in the production process for the Aroclor
5 blends?

6 A. I do not.

7 Q. Do you recall where the Attapulugus earth was
8 obtained? Who the supplier was?

9 A. I do not.

10 Q. I'm going to ask you to turn to page DSW
11 053346, so that's not quite twenty pages in, and
12 there'll be a Roman numeral III at the top titled
13 "Process in Detail." That's the right page.

14 A. Do I have the--

15 Q. That's the right page, yes.

16 A. 346?

17 Q. Yes. Yes, sir. In section 3.A, it refers
18 to Pyranol mixes. Is Pyranol, is that a term that
19 could be used for Aroclor blends generally?

20 A. Pyranol is a General Electric trademark.
21 The different Pyranols required by General Electric
22 were blended at the Anniston Plant, in tank cars,
23 before shipment.

24 Q. Okay, and I believe you indicated the
25 Inerteen was a Westinghouse--

1 A. Yes.

2 Q. --trademark; is that correct?

3 A. That is true.

4 Q. And Therminol was Monsanto's trademark;
5 correct?

6 A. Correct.

7 Q. How about Santicizer? Does that name mean
8 anything to you?

9 A. Santicizer? Yeah, that's a plasticizer.
10 It's a Monsanto trademark.

11 Q. Was that--that's an Aroclor blend, do you
12 recall?

13 A. I don't recall.

14 Q. On the page that we were looking at before,
15 page 053346, I'd like you--I'd ask you to read that
16 first paragraph to yourself and I'll then ask if that
17 helps you recall what the purpose was of the
18 Attapulugus earth.

19 (Witness peruses said
20 document.)

21 A. I've read it.

22 Q. Does that help you recall at all what the
23 earth was used for, what its purpose was?

24 A. Well, I was aware that Attapulugus earth is
25 used to filter many, many chemicals, and when you

1 asked the question, I thought you meant what material
2 were we removing by using Attapul--I don't know the
3 material they were removing by filtering through this
4 clay.

5 Q. Do you know whether what they were filtering
6 was generally classified as metals, or you have no
7 recollection at all of what was being filtered out?

8 A. I don't--I don't believe I ever knew.

9 Q. On this same section 3.A, what's the third
10 paragraph states "The quality of each mix is analyzed
11 by the laboratory and when approved, it is loaded into
12 tank cars or drawn out into drums." Do you know what
13 would happen if the mix was not approved by the lab?

14 A. Well, it depends on what defect in the
15 analysis was discovered, and the changes made to that
16 blend vary with that defect. It may require a little
17 more Aroclor number so and so, or it may require more
18 of the other fluid that's added, or it may require
19 such things as a color additive, so depending on the
20 defect that didn't meet the specification, they would
21 take appropriate action, and the defects were not so
22 great that they had to pump that material all the way
23 back and redistill and start all over again. It
24 wasn't that kind of a big difference.

25 Q. Okay. Do you recall the manner in which the

1 mixed material was loaded into tank cars, how it was
2 loaded into tank cars?

3 A. It's just a pipeline that dips into the tank
4 car opening.

5 Q. Okay. Was it--well, was the tank car placed
6 over by the Aroclor facility or did the material have
7 to be piped to another section of the plant?

8 A. It's--it had to be piped, but the distances
9 weren't great.

10 Q. Okay.

11 A. But it was piped over to where most of the
12 warehousing/shipping activities took place,--

13 Q. Okay.

14 A. --away from the manufacturing site.

15 Q. Where the tank car loading occurred, do you
16 remember whether that was on a concrete pad or any
17 other type of, of flooring, or is it directly under a
18 railroad track?

19 A. Of course, the railroad track was there, and
20 as I recall, there was some concrete pavement on each
21 side of a--about the width of this table.

22 Q. Okay, and was there a roof over that loading
23 area?

24 A. I don't remember.

25 Q. The sentence that I had read earlier also

1 referred to in addition to loading into tank cars,
2 drawn out into drums. Was the drum loading done at
3 the Aroclor facility or elsewhere in the plant?

4 A. It was done at the, what I'm going to call
5 the warehousing center.

6 Q. Okay, and was this--so the material was
7 pumped from the Aroclor facility over to the
8 warehousing area?

9 A. Into a tank, mm-hmm.

10 Q. What's the distance, approximately, between
11 the Aroclor facility and the warehousing area?

12 A. I'm guessing a city block or so.

13 Q. If you could turn the page, I just need a
14 real quick chemistry lesson, here, to make sure I know
15 what the initials all stand for. This is a table on
16 page DSW 053347. Do you see across the top different
17 percentages indicated for different materials which
18 are used to produce the blend products that are down
19 the left-hand side, down the Y axis. Across the X
20 axis, toward the end, there, there's a percent PPO.
21 Do you recall what that is? I think it's phenoxy
22 propene oxy oxide (sic) or something like that, but
23 I'll--I'm really looking to you to make sure I have
24 this right.

25 A. My memory fails me there, too. I don't

1 remember.

2 Q. Okay. TCB, the next one over, is that
3 trichlorobenzene?

4 A. I'm sorry, where is that, now?

5 Q. After the PPO. I'm reading across the top.

6 A. Oh, you are reading cross the top.

7 Q. Right. I can do all the Aroclor percents,
8 and then there's toluene, xylene, and then we have a
9 percent PPO, which you weren't sure of. The next one
10 was a percent TCB?

11 A. Trichlorobenzene.

12 Q. Okay, and the next one was TTCB. Is that
13 tritetrachlorobenzene?

14 A. Yes.

15 Q. Are those products you were making at the
16 plant in Anniston, or are those products that were
17 purchased?

18 A. As I remember, they were sent to the plant,
19 some of them, from the Monsanto units.

20 Q. You mean elsewhere?

21 A. Yes.

22 Q. Not from Anniston but other Monsanto areas?

23 A. Right.

24 Q. Okay. The last one across this top, here,
25 well, we skipped over percent earth, but we've talked

1 about that one already. The last one is a percent EP
2 221. Do you know what that's a reference to?

3 A. No, I don't.

4 Q. Do you know if the Attapulugus earth which I
5 believe you described as a claylike material, was
6 that--for how long was that used as a filter in the
7 process?

8 A. I don't know.

9 Q. Was it in use when you arrived in 1965?

10 A. Yes.

11 Q. And was it still in use when you left in
12 1969?

13 A. Yes.

14 Q. I'd like you to turn to--this is getting
15 toward the back, now, it'll be DSW 053425, and when
16 you find that, the top will say "Appendix H,
17 Atmospheric & Stream Discharge & Waste Disposal." Are
18 you on that page, Mr. Papageorge?

19 A. Yes.

20 Q. Do you know if any analysis was done in
21 order to give, provide this information?

22 A. I do not.

23 Q. If you go three more pages to DSW 053428,
24 the top of which references Appendix J, "Safety and
25 Toxicity Data and Ask Accident Reports," under Item 2

1 , "Thermal Burns," and I'd like to direct your
2 attention down to Subparagraph F as in "Frank," which
3 is the last one on this page?

4 A. I see it.

5 Q. Okay. The first one says--well, the lead-in
6 is "The following operations are hazardous and should
7 be done with care." The first one listed is "Catching
8 samples at the Aroclor chlorinator circulating lines."
9 Do you know what would make that activity hazardous?

