

1 In Re:

2 Solutia, et al.,

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

5
6 McWane, et al.,

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11
12 September 1, 2004

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14 Videotaped Deposition of WILLIAM B. PAPAGEORGE,

15 Volume III
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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, Volume
19 III, taken on behalf of the Defendants, at the offices
20 of Husch & Eppenberger, LLC, 190 Carondelet Plaza,
21 Suite 600, in the County of St. Louis, State of
22 Missouri, between the hours of 8:09 A.M. and 3:29 P.M.
23 on the 1st day of September, 2004, before J. Bryan
24 Jordan, Certified Court Reporter and Notary Public.

1 APPEARANCES OF COUNSEL:

2 FOR THE PLAINTIFF:

3 Michael H. Wetmore Esq.

4 HUSCH & EPPENBERGER, LLC

5 190 Carondelet Plaza, Suite 600

6 St. Louis, MO 63105-3441

7 Telephone: 314-480-1500

8 Direct (314) 480-1818

9 Fax 314-480-1505

10 michael.wetmore@husch.com

11
12 FOR MEAD WESTVACO:

13 Wendlene M. Lavey, Esq.

14 SQUIRE, SANDERS & DEMPSEY, L.L.P.

15 4900 Key Tower

16 127 Public Square

17 Cleveland, OH 44114-1304

18 Direct (216) 479-8545

19 Fax: (216) 479-8780

20 wlavey@ssd.com

FOR SCIENTIFIC-ATLANTA, INC.:

Lynette Eaddy Smith, Esq.

TROUTMAN SANDERS LLP

NationsBank Plaza, Suite 5200

600 Peachtree Street, Northeast

Atlanta, GA 30308-2216

(885-3489

Fax (404) 962-6688

lynette.smith@troutmansanders.com

FOR PHELPS DODGE:

Lynne Stephens O'Neal, Esq.

LEITMAN, SIEGAL & PAYNE, P.C.

600 North 20th Street

Suite 400

Birmingham, AL 85203

(205-251-5900

Direct (202) 986-5023

Fax (205) 323-2197

sls@lsppc.com

FOR LEE BRASS:

Julie Ehinger, Esq.

HUCKABY, SCOTT & DUKES

2100 Third Avenue North

Birmingham, AL 35203

(205) 251-2300

FOR HURON VALLEY STEEL:

Karen Pilat, Esq.

BUTZEL LONG

100 Bloomfield Parkway, Suite 200

Bloomfield Hills, MI 48304-2949

(248) 258-1616

Fax (248) 258-1439

pilat@butzel.com

FOR GII INDUSTRIES:

Raakhee Biswas, Esq.

BAKER BOTTS L.L.P.

The Warner, 1299 Pennsylvania Avenue, N.W.

Washington, District of Columbia 20004-2400

Telephone: 202-639-7707

Fax: 202-639-7832

raakhee.biswas@bakerbotts.com

1 FOR SOUTHERN TOOL:

2 Ms. Stacey H. Myers, Esq.

3 RESOLUTION LAW GROUP, P.C.

4 5335 Wisconsin avenue, N.W, Suite 305

5 Washington, DC 20015

6 (202) 686-4844

7 Fax 9202) 686-4843

8 shm@reslawgrp.com

9
10 FOR McWANE, FMC, AND UNITED DEFENSE:

11 Jarred O. Taylor, II, Esq.

12 MAYNARD, COOPER & GALE, P.C.

13 1901 Sixth Avenue North

14 Suite 2400 AmSouth/Harbert Plaza

15 Birmingham, AL 35203-2618

16 (205) 254-1061

17 Fax 9205) 254-1999

18 jttaylor@mcglaw.com

FOR WALTER INDUSTRIES AND U.S. PIPE AND FOUNDRY
COMPANY:

James A Langlais, Esq.

ALSTON & BIRD, LLP

One Atlantic Center

1201 West Peachtree Street

Atlanta, GA 30309-3424

(404) 881-7000

Fax (404) 253-8695

jlanglais@alston.com

FOR DATRON AND ANCHOR METALS:

Suzanne Wiery, Esq.

McMAHON, DeGULIS, HOFFMANN & LOMBARDI, LLP

The Caxton Building - Suite 650, 812 Huron Road

Cleveland, OH 44115-1126

(Cuyahoga Co.)