10 A. High temperatures. These are thermal burn
11 potential.

12 Q. What is "catching samples"? What is
13 "catching samples" referring to?

14 A. It's turning a valve to release the liquid
15 and catching it in a container.

16 Q. Is this to test the material to make sure it
17 met the specifications?

18 A. And you send that container with the
19 material to the laboratory where they test it.

20 Q. Okay, so that's a--done with a valve that's
21 got an "on" or an "off"?

22 A. Yes.

23 Q. Was there any sort of pan or, or catch basin
24 beneath that valve?

25 A. At this time, yes.

1 Q. Was there a time when there wasn't?

2 A. Oh, back in the Fifties, early Sixties,
3 before the PCB issue was raised, many times, any drips
4 out of that facet would be allowed to drip on the
5 floor instead of a catch basin.

6 Q. Is that what you would have called it? I
7 know I used if word "catch basin," but I don't want to
8 put words in your mouth. Would you call it something
9 else?

10 A. Drip pan or--

11 Q. Okay.

12 A. --any device with walls around it to keep
13 the liquid from--

14 Q. Do you know when the drip pans were put in
15 beneath the valves?

16 A. Early Seventies.

17 Q. Item 2 refers "The following operations are
18 hazardous and should be done with care." Number 2,
19 "Sampling the solid Aroclor still receiver," and what
20 would make that a hazardous activity?

21 A. Where--are we on the same page?

22 Q. Yeah, F-2.

23 A. Oh, F-2?

24 Q. Mm-hmm.

25 A. It's still the same kind of thing. It's a

1 hot material, liquid. That's why it's--otherwise, you
2 couldn't handle the solid. It would plug the line,
3 but anyway, the sample is taken, it's a very hot
4 liquid, and the caution, here, is be careful.

5 Q. Is it--although it references solid Aroclor,
6 you are saying at the time you are doing the sampling,
7 it's still a liquid?

8 A. Yes.

9 Q. And it becomes solidified, is it solid
10 Aroclor sometime later in the process?

11 A. When it's cooled, crushed, and ground, and
12 put in bags--

13 Q. Okay.

14 A. --or containers.

15 Q. So the reference to solid Aroclor is for the
16 most part when it's room temperature, it's in a solid
17 state?

18 A. That is--

19 Q. But as it goes through the process, it
20 remains a liquid?

21 A. Yes.

22 Q. And then the third one, here, refers to
23 drawing bottoms in the Aroclor stills. Can you
24 describe the process of drawing bottoms?

25 A. It's a process that's similar to drawing the

1 finished product off the top. Appropriate spigots are
2 turned on, and these hot liquids are collected in a
3 container and sent to the laboratory.

4 Q. Now, these--is there, is there a name for
5 these bottoms on these Aroclor stills?

6 A. Well, some of the bottoms are referred to as
7 Montars, whereas some of them just don't have a, a
8 name, they're just bottoms, and they're analyzed, and
9 if there's still some usable material in those
10 bottoms, they are reprocessed. If not, they are
11 discarded.

12 Q. Okay, where are they discarded?

13 A. In the, uh, landfills.

14 Q. During the period that you were plant
15 manager from 1965 through 1969, were these bottoms
16 that could not be utilized for something discarded in
17 one particular landfill? You said "landfills,"
18 plural. I'm trying to nail down what landfill you are
19 talking about.

20 A. I thought I said "landfill." I--

21 Q. Okay.

22 A. I--anyway, there was this plant landfill
23 which, in plant terminology, was referred to as the
24 dump, in which the containers that had these
25 materials, which had cooled off and now the material

1 is a solid in that container, were transported up into
2 that landfill site, covered eventually with soil, and
3 that's the disposal.

4 Q. Now, the drawing bottoms, you said that
5 again, there's sort of a spigot that you turn on or
6 off to draw the bottom.

7 A. Mm-hmm.

8 Q. Is there a hose connected to that, or is it
9 a spigot into a--into some kind of container? Could
10 you describe that a little bit more for me?

11 A. Well, the--some had hoses, short hoses to
12 allow some flexibility of where you directed the
13 fluid. Some of them just had a, a metal gooseneck,
14 I'm going to call it, an angle, a J-shaped spout that
15 they would turn the valve, collect the sample, shut
16 off the valve,--

17 Q. Okay.

18 A. --and send it to the laboratory.

19 Q. Now, that's to remove a sample amount.

20 A. Yes.

21 Q. Was there a time when the entirety of the
22 bottoms needed to be removed from the still, not just
23 for a sample?

24 A. Well, yes. Now, that's a different
25 pipeline.

1 Q. Okay.

2 A. A different valve.

3 Q. Okay, so there's one spigot that is used to
4 pull a sample so that you can sample the still
5 bottom--

6 A. Yes.

7 Q. --to see whether it can be used further or
8 versus being discarded, but there's a different
9 spigot, then, to actually withdraw all of the still
10 bottoms?

11 A. That is correct.

12 Q. Okay. Into what kind of container would the
13 still bottoms be emptied into?

14 A. For, for--oh, for destruction or disposal?

15 Q. If you are removing all of the still bottoms
16 at once, versus the sample.

17 A. It would be a steel drum, like the kind most
18 of us associate with drums of oil.

19 Q. Like a 55-gallon drum?

20 A. 55 with the vent opening and a fill opening:
21 Solid steel top, not the clamp-on type.

22 Q. Is the still elevated?

23 A. Oh, yes.

24 Q. Up off the ground--

25 A. Oh, yeah.

1 Q. --so you can have a drum underneath it?

2 A. Yes.

3 Q. Okay, and was that area beneath where the

4 drum would sit concrete--

5 A. Yes.

6 Q. --or earthen?

7 A. Concrete.

8 Q. Okay. Had there been a, a time, to your

9 knowledge, when there was not a concrete floor at
10 that--

11 A. Not to my knowledge.

12 Q. On the spigot area where samples are drawn

13 from, again is that another area where as of the

14 1970's there's a drip plant--drip pan in place?

15 A. Yes.

16 Q. But prior to that point in time, there was

17 not a drip plan?

18 A. No, but there was a concrete floor.

19 Q. Do you know where the concrete floor drained

20 to?

21 A. When the department was hosed down, the

22 water would follow its--the normal drainage pattern

23 that every area has, and in the Aroclor department, it

24 ended up in the--a collection pit for neutralizing any

25 acid that might be present and for trapping any

1 Aroclor or heavy byproduct of Aroclor in this pit.

2 Q. And is that the drainage pathway throughout
3 the time you were at the plant as plant manager?

4 A. Oh, the pathway is a natural thing. We--we
5 have to live with it. We can't change it.

6 Q. But there was a, a pit receiving this wash
7 water, if you will,--

8 A. Yes.

9 Q. --throughout the time you were there as the
10 plant manager?

11 A. Yes.

12 Q. Okay. Do you know when that pit was put
13 into place?

14 A. I do not.

15 Q. If you could turn the page on the document
16 we've been looking at, Exhibit 12, so we're now we
17 should be on DSW 053429, number 3 at the top of the
18 page refers to explosions. While you were a plant
19 manager, did any explosion ever occur in the Aroclor
20 facility?

21 A. No.

22 Q. To your knowledge, did one occur prior to
23 your arrival as plant manager?

24 A. No.

25 Q. Or subsequent to your departure in 1969,

1 were there any explosions, to your knowledge?

2 A. No.

3 Q. Were there any fires in the Aroclor
4 department during the time you were plant manager?

5 A. No.

6 Q. Before the time--are you aware of any before
7 you arrived in 1965?

8 A. I am not.

9 Q. Okay, or any fires after you left in 1969?

10 A. I did not hear of any.

11 Q. Number 4 talks about, refers to falls. It
12 states "Slipping on cement floors, stairs, Aroclor on
13 floor, ice conditions, et cetera." I want to focus on
14 the reference to Aroclor on floors. Why would there
15 be Aroclor on floor?