Telephone: 216-621-1312

Telecopier: 216-621-0577

wiery@mdhl.net

THE VIDEOGRAPHER:

Curt Shaw, Legal Videographer

GORE PERRY GATEWAY & LIPA REPORTING COMPANY

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1 THE VIDEOGRAPHER: We're on the record at
2 8:09 A.M. Today's date is September 1st, 2004. We're
3 at the offices of Husch Eppenberger. The address is
4 190 Carondelet Plaza, Clayton, Missouri. My name is
5 Curt Shaw, legal videographer, along with Jerry
6 Jordan, Certified Court Reporter, here today to
7 continue to deposition of William B. Papageorge, taken
8 in the case of Solutia, et al., vs. McWane, et al.,
9 currently pending in the Northern District of Alabama,
10 Cause Number CV-03-BWG-1345-E. At this time, would
11 counsel please re-identify themselves for the record.

12 MS. LAVEY: Wendy Lavey, with Squire,
13 Sanders & Dempsey, representing Mead Westvaco.

14 MR. LANGLAIS: Jim Langlais, with Alston &
15 Bird, representing Walter Industries and United States
16 Pipe & Foundry.

17 MS. O'NEAL: Lynne O'Neal, Leitman, Siegal &
18 Payne, representing Phelps Dodge.

19 MS. MYERS: Stacey Myers, Resolution Law
20 Group, representing Southern Tool, Inc.

21 MS. SMITH: Lynette Smith, Troutman &
22 Sanders, representing Scientific-Atlanta, Inc.

23 MR. TAYLOR: Jarred Taylor, with Maynard,
24 Cooper & Gale, representing McWane, FMC, and United
25 Defense.

1 MR. WETMORE: Mike Wetmore of Husch
2 Eppenberger. We represent the Plaintiffs.

3 MS. LAVEY: Would the people on the phone,
4 please, introduce themselves?

5 MS. PILAT: Karen Pilat, here on behalf of
6 Valley Steel.

7 MS. EHINGER: Julie Ehinger, Ampass
8 Industries and Lee Brass.

9 MS. BISWAS: Raakhee Biswas, DII Industries.

10 MS. WEARY: Suzanne Wiery, for Datron.

11 EXAMINATION (CONTINUED)

12 BY MS. LAVEY:

13 Q. Good morning, Mr. Papageorge.

14 A. Good morning.

15 Q. I want to pick up where we left off
16 yesterday. We were talking about an expansion project
17 at Anniston in 1969. I'm going to hand you what we
18 marked yesterday as Exhibit Number 19. No, I'm sorry,
19 Exhibit 17. Thank you. Before talking specifically
20 about this document, do you recall new loading docks
21 being put in as a part of that project in 1969?

22 A. Yes.

23 Q. Okay, do you recall if the new loading docks
24 were covered, they were under roof?

25 A. As best as I can recall, some of them were

1 covered, and yet there were extensions without any
2 roof covering.

3 Q. Before the new loading dock was put in with
4 some roof covering, was the prior method of loading
5 not undercover?

6 A. That is correct.

7 Q. So the rainwater could directly hit that
8 area and run off wherever the water would run off;
9 correct?

10 A. Correct.

11 Q. Do you remember, as part of this expansion
12 project in 1969, the request to pave Parkwin Street?

13 A. I do not.

14 Q. Do you remember whether Parkwin Street was
15 paved at the time you were a plant manager?

16 A. I do not. I--(Shakes head in negative
17 manner.)

18 Q. We were talking about the chlorination units
19 as part of the Aroclor facility some yesterday. Do
20 you remember the installation of demisters on the
21 chlorinator units as part of the 1969 project?

22 A. I remember discussions in which demisters
23 were reviewed and explained. I personally do not
24 remember seeing the installation, itself.

25 Q. You don't know whether demisters were put

1 in?

2 A. Oh, demisters were there when I'd visit the
3 site. I don't remember the procedure used to install
4 them and when they started using them.

5 Q. Do you know what the purpose was for the
6 demisters?

7 A. Well, the idea of a demister is to capture
8 any vapor or droplets of moisture which, in this case,
9 might contain chlorine or hydrogen chloride.

10 Q. Is that what's meant by entrainment?

11 MR. WETMORE: I'm sorry, is what is meant by
12 entrainment?

13 BY MS. LAVEY:

14 Q. (Continuing) The description of vapor or
15 moisture that you are trying to remove. Let me
16 rephrase the question. What do you--what is
17 entrainment in the--in that context?

18 A. It's the presence of moisture in a gas
19 stream. I don't know what else to say.

20 Q. Can entrainment also be the presence of
21 solid particles in a, in a gas stream?

22 A. I've never personally been aware of the use
23 of the expression "entrainment" as it applied to
24 particulate matter.

25 Q. Do you know how the removal of vapor or

1 moisture from a gas stream was handled prior to the
2 installation of demisters at the chlorinator units?

3 A. I don't remember.

4 Q. Do you remember if any portion of the
5 Aroclor facility was dismantled as part of the 1969
6 project?

7 A. I associate dismantling with the removal of
8 pieces of equipment and the associated piping. There,
9 there was some alteration, particularly of piping, to
10 accommodate the existence of an addition.

11 Q. Can you describe that alteration a little
12 bit more?

13 A. I don't recall the detail. It's a matter of
14 combining the, the pipelines from the new unit and
15 pipelines from the old to enter the storage tanks and
16 the drumming facilities. I don't know how else to
17 explain it.

18 Q. You had said yesterday that as far as you
19 recalled, the existing units were still in place but
20 there was also the new units along next to it?

21 A. That is correct.

22 Q. Is that correct? Okay. If you could turn
23 to what is in Exhibit 17 on page--let's see, page 9 of
24 12, which will have a DSW marking of 577140, and I
25 would like to direct your attention down to 135,

1 "Physical appearance at Anniston," the first paragraph
2 states, "Consolidation of chlorination and
3 distillation controls in a new control room will allow
4 us to dismantle the existing control rooms. The west
5 section of Building 27 will be dismantled to provide
6 space for the new solid still."

7 Reviewing that paragraph, do you know if the
8 dismantling that they are referring to is limited to
9 the control rooms?

10 A. That's what this, this paragraph pertains
11 to.

12 Q. What was Building 27, if you recall?

13 A. I don't remember.

14 Q. Do you know if the old, what we refer to as
15 the old part of the Aroclor facility and the new part,
16 did they continue to operate together until Aroclor
17 production ceased?

18 A. Yes.

19 Q. Do you recall the names of any individuals
20 who were responsible for the expansion project in
21 installations in 1969?

22 A. I do not.

23 Q. When you said that there was some alteration
24 of the piping in order to have the old and the new
25 running together, was any of that piping removed? Any

1 segments of piping removed?

2 A. When the piping is altered, what this
3 implies is that when it used to go from point A to
4 point B, we wanted now to go to point A to point C,
5 and if that piece fits, it's just moved as is. If
6 there is a problem with the fit, a new piece of pipe
7 will be, in essence, cut to size to fit and accomplish
8 the new end point.

9 Q. Do you recall there being any, any piping or
10 other type of equipment that was taken down and needed
11 to be disposed in some manner?

12 A. I do not remember that.

13 Q. Do you remember if the control room was, in
14 fact, dismantled?

15 A. Yes, the old control room, yes.

16 Q. And do you know where that debris from that
17 demolition was taken?

18 A. I do not.

19 Q. Did the addition of the new tank farm that
20 was put in in 1969 change the way in which the Aroclor
21 product was stored or prepared for shipment?

22 A. It did not change the way, other than the,
23 the location changed and there were new tanks compared
24 old tanks. Other than those changes, the handling of
25 the material remained very similar.

1 Q. Were the--when the new tank farm was put in,
2 were the old tanks taken out of service?

3 A. I don't remember that detail.

4 Q. Do you have any recollection of tanks being
5 crossed or taken, removed from the site?

6 A. I don't recall any such activity.

7 Q. One of the items we discussed yesterday as
8 part of the work in 1969 was a new warehouse. Do you
9 recall that?

10 A. Yes.

11 Q. What was being stored in the new warehouse?

12 A. Oh, I do not recall specific items that were
13 warehoused, but it served as a general, let's call it
14 gathering point for incoming materials used in the
15 manufacturing process, and it was also a place to
16 distribute that material to the user as needed, so it
17 was, it was an active operation, an in-and-out type of
18 thing.

19 Q. What became--was there previously--there was
20 an old warehouse prior to that; correct?

21 A. Yes.

22 Q. What became of the old warehouse?

23 A. It was still in use. It's just that the
24 expanded production program required more material to
25 be available, so it required more storage space;

1 therefore, it resulted in an additional warehouse.

2 Q. Do you recall the approximate annual
3 production levels after the expansion program was
4 instituted in 1969 of Aroclor product?

5 A. Whew, I, I don't remember the numbers, no.

6 Q. Do you remember any annual production
7 numbers, roughly, over the time that you were there as
8 plant manager?

9 A. Extremely roughly. As I--the numbers in my
10 mind at the moment that--are not based on solid
11 information. I recall numbers like 30 million pounds,
12 as an example, compared to potential capacity to
13 produce 50 million. Those kinds of numbers I do
14 recall, but I don't remember if they actually were
15 achieved or whether they are truly as accurate as I
16 recall them.

17 Q. So the Aroclor expansion in 1969, much of
18 that, as you recall, was producing more up to the full
19 capacity of the existing Aroclor facility to a large
20 extent?

21 A. I don't know if it's a large extent, but to
22 a reasonable extent, some of the activity was
23 attributed to that, yes.