16 A. Well, there are a lot of possible sources.
17 Some of it is just the employees, themselves, walking
18 into a, a spot out in the operating unit and walking
19 into an area that had--the floors, here, apply to both
20 the grating-type floor, as well as the solid concrete
21 floors or tiled concrete in the instrument rooms.
22 Most of the floor materials was due to employees'
23 shoes bringing it in as they walked around.

24 Q. Where were they stepping into it in order to
25 get it on their shoes?

1 A. That's these small leaks that might occur,
2 and they do--they did occur in odd places at odd
3 times, and many times you--especially at night, you
4 wouldn't know you're walking through it as you go from
5 one spot to another, and they would track that around,
6 and that's how the floors would pick up this material.

7 Q. You mentioned two kinds of floors, grating
8 floors and then the solid floors. Where are the
9 grating floors? Is that upper levels, or is the first
10 floor grating floors, as well?

11 A. No, generally, the first floor was solid
12 concrete. The upper levels were generally the
13 grating, except for those facilities like the
14 instrument room, the rest room, the locker room, that
15 kind of--if, if it existed at all in that department
16 or that unit, would have a solid floor.

17 Q. Okay, if the employees did get the Aroclor
18 on their shoes in their--in tracking it around, are
19 they wearing personal shoes or company shoes?

20 A. I'm going to call them company issue.

21 Q. Okay.

22 A. They're issued the proper booties to--with
23 the, the sides protecting part of the ankle, and so
24 on, and then the, the sole would be resistant to
25 deterioration as they walked through these various

1 chemicals that they're involved with.

2 Q. What were the booties made of? Do you
3 recall?

4 A. I recall some of them with neoprene being
5 the preferred material. I don't recall any other
6 material used.

7 Q. Was there a point in time when the company
8 did not issue booties to the workers in the Aroclor
9 facility, to your knowledge?

10 A. I'm only guessing. I don't know what
11 happened back in the Forties and Fifties.

12 Q. When you arrived in 1965, though, issuance
13 of booties to the Aroclor workers was the standard
14 practice?

15 A. Yes, for those workers who would probably
16 have a need for 'em.

17 Q. Okay, what about people like Maintenance
18 Department or Technical Services Department who were
19 not assigned full-time as a worker in the Aroclor
20 facility?

21 A. They could pick up a pair as they went into
22 appropriate areas.

23 Q. And at the end of the day, did they discard
24 their company-issued booties? Any of the workers,
25 now. I'm not just speaking of technical service or

1 maintenance, but those who had the booties on.

2 A. Those who were issued booties as part of
3 their job kept them until they felt that they needed a
4 new pair. It was their decision in terms of
5 wearability, damage, and so on.

6 Q. Where did they keep them at the end of the--

7 A. In their--

8 Q. --at the end of their shift?

9 A. --lockers. They had, they had lockers for
10 their personal clothes and a locker for their working
11 clothes: Adjoining lockers.

12 Q. Now, you've testified in prior testimony,
13 haven't you, that you, yourself, would get Aroclor on
14 your shoes, and get into your car and get Aroclor in
15 your car; is that correct?

16 A. That is correct.

17 Q. So you didn't always put booties on?

18 A. I wasn't issued any booties.

19 (Laughter.)

20 A. (Continuing) No, I would pick 'em up as I
21 walked through the plant, and before I got in my car,
22 I'd kind of take a twig or something and clean off the
23 accumulation under my heel, but I would still find
24 marks on my kitchen floor when I got home.

25 Q. If you could turn to the next page, DSW

1 053430, still under 4, which is described as "Falls,"
2 I'd like to direct your attention to paragraph D as in
3 "dog," and that states that "Spills must be cleaned up
4 immediately following their occurrence. Report any
5 spill that cannot be cleaned up within the shift to
6 the chief operator. Spills are to be reported in the
7 log book." Can you describe your understanding of how
8 spills were handled, to whom, to whom the spill was
9 reported, and who had the responsibility for cleaning
10 up?

11 A. Well, the normal way information is
12 transferred is--usually follows the organization, so
13 if the operator sees it, he calls the chief operator
14 and tells them. The chief operator makes a decision
15 are there enough hours for the shift to clean it or
16 not, or maybe we can do a partial cleanup and when the
17 next shift takes over, that chief operator connects
18 with the replacement chief operator, so the
19 communication continues. In addition, by logging it
20 on the paper work that's in the department, that
21 message is conveyed, and the logging really reports
22 the leak in a given area, cleanup completed, cleanup
23 in progress, whatever the status was. Generally,
24 that's as far as most cleanups go. If it's a much
25 more challenging problem, the chief operator would

1 report it to the foreman on the day shift, and the
2 foreman, in turn, makes a decision "Do I involve my
3 supervisor," so it goes up the--what do you call
4 it--the chain of command.

5 Q. What would be used to clean up any spills?

6 A. It's really up to the individual doing the
7 cleaning. Some of those spills were cleaned up using
8 sand, if it was large enough and enough liquid
9 available. Some of them were easily cleaned up just a
10 rag. Some of them required some solvent, and the
11 individuals would--for example, take some benzene and
12 help absorb some of the more difficult stains, if you
13 will, with materials like benzene.

14 Q. If, um, if rags were used, where would the
15 rags be discarded after cleaning up?

16 A. The rags would be discarded in these
17 landfills we talked about, the dumps.

18 Q. Did they have a--I mean, was there a
19 receptacle of some kind at the plant, itself, for the
20 rags to go into before they got taken over to the--

21 A. Yes, they had the--

22 Q. --landfill?

23 A. --steel drums with the open tops, not the
24 kind with the openings like the liquid drums.

25 Q. Mm-hmm. Were those dedicated for

1 cleanup-type, contaminated rags and that type of
2 material?

3 A. Well, there was a distinction made between
4 throwing away waste paper records in one container and
5 an oily rag in this other container. Yeah, they were
6 distinguished--

7 Q. Okay.

8 A. --just by their location.

9 Q. Okay, and if solvent was used, why would
10 solvent be needed to clean it up?

11 A. I'm sorry?

12 Q. Why would solvent be needed to clean it up?

13 A. You need something to, I'm going to call it
14 cut the grease effect.

15 Q. Okay.

16 A. Otherwise, it stays there, and in some
17 areas, you would like to get down to the original
18 surface. In other areas, you do the best you can and
19 tolerate the black color.

20 Q. Would that--is that visually the indicator
21 that there had been an Aroclor spill on the floor, the
22 black color?

23 A. Well, it's--I wouldn't say it's black. It's
24 oily looking.

25 Q. Okay. At some point, you also mentioned

1 that occasionally, the--water was used just to wash,
2 hose down the floors. Was that done as a regular
3 housekeeping practice or specific to spill occasions?

4 A. That's just regular hosing down not only for
5 these spills but for anything else that accumulates.

6 Q. And I think you said, then, the cleaning up
7 was the responsibility within the operating area. In
8 other words, there wasn't a separate cleanup crew
9 whose--who was tasked with wandering the plant,
10 cleaning up areas. Is that correct?

11 A. Well, there were some individuals in the
12 plant to clean up the general plant, mowing the lawns,
13 and so on, but if it involved a material from a
14 manufacturing process, that was the responsibility of
15 the individuals in that unit, in that manufacturing
16 unit.