24 Q. Was the overall capacity of the Aroclor
25 facility increased as a result of what's referred to

1 as the expansion project?

2 A. The ability to produce more was made
3 available. I don't recall if we ever achieved that
4 point.

5 Q. Can you describe the new flaking and bagging
6 equipment that was installed in 1969?

7 A. I don't know how to describe it. It's--

8 Q. What piece of equipment does that entail?

9 A. Well, there were several pieces. There was
10 the unit, for example, that, as I recall, it amounted
11 to a, a rolling metal device that was immersed in the
12 liquid and that liquid would solidify because that
13 device was cooled, and then on--at some point on its
14 rotation, there would be a device to shave off the
15 flakes. That flake material was then conveyed to a
16 device that was used to fill bags, or fill fiber drums
17 of material.

18 Q. The, the new flaking equipment was inside
19 the new warehouse; correct?

20 A. Yes.

21 Q. Where was it located prior to that? The
22 flaking operation, I should say, not the new flaking
23 equipment.

24 A. I don't know how to describe it. There was
25 a sheltered area near the older facility, and as I

1 recall, the equipment at that time occupied less
2 space, also. It was a smaller facility.

3 Q. When you say it was a sheltered area, what
4 do you mean by "sheltered"?

5 A. A roof, and something like, maybe, three
6 sides with an open area to allow--

7 Q. Sort of like a lean-to?

8 A. I'm sorry.

9 Q. Kind of like a lean-to?

10 A. Well, if--yeah, if we use the word "lean-to"
11 to describe the same kind of facility, yes.

12 Q. A three-sided enclosure and a roof?

13 A. Yes.

14 Q. And the flaking operations would take place
15 entirely inside that three-sided enclosure?

16 A. Yes.

17 Q. Were there conveyors associated with the
18 flaking equipment prior to the new installation?

19 A. There was, there was a conveyor that
20 conveyed the flakes from the solid material former
21 over to a point where it could be introduced into bags
22 or drums; packages, in other words.

23 Q. Was the packaging in the same three-sided
24 enclosure, with the drums and the bags?

25 A. Yes, as best I remember, mm-hmm.

1 Q. So the conveyor system did not exit the
2 three-sided enclosure and go elsewhere?

3 A. No.

4 Q. What products were flaked?

5 A. They were the Aroclors, which includes some
6 biphenyls and most of the terphenyls, chlorinated
7 terphenyls, so for the biphenyls, it would be a
8 material like Aroclor 1268, and to a very small
9 degree, Aroclor 1262, and as best I recall, it
10 included just about all of the chlorinated terphenyls,
11 5460, and so on.

12 Q. Is that because the chlorinated terphenyls
13 are, are solid at room temperature, and not all the
14 biphenyls are?

15 A. That's correct.

16 Q. So any of the biphenyls that would be solid
17 at room temperature would be flaked, as well?

18 A. That's right.

19 Q. And sold in that, that flaked constituent--
20 that's not the right word. The solid Aroclors were
21 sold in that flaked state; is that correct?

22 A. Yes.

23 Q. Is there any other way to package solid
24 Aroclors?

25 A. I don't understand that. You package it by

1 putting it in a container that will withstand the
2 shipping process.

3 Q. But solid Aroclors don't come in another
4 form other than as flaked?

5 A. I hesitate because some of the forms were
6 not flaked so much as almost little beads, as though
7 they were crushed, but my memory doesn't help me
8 recall how that form was achieved.

9 Q. But it would not have been done through the
10 flaking process, as you recall?

11 A. It would have to follow the flaking process.
12 You flake it and then break up the flakes into little
13 beads or particles.

14 Q. But you don't recall what that operation
15 was?

16 A. I don't recall the--I don't visualize,
17 today, the system that existed to do that. It wasn't
18 used very much. It was sort of a, an afterthought
19 that some customers wanted a different form and they
20 would prepare that material.

21 Q. Was there a dust collection system of any
22 kind associated with the flaking process?

23 A. I don't recall any, no.

24 Q. With the new flaking system, is that--in the
25 warehouse, is that all taking place on one level? Is

1 this a multi-story building?

2 A. What was the beginning?

3 Q. The flaking, the new flaking system, was
4 that taking place on one level in a warehouse, or is
5 that a multi-floored process area?

6 A. As best as I can recall, it was a, a
7 single-level activity.

8 Q. You were describing the piece of equipment
9 that goes around, causing the flaking. Is that called
10 a flaker drum?

11 A. That is an appropriate description.

12 Q. What would--was there anything below the
13 flaker drum, beneath it, or did the conveyor run right
14 under the drum?

15 A. The conveyor ran under the drum, would catch
16 the flakes as they came off the drum.

17 Q. Do you know what the flaker drum was made
18 out of?

19 A. I, I do not. It's a metal drum is all I
20 know.

21 MS. LAVEY: I'll ask the court reporter to
22 mark this document as Exhibit 20? 21. Sorry.

23 (Defendant's Exhibit 21
24 marked for
25 identification.)

1 MS. LAVEY:

2 Q. After he's marked it, Mr. Papageorge, I'll
3 ask you to take a look at it and ask you a few
4 questions. For the record, this is Bates stamped
5 number DSW 392464 through DSW 392465.

6 (Witness peruses said
7 document.)

8 A. I have read it.

9 Q. Okay, do you recall generally, as plant
10 manager, receiving these progress reports from Central
11 Engineering Department during the course of the
12 Aroclor expansion project?

13 A. I'm sorry--

14 Q. Do you recall receiving these progress
15 reports from Central Engineering Department during the
16 Aroclor expansion project?

17 A. I recall receiving reports of this type.

18 Q. Okay.

19 A. I don't, I don't personally remember the
20 individual reports and the details described in them.

21 Q. Did you recognize this particular progress
22 report dated March 17, 1969?

23 A. Do I recognize it at this moment?

24 Q. Yes, sir.

25 A. Not specifically, no.

1 Q. But your name is on the first page as being
2 a recipient; is that correct?

3 A. That is correct.

4 Q. The person who signed this document's name
5 at the last--second page is R. C. Herman. Who is
6 that?

7 A. I don't remember him.

8 Q. I want to direct your attention just above
9 the signature line where it says, "Number 1, dust
10 collection system."

11 A. I see it.

12 Q. Okay. When you review that paragraph, does
13 that refresh your recollection as to a dust collection
14 system or where the system is located?

15 A. I do not remember that.

16 Q. You don't recall any problems associated
17 with a dust collection system?

18 A. No, I do not.

19 Q. Under number 2, "Biphenyl temperature
20 control," you'll see the first sentence states that
21 "The steam and water control system in the flaking
22 area will be replaced by a therminal" (sic) "system."

23 A. I see it.

24 Q. Do you know what the steam and water control
25 system is referring to? In other words, what is--what

1 was the steam and water control system in the flaking
2 area?

3 A. I don't know the specifics of the flaking
4 area for the biphenyl, as distinguished from the
5 Aroclors that we talked about. That's a different
6 operation.

7 Q. The flaking of the biphenyls is separate
8 from flaking of the Aroclors?

9 A. Correct.

10 Q. Why was biphenyl being flaked?

11 A. Because at room temperature, it's a solid,
12 and that was the form that the customers wanted to see
13 it, rather than in blocks or chunks.

14 Q. So biphenyl that wasn't being used in
15 Anniston's own Aroclor facility was--could be flaked
16 and sold to others?

17 A. Correct.

18 Q. And was it shipped to other Monsanto plants
19 in that form, as well?

20 A. I'm under an impression it was, but I don't
21 recall the specifics in terms of amounts, plants, and
22 uses.

23 Q. Was the flaking system in place for the
24 biphenyl facility different in any way from the
25 flaking system in place for the Aroclor?

1 A. Owe, I'm--every system has its own
2 characteristics, but in principle, it was similar.

3 Q. It still had a flaking drum that went around
4 and the flakes came off onto a conveyor?

5 A. Yes.

6 Q. Where was the flaking taking place for the
7 biphenyls?

8 A. Ooh, I don't remember the specific spot, no.

9 Q. Do you remember if it was inside a building?

10 A. Not vividly, no, I don't remember it.

11 Q. Was that flaking area for biphenyls being
12 altered or modified as part of the 1969 expansion
13 project, do you know?

14 A. Well, it's modified as described in this
15 paragraph 2 we are looking at.

16 Q. But you are not familiar with the steam and
17 water control system specifically in connection with
18 that biphenyl flaking system; correct?

19 A. When you ask me if I'm familiar with that
20 system, you mean physically, or purpose of the system,
21 or-

22 Q. Those would both be my next questions, so I
23 suppose I should ask to be clear, do you remember
24 there being a steam and water control system at the
25 flaking area for biphenyls?

1 A. Not in detail, no, but many processes have
2 those kinds of systems because they need cooling by
3 the water and heating by the steam.

4 Q. The sentence indicates that the steam and
5 water control system was going to be replaced by a
6 therminal system. Do you know what the therminal
7 system was?

8 A. First of all, that Therminol is misspelled.
9 It should be capital "T" and an -o-l.

10 Q. I wasn't sure if it was just a different
11 word, I didn't know, or if it was supposed to be
12 Monsanto's Therminol.