17 Q. You also said that sand might be used to
18 clean up spills. Where, where was the sand obtained?

19 A. It was purchased.

20 Q. Do you know what type of sand it was?

21 A. By "type," you mean by technical name? I
22 can only go by the color. It's tan colored. It
23 wasn't white beach sand.

24 Q. Did it come in bags?

25 A. Some of it came in bags, but most of it came

1 in a dump truck. They would deliver and dump it in a
2 corner of the plant and it would be available.

3 Q. Were those company dump trucks bringing the
4 sand in?

5 A. No, they were suppliers' trucks.

6 Q. Where would the sand be stored within the
7 facility before being used for cleaning up a spill?

8 A. It was just dumped out in the open. It
9 wasn't stored anywhere.

10 Q. Was there single pile that contained sand
11 out in the yard somewhere?

12 A. Oh, it, it depended on the, the delivery
13 schedules, and if the pile still at the plant was a
14 reasonable size, they would not dump the new pile on
15 top, they'd go over another place and dump the second
16 pile, so there was no one spot specific to sand only.

17 Q. After the sand was used to clean up a spill,
18 where would the sand be taken?

19 A. It would be put in the steel containers,
20 open-top steel drums, eventually sealed and taken to
21 the landfills.

22 Q. To your knowledge, was any of that sand
23 obtained from foundries in Anniston?

24 A. I'm sorry.

25 Q. To your knowledge, was any of the sand

1 obtained from the foundries in Anniston?

2 A. I never heard that before, no.

3 Q. To your knowledge, they were not using

4 foundry sand for cleaning up spills; is that--

5 A. That is true.

6 Q. Who would be responsible for acquiring the
7 sand?

8 A. Well, there again, it's the individual
9 responsible for receiving raw materials and--

10 Q. The same process we talked about before with
11 the purchasing agents and the warehousing individual?

12 A. Yes. Yeah.

13 Q. If we could turn to the--probably really the
14 last page of the document, but there's an extra page
15 at the end, here, so let's go to the second-to-last
16 page, DSW 053440, please. It's--the top of the page
17 refers to Appendix N, "Miscellaneous," the heading
18 "Specialized Equipment." I'll give you a moment to
19 read the few sentences, there, to yourself before I
20 ask my question.

21 (Witness peruses
22 said document.)

23 A. I've read it.

24 Q. Okay. Do you recall there being an issue of
25 iron rust forming?

1 A. I don't know that I would describe it as an
2 issue. It was a desired precaution, because the
3 General Electric people didn't want that rust
4 introduced into the transformers and creating all
5 kinds of problems with the operation of the
6 transformer.

7 Q. This particular paragraph refers to a
8 zinc-tin lining to prevent rust in the Pyranol mix
9 tank and tank cars. Do you recall any other type of
10 galvanizing or lining used to prevent rust?

11 A. I do not.

12 Q. Do you know if any lead galvanizing was
13 used?

14 A. I never heard of that, no.

15 Q. You can set that document aside.

16 I'd like to back up to the Aroclor
17 production process. We've talked about biphenyl
18 production, we've talked about the last exhibit was
19 standard manufacturing process for Aroclor blends.
20 I'd like to turn now to Aroclors, themselves, and that
21 manufacturing process. Can you describe in your own,
22 in your own words to a lay person the production
23 process for Aroclor manufacturing when you arrived in
24 1965?

25 A. I will try.

1 Q. Okay.

2 A. You start with the biphenyl as a liquid, and
3 introduce into that liquid chlorine, and the chlorine
4 then combines with the biphenyl by replacing a
5 hydrogen and introducing chlorine. The time and
6 amount, the time the chlorine is introduced and the
7 amount introduced determines the, to a great degree,
8 the amount of chlorine that attaches itself to the
9 biphenyl group. The operators know either from
10 personal experience or information they receive from
11 the more experienced workers that after so many hours
12 and you are seeking a certain Aroclor mixture, takes
13 your sample and have this sample sent to the
14 laboratory and have them determine, at the laboratory,
15 determine some of the properties of that sample; what
16 is its specific gravity, what color is it, and so on,
17 some very preliminary kinds of testing, and if it
18 meets some minimal expectations, it's time to stop
19 chlorinating and send that mixture to a unit which
20 distills, and by distilling, we're talking about a
21 process that heats the material to form vapors. The
22 initial vapors are high in the residual chlorine.
23 It's still in that mixture, hasn't reacted, then there
24 is a phase when the hydrogen chloride, which was
25 formed when the hydrogen which was removed from the

1 biphenyl combined with the chlorine that was present
2 to make hydrogen chloride gas. That'll come off, and
3 eventually, you reach the point where most of these,
4 I'm going to call them byproduct materials are
5 removed, and then the Monsanto procedure called for
6 introducing, as I remember, sodium hydroxide--lye is
7 the common word, l-y-e--to neutralize any remaining
8 acid. The distillation then continues and the
9 material is checked in a product receiver instead of
10 the off-gas receiver, and when the operation reaches
11 either a time limit and/or a temperature limit, the
12 distillation is, for all practical purposes,
13 completed. The material that was collected from this
14 operation is now sampled, and that sample is sent to
15 the laboratory again, and this time, they conduct a
16 much more sophisticated analysis, looking for many
17 properties, specific gravity, color, and so on, and
18 when certain of these properties are met, they're
19 pretty confident that the material was the Aroclor
20 that was intended to be produced, say, the Aroclor
21 1242, and that becomes, then , the salable or usable
22 finished product.

23 Q. Is that--what, the product receiver you
24 refer to, is that a tank?

25 A. Yes.

1 Q. So the product, if it's passed the test, is
2 then drawn out of that tank?

3 A. It's attached to what?

4 Q. It's the--assuming that the sample came back
5 good,--

6 A. Oh.

7 Q. --the product is then taken out of that,
8 that tank,--

9 A. Right.

10 Q. --how is it removed from the tank?

11 A. Well, it has its own pumping system,
12 pipelines, valves, pumps, to send it either to a
13 storage tank for that material specifically or to
14 another storage tank where that material will be
15 blended, so it goes in two places: One to be shipped,
16 the other to be blended, and eventually shipped as a
17 blend.

18 Q. Okay. You indicated that it would either,
19 the material was either going--I'm not sure I have
20 this right, but the, the product receiver versus the
21 off-gas receiver. What's going in the off-gas
22 receiver?

23 A. The gases that are removed initially are run
24 through a system that uses water to scrub out the
25 soluble gases, and the intent, there, is to end up

1 with the hydrochloric gas, transferred into water, to
2 become hydrochloric acid, which is commonly called
3 muriatic acid, and that acid, there's a market for it.
4 It can be sold.

5 Q. So what's coming off initially is the
6 hydrochloric gas, if I understood you correctly, and
7 that is then going--being directed through a scrubber?

8 A. (Nods head in affirmative manner).

9 Q. Is the scrubber removing certain impurities,
10 or is it just adding water to turn into it
11 hydrochloric acid?

12 A. Well, I don't know of any impurities are
13 that volatile. The water will, of course, absorb the
14 hydrochloric gas and make the acid.

15 Q. Okay. Where was the--where would the water
16 come from?

17 A. The city water supply.

18 Q. Was there always a city water supply when
19 you were there as plant manager, or was there a point
20 in time when there was well water, or other water
21 source?

22 A. No, the city water supply was our only
23 source.

24 Q. When chlorine is introduced into the
25 process, that's introduced as a chlorine gas; is that

1 correct?