13 A. Yes.

14 Q. Okay.

15 A. This is the fire-resistant heat transfer
16 fluid that contains chlorinated biphenyls.

17 Q. So how was the Therminol system, then,
18 controlling the temperature for the flaking unit?

19 A. Instead of creating steam by exposing it to,
20 let's say, a gas flame or an electric coil, the steam
21 is generated by heating water using coils that contain
22 heated Therminol. The Therminol is available some
23 distance away, not too far, because it will cool too
24 much by the time it gets to where you need it, and
25 that's the way heat is transferred, from a gas flame

1 with a fire-resistant fluid over to a, a water source
2 that can be made into steam.

3 Q. Was Therminol used in a similar fashion for
4 heat transfer elsewhere in the plant?

5 A. Well, it's a very common procedure where you
6 are trying to avoid the presence of a flame that could
7 cause fire and explosion in undesirable places, you,
8 you tolerate it over in a, what is perceived to be a
9 safer place, transfer its heat using the Therminol.

10 Q. Do you recall specifically the areas of
11 plant or the operations within the plant where
12 Therminol was being used as a heat transfer fluid?

13 A. Not specifically, no.

14 Q. Do you remember there being a heat transfer
15 unit with a PCB-containing fluid at the HB-40
16 manufacturing area?

17 A. I do not.

18 Q. The document that we were looking at states
19 that "This system"--meaning the new Therminol system--
20 "is being designed and scheduled for completion on
21 March 26, 1969." Do you see that? Still under number
22 2.

23 A. Yes, I see that.

24 Q. Do you know if, in fact, the system was
25 completed and put into operation?

1 A. No, I don't remember that specific. It was
2 completed in '69, but I don't know about March--

3 Q. Not whether--I wasn't asking so much about
4 the date, but at some point in time, it was completed?

5 A. Yes.

6 Q. In 1969?

7 A. Yes.

8 Q. I'm going to hand you another document.
9 I'll ask the court reporter to mark that as Exhibit
10 22--

11 (Defendant's Exhibit 22
12 marked for
13 identification.)

14 BY MS. LAVEY:

15 Q. --and ask you to review that for a moment,
16 Mr. Papageorge.

17 (Witness peruses said
18 document.)

19 A. I have read the exhibit.

20 Q. I don't see your name anywhere on this
21 document, Mr. Papageorge, but do you have any
22 recollection of receiving it?

23 A. I do not.

24 Q. Do you know what near-miss accident is being
25 referred to on this memorandum?

1 A. I do not.

2 Q. Before we go back to Exhibit 22, I'm going
3 to mark another Exhibit as Exhibit 23 and ask you to
4 review this document.

5 (Defendant's Exhibit 23
6 marked for
7 identification.)

8 MS. LAVEY: For the record, Exhibit 23 is
9 Bates number DSW 577633 through DSW 5777642, and while
10 Mr. Papageorge is reviewing that, I'll also note that
11 Exhibit 22 was DSW 577631 through DSW 577632.

12 (Witness continues to
13 peruse said documents.)

14 A. I have scanned the exhibit.

15 BY MS. LAVEY:

16 Q. Do you recall ever receiving a copy of this
17 near-miss accident investigation report?

18 A. I do not.

19 Q. Do you recall the events that are described
20 in this report?

21 A. I do not recall.

22 Q. In April of 1969, you were still plant
23 manager, were you not?

24 A. I was.

25 Q. Having reviewed this document, does that

1 refresh your recollection as to what the flaker
2 processing equipment looked like in the new warehouse?

3 A. Well, I was under the impression, definite
4 impression, that there was a conveyor involved. I do
5 not see any reference, here, to a conveyor. There are
6 the units referred to as hoppers and chutes that
7 direct the flake material to some end point. I, I
8 don't know what happens after the hopper, the final
9 hopper.

10 Q. And you are looking, as I can tell from over
11 here, you are looking at the sketch of Appendix A
12 sketch, or--yeah, sketch number 1?

13 A. I'm sorry?

14 Q. I was just trying to identify which sketch
15 you were looking at in the document.

16 A. Oh, sketch number 1. You are right.

17 Q. Sketch number 1? Okay.

18 A. Yes.

19 Q. And on sketch number 1, you see that both
20 the biphenyl and Aroclor hoppers are listed there?

21 A. Yes.

22 Q. So both the flakers for Aroclor and biphenyl
23 were relocated and put into the new warehouse,--

24 A. Yes.

25 Q. --correct? And also the flaker system

1 covered at least two levels, if not three levels
2 within this building, did it not?