2 A. That is correct.

3 Q. Was a catalyst used in that first stage of
4 the chlorination process?

5 A. I'm not aware of any catalyst.

6 Q. I'll see if I can get the right documents
7 now.

8 MR. NASSIF: He needs to take a break.

9 THE VIDEOGRAPHER: Four minutes.

10 MS. LAVEY: Well, I can think about it for
11 three and a half minutes.

12 THE VIDEOGRAPHER: Let's go ahead and
13 change.

14 MS. LAVEY: Let's change.

15 THE VIDEOGRAPHER: This will end tape number
16 if 2 of the deposition of William B. Papageorge.
17 We're off the record at 11:28 A.M.

18 (Recess.)

19 THE VIDEOGRAPHER: We're back on the record,
20 11:37 A.M. This begins tame number 3 in the
21 deposition of William B. Papageorge.

22 BY MS. LAVEY:

23 Q. Mr. Papageorge, I'm going to hand you a
24 document which we will mark as Exhibit 13.

25 (Defendant's Exhibit 13

1 marked for
2 identification.)

3 BY MS. LAVEY:

4 Q. Mr. Papageorge, I'll ask you to take a look
5 at that document and let me know if you recognize it.

6 For the record, this is "Standard
7 Manufacturing Process for Aroclor," has--states it
8 supersedes standard manufacturing process issued
9 October 22nd, 1957. This document has a date of
10 September 1966, Bates range DSW 303353 through DSW
11 303482.

12 Oh, I'm sorry.

13 MR. NASSIF: That's all right.

14 (A copy is handed to.

15 Mr. Nassif.)

16 (Witness peruses said
17 document.)

18 BY MS. LAVEY:

19 Q. Do you recall this document, Mr. Papageorge?

20 A. I recall the format. It's very typical to
21 other documents of a similar nature for all the
22 processes at the Anniston Plant. This is specific to
23 Aroclors. I do not recall the individual and very
24 specific items that are covered in this document.

25 Q. Based on your understanding of the standard

1 manufacturing process documents, would this document
2 accurately reflect, as of September 1966, the manner
3 in which Aroclors are produced at the Anniston Plant?

4 A. Yes.

5 Q. So the production units would use this as a
6 sort of guide to ensure a consistent manufacturing
7 process, batch to batch?

8 A. Yes.

9 Q. Do you--the first page of this indicates
10 it's superseding a 1957 standard manufacturing
11 process. Do you have any recollection of what was
12 different as of September 1966 and the previous
13 version?

14 A. No, I do not.

15 Q. Although the copy quality is very poor, I
16 want to direct your attention to DSW 303378. It's
17 about 25 pages in. It's a page you can't read very
18 well, the top of which says Roman numeral IV,
19 "Comments on the Process," Section A, "Liquid
20 Aroclors," number 1, "Chlorination," and under B, do
21 you see the section marked B, "Catalyst"?

22 A. Yeah, I note it reminds me I forgot to
23 mention iron.

24 Q. I was going to bring you there.

25 (Laughter.)

1 Q. (Continuing) Do you recall--

2 A. Yes.

3 Q. --iron being used as a catalyst in the
4 chlorination?

5 A. Yes, now, I--very vividly.

6 Q. Why do you recall it so vividly?

7 A. Well, I, frankly, had forgotten it until I
8 read it again here,--

9 Q. Okay.

10 A. --and it fit together very well.

11 Q. What, exactly, are iron turnings?

12 A. Just, they just take iron and, and grind it
13 up until it becomes like iron filings.

14 Q. Did the plant receive the iron turnings in
15 that state--

16 A. Yes.

17 Q. --or were you doing that at the plant?

18 A. No, it was received as used.

19 Q. Do you know where the--from whom the iron
20 turnings were obtained?

21 A. I do not.

22 Q. Okay, and who would know that? Would that
23 be the purchasing agent and warehousing superintendent
24 that we've talked about before?

25 A. Those are logical places to ask, mm-hmm.

1 Q. Do you know if the iron turnings would be
2 pure iron?

3 A. I do not know the, the specifications as to
4 contents.

5 Q. Do you know if it mattered to the process
6 whether it was a pure iron or had other materials in
7 the iron?

8 A. No, I'm not qualified to say.

9 Q. Was a--for each new batch of production, was
10 a new basket of iron turnings utilized, or could you
11 reuse the same basket of iron turnings over and over
12 again in the process?

13 A. As I remember, it's, it's a reusable source,
14 and when it depletes through long usage, they
15 replenish with the--

16 Q. Because it's actually the iron turnings are
17 used to produce ferric chloride which is, in fact, the
18 actual catalyst; correct?

19 A. Correct.

20 Q. Okay. Did there come a time when the iron
21 turnings had to be taken out of the basket to be
22 replaced with fresh iron turnings?

23 A. I'm not aware that they ever discarded the
24 residual iron filings; they just added to it as long
25 as there was iron present that satisfied the needs of

1 the reaction.

2 Q. Do you recall the time frame during which
3 iron turnings were being used in order to produce the
4 ferric chloride as a catalyst? Is that something that
5 was occurring throughout your period as plant manager?

6 A. Yes.

7 Q. Okay, do you know if that was the process in
8 place prior to your arrival?

9 A. It was.

10 Q. Okay, was that the process, as far as you
11 know, from the beginning of Aroclor production, or is
12 that a more recent change in the production process?

13 A. It's my understanding it was present from
14 the very beginning.

15 Q. Okay. Do you know if ferric chloride was
16 ever added directly, rather than the use of the iron
17 turnings?

18 A. I've never heard that, no.

19 Q. Okay, and that, that aspect of the process
20 continued after you left, as well?

21 A. Yes.

22 Q. Up until the cessation of all Aroclor
23 production?

24 A. Correct.

25 Q. And you can put that one aside,

1 Mr. Papageorge.

2 BY MS. LAVEY:

3 Q. I'm going to hand you another standard
4 manufacturing process document, Mr. Papageorge, which
5 we'll mark as Exhibit Number 14.

6 (Defendant's Exhibit 14
7 marked for
8 identification.)

9 BY MS. LAVEY:

10 Q. And I'll ask you to take a look at that, as
11 well, and advise me whether it's a document that you
12 have seen before in your position as plant manager.

13 (Witness peruses said
14 document.)

15 MS. LAVEY: For the record, this document is
16 entitled "Standard Manufacturing Process for Aroclors,
17 October 1968," Bates range DSW 392112 through DSW
18 392264.

19 (Witness continues to
20 peruse said document.)

21 A. The--again, the document is very similar to
22 the types of specifications or process descriptions
23 common in the plant. The fact that I've signed this
24 document indicates that I did see it. I do not
25 remember the detailed specifics.

1 BY MS. LAVEY:

2 Q. Okay, and you are referring to your
3 signature on the second page, DSW 392113, correct? As
4 the plant manager?

5 A. Correct.

6 Q. Sir, does this document accurately reflect
7 the production process for Aroclors, at least as of
8 October 1968?

9 A. Yes.

10 Q. Do you have any recollection of how this
11 document was different than the one that had been
12 issued September 1966?

13 A. The only recollection I--that comes to mind
14 is the introduction of a method for chlorinating that
15 involved a series of tanks, and the chlorination would
16 occur as the material flowed through that series,
17 rather than key--keeping it in one container until the
18 end of the chlorination, and then--

19 Q. So the chlorination used to take place in
20 one vessel?

21 A. One vessel, until the end.

22 Q. Okay.

23 A. This allowed, or was designed to permit the
24 flow as it went through the system to pick up the
25 chlorine so that by the time it reached the last tank,

1 it was close to completion.