3 A. Yeah, the system, previously, you asked
4 where is the flaker; it's on one level.

5 Q. The system took place over several floors,
6 two or three floors?

7 A. Yes.

8 Q. If I could direct your attention on page 5,
9 which is DSW 577637--

10 A. I have page 5.

11 Q. Okay. Under "Committee Observations," I
12 want to direct you to paragraph number 4.

13 A. At the bottom of the page?

14 Q. Yes, sir.

15 A. Mm-hmm.

16 Q. Okay. Paragraph 4 begins with a statement
17 that says, "Housekeeping in the area is, at best,
18 poor." Would you agree with that opinion as of 1969?

19 A. I don't recall ever being asked that
20 question then. I don't know how, how to add to that.
21 That is presumably the opinion of the investigating
22 committee.

23 Q. Well, do you recall the interior of this
24 structure, either while you were plant manager or
25 during your return visit?

1 A. I, I recall that in a, in a vague sort of
2 way. I don't recall ever being there where I saw
3 something that deserved the word "poor" in my
4 observation. I don't recall that.

5 Q. The next sentence says, "Contributing to
6 this problem are: Number 1, an ineffective dust
7 collection system which continuously spills product on
8 the second-level piping and the ground-level floor."
9 Do you recall ever seeing product spilled on the
10 second-level piping and the ground-level floor?

11 A. I do not.

12 Q. Having reviewed this document somewhat, do
13 you now recall the dust collection system associated
14 with this process?

15 A. I do not.

16 Q. Under the same paragraph, it goes on to
17 refer to "flaker doors which have become broken,
18 allowing product to spill on the floor and vapors to
19 escape and cover all process equipment on the third
20 floor." Do you have any recollection, then, of seeing
21 product spilled on the third floor and covering
22 process equipment?

23 A. I do not.

24 Q. Do you know what is being referred to when
25 it says "vapors to escape"?

1 A. I have to guess as to which particular piece
2 of equipment they're referring to.

3 Q. What vapors could possibly be escaping in
4 connection with the flaker process in the warehouse?

5 A. It would have to be the material they are
6 flaking, and it would involve a source of heat,
7 whether a flake fell on a hot pipe, or the vapor came
8 from the molten material headed for the flaker, it
9 could be different sources of vapor that might not
10 have been captured.

11 Q. When it states that "Vapors escape and cover
12 all process equipment," would you read that to mean
13 solid particles?

14 MR. WETMORE: Object to the form. I mean,
15 it says what it says.

16 A. I, I have difficulty describing--there are
17 many surfaces in an area of this type. Some of them
18 are room temperature, let's call it. If the vapors
19 hit that room temperature surface, they could start
20 forming a deposit, a solid deposit that may look like
21 a dust or eventually, it becomes a coating. The dust
22 particles gather into a coating. If that surface on
23 which the vapor is exposed is hot, at best, that vapor
24 will show up as a, as a film of liquid, and stay a
25 liquid as long as that surface is hot, so I don't

1 quite know how to answer your question.

2 Q. Okay. Well, I realize you didn't write it,
3 and that's all right. Do you know--do you recall ever
4 seeing any air emissions coming from this building?

5 A. No.

6 Q. Do you recall emissions into the atmosphere
7 from the previous flaker operations before the new
8 warehouse was built?

9 A. I do not.

10 Q. For either biphenyl or Aroclor?

11 A. That is correct.

12 Q. At the top of this page that we've been
13 looking at, the very first--actually, I want to direct
14 you to the second sentence and ask you a question.
15 The second sentence states, "This material was
16 insulated from the chute by a layer of biphenyl dust."
17 Do you see that sentence?

18 A. I do.

19 Q. Do you know what is meant by "biphenyl
20 dust"?

21 A. I can't tell you what the authors meant, but
22 I can tell you that when I hear, when I am told
23 biphenyl dust, it tells me that this is the solid
24 biphenyl at room temperature that is--that has ended
25 up as a dust, which means very fine little particles,

1 and one observing a surface sees this dust like you
2 might see talcum powder sprinkled or in different
3 concentration at different locations throughout the
4 area.

5 Q. Did you ever see what you are describing as
6 biphenyl dust inside this structure?

7 A. I don't remember seeing that type of
8 situation. I do recall little, small spots that were
9 part of the operation that the operators would
10 eventually sweep up and collect, but the impression I
11 get from reading this document, it was more widespread
12 than that. I didn't--I'd never seen that.

13 Q. When you refer to small spots that the
14 operators would sweep up, where would the sweepings be
15 taken?

16 A. Oh, I don't know. Again, it depends on what
17 activity took place on that shift. Did a bag break on
18 them as, as they were handling it? Did the stuff
19 spill in a spot? Did something go wrong with the
20 whole conveying system where some of the material got
21 off the conveyor and started spilling in another spot?
22 But they were incidences that occurred that were
23 observed as being abnormal. That's not normal, but
24 eventually, they get around to cleaning it up.