2 Q. Would the sampling of that, initial sampling
3 you talked about before that was done to kind of
4 roughly see are we on track, here, with the right
5 amount of chlorine, would that occur at the end of the
6 sequence or at each one of the separate tanks along
7 the way?

8 A. Initially, it was each one until the
9 operators and the supervision became very familiar
10 with that approach, and then it became the last tank.

11 Q. And did that process--in fact, was that
12 process retained? In other words, you stayed with the
13 sequential tanks, you didn't return to the one-tank
14 system?

15 A. That's true.

16 Q. Okay.

17 A. Now, what I don't remember is whether all of
18 the production went through that system. Some of it
19 may still have been made in the older units.

20 Q. So you, you don't recall a complete
21 changeover from one system to the other, that you had
22 both of them operating in parallel?

23 A. As I recall, this was in addition.

24 Q. If you go five or six pages in to DSW
25 392118, there's a reference to AMENDMENT number A

1 described as "Packed bed treatment of electrical grade
2 Aroclors," date of May 18th, 1967, and the disposition
3 indicates that it was accepted. Do you recall that
4 particular amendment?

5 A. I do not.

6 Q. Do you know what is meant by "packed bed
7 treatment"?

8 A. No, that's my confusion.

9 Q. That's what you don't remember?

10 A. I don't remember that terminology.

11 Q. Okay. That's all I have on that document.
12 You can set that aside.

13 I'm going to hand you yet another standard
14 manufacturing process for Aroclors which will be
15 marked as Exhibit 15.

16 (Defendant's Exhibit 15
17 marked for
18 identification.)

19 BY MS. LAVEY:

20 Q. This document is entitled "Standard
21 Manufacturing Process for Aroclors, July 1969," Bates
22 range DSW 543174 through DSW 543336. I'll again ask
23 you to take a look at that, Mr. Papageorge, and tell
24 me whether you recognize it.

25 (Witness peruses said

1 document.)

2 A. I have scanned the exhibit. I again don't
3 recall this specific, but it's a, again, a familiar
4 type of document. This appears to me to concentrate
5 particularly on--well, I shouldn't say that. It
6 covers both the liquid, as well as--PCBs, as well as
7 the terphenyls, chlorinated terphenyls. I don't know
8 what else to add to that.

9 Q. Okay.

10 A. It doesn't have any--it doesn't bring to
11 mind any particular occasion, or need, or--

12 Q. And this document, since you were thumbing
13 through it, I'm sure you noticed there were a series
14 of what I referred to as tentative amendments at the
15 front portion of this document,--

16 A. Yes.

17 Q. -most, if not all of which appear to
18 postdate your time frame as plant manager.

19 A. That's correct.

20 Q. When you moved to St. Louis, would you have
21 ceased receiving copies of these?

22 A. That is true.

23 Q. Okay.

24 A. Mm-hmm. (Nods head in affirmative manner).

25 Q. Okay, but not looking at the amendments, the

1 rest of the document that was issued July 1969, that
2 would accurately reflect the production process in
3 place at that time at the Anniston Plant.

4 A. Yes.

5 Q. Correct? On the--I would like to review
6 some of the names again. On the second page of the
7 document, DSW 543175, we talked about Mr. Schulte
8 before and Mr. Landwehr. There is also a
9 T. W. Lawrence. Do you recall that individual?

10 A. I do not.

11 Q. Do you recall an individual named Gary
12 L. Moore?

13 A. I recall the name; I don't recall the
14 individual or his participation.

15 Q. If we could turn in a couple of pages to DSW
16 543178, there's a list of approvals and signatures.

17 A. I see it.

18 Q. At that point, the plant manager is Gene
19 Jesse; correct?

20 A. Correct.

21 Q. The next name down is listed as the PR&D
22 group leader, a J. L. Brown. What does "PR&D" stand
23 for, if you know?

24 A. It's a research and development activity.
25 The "P" is--I think refers to product research and

1 development, but I am not certain.

2 Q. And do you know who J. L. Brown refers to?

3 A. I'm sorry?

4 Q. Do you know who J. L. Brown is in that
5 position as PR&D group leader?

6 A. I do not.

7 Q. Would that be Jerry Brown, or is this a
8 different individual?

9 A. I hesitate because I don't associate Jerry
10 Brown as a researcher. I don't know.

11 Q. Also on that same page, the Research Group
12 Leader, a J. W. Baker, do you recall that individual?

13 A. No, I don't.

14 Q. Manager of Research and Development,
15 W. R. Richard?

16 A. I remember Bill Richard, yes.

17 Q. An was he in St. Louis?

18 A. He was, mm-hmm.

19 Q. The manufacturing manager is identified as
20 J. R. Savage?

21 A. James Savage, yes.

22 Q. Where was he located? Is that St. Louis or
23 Anniston?

24 A. St. Louis.

25 Q. Do you know how long Mr. Savage held that

1 position as manufacturing manager?

2 A. I do not.

3 Q. Do you know how long he was with the
4 company?

5 A. I don't.

6 Q. Continuing to the next page, you'll see DSW
7 543179 referred to a tentative Amendment G. I guess I
8 should have asked this earlier. When they, when they
9 say it's a tentative amendment, does that mean that it
10 may or may not be accepted into the SMP?

11 A. That is possible, yes, it may or may not,
12 mm-hmm.

13 Q. When it's first developed, it's a tentative
14 amendment; correct?

15 A. True.

16 Q. If the approval page is signed, does that
17 mean it has been accepted, or is it just approving the
18 test run, if you will?

19 A. Will you show me which page that is?

20 Q. For example, for Amendment G, it would be
21 page 6 of that document if you thumb through a few
22 pages.

23 A. Page 6.

24 MR. NASSIF: You can get that if you need to
25 pull that out.

1 BY MS. LAVEY:

2 Q. What I'm asking is, is the signatures on
3 this page, which are similar in form for other
4 amendments, is that an indicator that there is an
5 approval to proceed with this experiment, or test run,
6 or whatever the amendment is about, or does that
7 signify an approval that the amendment has been
8 accepted into the SMP?

9 A. The approval signature page applies to the
10 preceding documentation, and in this particular case,
11 they are referring to trying three to five batches, on
12 page 4, so that's what these individuals approve for
13 the trial.

14 Q. They're approving the trial?

15 A. That's the way I--

16 Q. Okay.

17 A. --interpret this document.

18 Q. Okay. On page 4 that you were referring to,
19 it indicates the originator of this particular
20 amendment is a K. G. Hale. Do you know that name?

21 A. I do not know him.

22 Q. You can set that document aside,
23 Mr. Papageorge.

24 Could you describe physically the
25 distillation unit for the Aroclor production? Is this

1 a--are these a series of stills? Is it one big
2 contraption?

3 A. I don't recall the specifics of that
4 distillation system.

5 Q. Okay, do you know what the distillation took
6 place in? A distillation column, or a tank?

7 A. It's a, it's a column, but I don't know what
8 is in that column.

9 Q. Were there a sequence of columns?

10 A. I don't remember.

11 Q. Was there a difference in the process for
12 liquid Aroclor production versus solid Aroclor
13 production, or is it just a difference in how much
14 chlorination had been done to it?

15 A. Well, it's, it's a difference in the degree
16 of chlorination, as well as the fact that the solid
17 Aroclors were terphenyls, but at the temperatures of
18 the operations, all of the Aroclors, whether they be
19 terphenyls or polychlorinated biphenyls, are liquids.
20 The distillation columns, I, I don't recall how they
21 were designed internally, whether they had packing in
22 them or whether they had trays which the gas or vapor
23 bubbled through liquid and changed its properties as
24 it went up the column, I don't know that detail.

25 Q. It's the terphenyls, then, would not be a

1 1200 series. Is that right?

2 A. The terphenyls would be the 5000--

3 Q. Okay.

4 A. --series.

5 Q. Okay, and the distillation system was kept
6 at an elevated temperature? Is that correct?

7 A. Correct.

8 Q. Was the distillation for solid Aroclors kept
9 at a higher temperature than distillation for liquid
10 Aroclors, or is there not a real difference?

11 A. You mean Aroclors or biphenyls? Chlorinated
12 biphenyls?

13 Q. The solid Aroclors versus the liquid
14 Aroclors. I was asking whether there's a temperature
15 difference in the distillation process.

16 A. There is a temperature difference, whether
17 they're terphenyls or biphenyls.

18 Q. When is there a temperature difference?

19 A. Well, in the biphenyls, the more chlorine
20 content, the higher the temperature. In the
21 terphenyls, being an entirely different chemical
22 family, they start off with a high temperature, and
23 then as the chlorination level increases, the
24 temperatures also rise.

25 Q. Were the solid Aroclors made in a different

1 set of distillation units?

2 A. Whew, I don't remember that.

3 Q. You don't remember whether the liquid
4 Aroclors were made in one place and the solid Aroclors
5 were made in another place?

6 A. I do not.

7 Q. Do you recall--strike the question. Let me
8 just hand you the document.

9 I'm going to hand you a document that we'll
10 mark as Exhibit 16, as DSW 392343.

11 (Defendant's Exhibit 16
12 marked for
13 identification.)

14 Q. (Continuing) And I recognize your name
15 doesn't appear on here, but I'd still like you to take
16 a look at it and let me know whether it's a memo that
17 you have seen before.

18 (Witness peruses said
19 document.)

20 A. I don't recall ever seeing this.

21 Q. Do you remember something referred to as a
22 clay addition pot? It's referred to in the end of
23 this document in the third paragraph.

24 A. I do not remember that.

25 Q. Do you remember dry clay being used in any

1 way in the process?

2 A. The only clay I recall is Attapulgius. I
3 don't know what type of clay it's referring to here.

4 Q. When the Attapulgius earth was used, how was
5 that added? Did you remember physically what it was
6 contained in?

7 A. No, I don't.

8 Q. I'm trying to determine whether it's
9 possible it's the same thing as this clay addition
10 pot, but this is just not a term you've heard;
11 correct? "Clay addition pot"? Okay.

12 A. I do not know.

13 Q. Okay. Set that aside.

14 Do you recall an Aroclor expansion project
15 at the end of your time as plant manager?

16 A. At the end of my time?

17 Q. Well, okay, during the time that you were
18 plant manager, was there a point in time where the
19 Aroclor production was expanded?

20 A. I recall a reference to expanding the
21 production, and I associate that with the introduction
22 of the step-wise chlorination process that was
23 introduced.

24 MS. LAVEY: I'm going to hand you another
25 document which we will have the court reporter mark as

1 Exhibit 17.

2 (Defendant's Exhibit 17

3 marked for

4 identification.)

5 BY MS. LAVEY:

6 Q. (Continuing) And this document has Bates
7 range DSW 577126 through 577150.

8 A. I have scanned the exhibit.

9 Q. Mm-hmm?

10 A. I do not have any recollection of seeing
11 this.

12 Q. Do you know who R. S. Yates is?

13 A. Robert Yates?

14 Q. Do you know what position Robert Yates had?
15 I guess I should narrow that down to the time when you
16 were plant manager.

17 A. I associate Mr. Yates as being a--as best I
18 remember, he was a member, an engineer in the
19 Corporate Engineering Department.

20 Q. Do you recall who the head of the
21 engineering department was at Corporate, the Corporate
22 level while you were in Anniston?

23 A. I do not.

24 Q. Do you recall any of the head top guys in
25 the engineering department?

1 A. I do not.

2 Q. Do you know the name J. W. Colgan,
3 C-o-l-g-a-n?

4 A. No.

5 Q. Mr. Papageorge, do you know if the Anniston
6 Plant employed any carpenters while you were plant
7 manager?

8 A. There were members of the maintenance group
9 that carried the title of carpenter.

10 Q. What would the carpenters be used for? Do
11 you recall?

12 A. I can't think of too many specific--they
13 were involved, for example, in arranging repairs in
14 the office buildings, and so on, but most of the time,
15 there was no basic carpentry to be done. They would
16 pinch hit as pipefitters and all the other categories
17 in the Maintenance Department.

18 BY MS. LAVEY:

19 Q. I'm going to hand you another document and
20 ask the court reporter to mark this as Exhibit 18.

21 (Defendant's Exhibit 18
22 marked for
23 identification.)

24 BY MS. LAVEY:

25 Q. (Continuing) I'll ask you to take a few

1 moments to review that, Mr. Papageorge, before I ask
2 you questions.

3 (Witness peruses said document.)

4 A. I have read the document.

5 BY MS. LAVEY:

6 Q. Do you recall ever seeing this document
7 before?

8 A. I do not.

9 Q. Is this the type of document that as plant
10 manager, you would normally expect to receive?

11 A. Not necessarily.

12 Q. Does it refresh your recollection about a
13 proposed Aroclor expansion project in this time frame?
14 The memo is dated 1967, while you were plant manager.

15 A. Well, this was part of a discussion going on
16 about the Aroclor facilities at the plant, and I don't
17 know how else to describe it. It does refer to an
18 approved project, CEA 1430, which involved the
19 Anniston Plant.

20 Q. Under the Anniston portion of this memo, I
21 think the second page refers to Krummrich, but on the
22 first page, in reference to Anniston, there is a
23 discussion of a new tank farm. Do you recall whether
24 that new tank farm was, in fact, put in?

25 A. Yes.

1 Q. How about the next item, number 2, a new
2 drumming station? Do you recall if that was put in?

3 A. That was installed, yes.

4 Q. Do you recall when?

5 A. The best of my recollection, about 1968.

6 Q. How about the tank farm? I forgot to ask
7 when that was you indicated--

8 A. About the same time.

9 Q. 1968?

10 A. Yes.

11 Q. The next item refers to new flaking and
12 packaging facilities for solid Aroclors and biphenyl.
13 Do you recall if that was installed?

14 A. Yes.

15 Q. Do you recall what the--when it was
16 installed?

17 A. About the same time.

18 Q. And then the fourth item refers to a, a
19 warehouse that would be built which would, in fact,
20 contain the flaking, new flaking and packaging
21 facilities and the new drumming station. Was that
22 warehouse built?

23 A. Yes.

24 Q. Do you recall where the warehouse was
25 located?

1 A. I don't know quite how to describe it. It
2 was a city block away from the producing unit that I
3 referred to earlier.

4 Q. This document refers under number 2 to a
5 proposed warehouse at 6th and Parkwin Street. Does
6 that sound right for where the warehouse ultimately
7 was put?

8 A. As best as I recall, yes.

9 Q. This memo refers to the CEA as Aroclor
10 expansion. Do you recall any other production
11 facilities being added or expanded at this time frame,
12 1968, other than these four items that are listed
13 here?

14 A. I do not.

15 Q. Who is R. P. Stevens listed on this memo at
16 the very top in general offices?

17 A. Yes, he was a member of a Corporate
18 Engineering Department whose--who led the group that
19 was assigned this project.

20 Q. Do you know why a new tank farm was needed?

21 A. Increase production.

22 Q. Increase production of what?

23 A. Aroclors.

24 Q. Would this be solid, or liquid, or both?

25 A. Both, but primarily liquid.

1 Q. Was this activity in 1968, did that
2 activity, once it was all installed, lead to a
3 increase in the number of employees at the facility?

4 A. I don't remember.

5 Q. Do you know why a new drumming station was
6 needed?

7 A. As best I recall, it was due to the
8 increased production and the need of a system that was
9 more automated in terms of conveyor belts, filling
10 lines, labeling facilities, rather than try to do it
11 out of the corner of the operating unit, when-weather-
12 permitted kind of approach, so this was an attempt to,
13 in essence, modernize their facility.

14 Q. Before the warehouse was built to house the
15 new drumming station and the new flaking and packaging
16 facilities, these activities were not done in a, in a
17 building?

18 A. They were out in the open.

19 Q. Over by the Aroclor production facility?

20 A. Nearby, yes.

21 Q. Okay. Do you recall where the tank farm
22 was, the new tank farm, where was it located
23 relative--

24 A. Near this new warehouse.

25 Q. Okay. Do you recall that that project, the

1 expansion project, required the relocation of a
2 process sewer line?

3 A. Not specifically, no.

4 Q. I'm going to hand you another document and
5 ask the court reporter to mark this as Exhibit 19.

6 (Defendant's Exhibit 19
7 marked for
8 identification.)

9 Q. (Continuing) For the record, this appears
10 to be some type of progress report with a date of
11 March 27th, 1968, refers to CEA number 1430, Bates
12 range DSW 392485 through 392486.

13 (Defendant's Exhibit 19
14 marked for
15 identification.)

16 BY MS. LAVEY:

17 Q. If you could take a moment to review this
18 document, please.

19 (Witness peruses said
20 document.)

21 A. I have read it.

22 Q. You'll see on the first page, under
23 "Anniston Plant," your name. Do you recall receiving
24 this document?

25 A. When I saw my name, it brought back some

1 memory, yes.

2 Q. Okay. Does this document help you recall
3 anything about needing to relocate the 24-inch process
4 sewer?

5 A. Yes, I do remember a sewer job relating to
6 this, but I don't recall the exact location, nor do I
7 recall the--what facilities this process pipe
8 serviced.

9 Q. Was it being relocated simply because it was
10 in the way of where the tank farm was going to be, if
11 you recall?

12 A. I do not know. It was obviously in the way,
13 but I don't know for what purpose.

14 Q. Would that job relating to relocating the
15 sewer be done with Monsanto employees or would an
16 outside contractor have done that?

17 A. That type of job would have to be an outside
18 contractor.

19 Q. Do you recall any particular outside
20 contractors that were utilized in connection with the
21 expansion project generally or the sewer relocation
22 specifically?

23 A. Contractors were involved with both the
24 building, and the new facilities, and the sewer, but I
25 don't know which contractors and at what sequence.

1 Q. Do you know if they were local contractors
2 from Anniston or the Anniston area?

3 A. That, I don't know.

4 Q. Do you recall a 36-inch storm sewer needing
5 to be repaired as part of this expansion project?

6 A. No, I do not.

7 MS. LAVEY: I think we'll do this one last
8 document and then be done for the day, since we're at
9 12:30, here.

10 BY MS. LAVEY:

11 Q. I'll hand you another document and ask that
12 the court reporter mark this as Exhibit 20 and ask you
13 to take a few moments to look at that.

14 (Defendant's Exhibit 20
15 marked for
16 identification.)

17 MS. LAVEY: For the record, this is also
18 described as a progress report, referencing CEA number
19 1430 dated January 19, 1968, Bates range DSW 392491
20 through DSW 392492.

21 (Witness peruses said
22 document.)

23 A. I have read it.

24 Q. Okay. There's a hand--handwriting on the
25 first page that says, "CC" and a bunch of initials.

1 Does the "WBP" refer to you?

2 A. I think so. I did not know anyone else with
3 those same initials.

4 Q. Okay. Do you have any recollection of
5 receiving this progress report?

6 A. Not this specific one, but one of many on
7 these projects.

8 Q. As the plant manager, you would routinely
9 receive the progress reports on the approved projects?

10 A. Not always. These would go to an individual
11 in the plant. In this case, it went to Mr. Taffy, and
12 he was the one to distribute it within the plant.

13 Q. And who was Mr. Taffy?

14 A. He was a member of--I'm going to call it the
15 Technical Services Department General Engineering
16 Advisory Team.

17 Q. But within the Technical Services
18 Department?

19 A. At the plant, yes.

20 Q. At the plant: Okay. He's an engineer by
21 training, do you know?

22 A. I'm sorry?

23 Q. Was he an engineer by training, do you know?

24 A. Yes. Yes.

25 Q. Okay. Does the discussion on the second

1 page under "Field work," which refers to repairing the
2 36-inch storm sewer, cause you to recall anything
3 about the, the need for the repair on the 36-inch
4 storm sewer?

5 A. I don't recall the, the details. I do know
6 that they had storm sewer process--or problem and a
7 process sewer problem.

8 Q. But you don't recall what the problem was?

9 A. No, I don't.

10 MS. LAVEY: Okay. I think we can--

11 MR. NASSIF: Okay, are you making good time?

12 MS. LAVEY: --call it a day. Okay.

13 MR. NASSIF: Okay.

14 THE VIDEOGRAPHER: This will end today's
15 session of the deposition of William B. Papageorge.
16 We are off the record at 12:41 P.M.

17 (Whereupon, at 12:41 P.M., the
18 deposition was recessed to the
19 following day.)
20
21
22
23
24
25

1 COMES NOW THE WITNESS, WILLIAM B. PAPAGEORGE,
2 and having read the foregoing transcript of the
3 deposition taken on the 31st day of August, 2004,
4 acknowledges by signature hereto that it is a true and
5 accurate transcript of the testimony given on the date
6 hereinabove mentioned.

7
8
9
10 WILLIAM B. PAPAGEORGE
11

12 Subscribed and sworn to me before this

13 day of , 2004.
14

15 My Commission expires: .
16
17
18

19 Notary Public
20
21
22

23 jj
24
25

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 31st day of August, 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 14th day of September, 2004.

13
14
15 J. Bryan Jordan

16 Certified Court Reporter No. 00532

17 State of Missouri

18 My License expires: January 1, 2005
19
20
21
22
23
24

1 COURT MEMO

2 IN THE UNITED STATES DISTRICT COURT

3 FOR THE NORTHERN DISTRICT OF ALABAMA

4 MAGISTRATE JUDGE GREEN

5
6 Solutia, et al.,

7 Plaintiffs

8 vs. Case No. CV-03-PWG-134-E.

9 McWane, et al.,

10 Defendants.

11
12 CERTIFICATE OF OFFICER AND

13 STATEMENT OF DEPOSITION CHARGES

14 Rule 57.03 (g) (2) (a) & Sec. 492.590 RSMO 1985)

15
16 VIDEOTAPED DEPOSITION OF WILLIAM B. PAPAGEORGE, VOLUME

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18
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17
18 IN WITNESS WHEREOF, I have hereunto set my hand and
19 seal this 14th day of September, 2004.

20
21 _____
22 J. Bryan Jordan

23 Notary Public State of Missouri

24 (St. Louis City)

25 My Commission expires January 14, 2007

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