25 Q. Do you recall any incidence where the

1 conveyor system broke down and the material was
2 directed elsewhere?

3 A. No, I don't.

4 MS. LAVEY: We've been going about an hour.
5 Why don't we take a quick break?

6 MR. WETMORE: That would be fine.

7 THE VIDEOGRAPHER: We're off the record at
8 9:08 A.M.

9 (Recess.)

10 THE VIDEOGRAPHER: We're back on the record
11 at 9:16 A.M.

12 BY MS. LAVEY:

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

15 MS. LAVEY: I'm not going to ask you
16 questions about this particular document other than
17 whether it was in place at the time indicated as far
18 as you can tell, at least that changes how long you
19 want to look through it, but--

20 (Defendant's Exhibit 24

21 marked for

22 identification.)

23 BY MS. LAVEY:

24 Q. The document that we've handed you is titled
25 "Standard Operating Instruction for Drumming and

1 Flaking," dated October 1969. The only question I
2 want to ask you, sir, is whether or not this document
3 would be an accurate description of the drumming and
4 flaking operation as of October 1969.

5 (Witness peruses said
6 document.)

7 MR. WETMORE: Well, I think to answer the
8 question, he's going to have to look through it.

9 BY MS. LAVEY:

10 Q. (Continuing) Go ahead and look through it.

11 (Witness peruses
12 said document.)

13 A. I have difficulty on how to determine
14 accuracy.

15 Q. Let me rephrase the question.

16 A. Mm-hmm.

17 Q. You see that this document is dated October
18 1969; correct?

19 A. Correct.

20 Q. On the first page?

21 A. Yes.

22 Q. Are the standard operating instructions in
23 place to allow the operators to run their particular
24 piece of equipment on--in a consistent manner?

25 A. That's the intent.

1 Q. So the idea of a standard operating
2 instruction is that they should be utilized and
3 followed by the particular operating unit to which it
4 applies; correct?

5 A. By the units, yes.

6 Q. Is there any reason to believe that the
7 operators would not have followed the standard
8 operating instruction for drumming and flaking?

9 A. I have no reason to believe they would not
10 follow.

11 Q. You can put that one aside. Another
12 operating instruction, Pyranol, which we'll mark as
13 Exhibit 25.

14 (Defendant's Exhibit 25
15 marked for
16 identification.)

17 BY MS. LAVEY:

18 Q. Exhibit 25 is DSW 543057 through DSW 543105,
19 and while Mr. Papageorge George is looking that over,
20 the previous exhibit, Exhibit 24, was DSW 542924
21 through DSW 542975.

22 (Witness peruses said
23 document.)

24 A. In scanning this exhibit, I find it very
25 typical of the kinds of instructions available to the

1 operating personnel in the Anniston plant for all of
2 the plant processes. This is a typical example.

3 Q. Okay, and is there any reason to believe
4 that the process as described in this document would
5 not accurately reflect the process as it, in fact,
6 existed in 1967?

7 A. No, but there is no reason to believe that
8 it does not.

9 Q. You can put that one aside, Mr. Papageorge.
10 Thank you.

11 When did Aroclor production terminate at
12 Anniston?1

13 A. 1970.

14 Q. Was that all Aroclors, or did they phase out
15 different products at different times?

16 A. There was a phasing out. The chlorinated
17 biphenyls were amongst the early products
18 discontinued, and eventually, it applied also to the
19 chlorinated terphenyl Aroclors.

20 Q. Did they phase out the liquid Aroclors
21 before the solid Aroclors?

22 A. The solid Aroclors were chlorinated
23 biphenyls, were phased out very early, and then there
24 was a phaseout of some of the liquid-type
25 polychlorinated biphenyls, and eventually, the phasing

1 out included the chlorinated terphenyls.

2 Q. Did you have any involvement in the
3 dismantling of the Aroclor facility?

4 A. The only involvement that I was informed of,
5 really, was one of the status of things, and on their
6 completion, they might be, that kind of thing.

7 Q. Can you identify any personnel who were--who
8 would be involved and knowledgeable about the
9 dismantling?

10 A. No, I cannot.

11 Q. Was Mr. Jesse the plant manager at the time
12 the Aroclor facility was dismantled?

13 A. Yes.

14 Q. Do you recall the chlorine plant being
15 dismantled earlier? I think 1969, perhaps?

16 A. Yes.

17 Q. Okay, who was involved in the dismantling of
18 the chlorine plant?

19 A. When you say "who," you mean--

20 Q. Can you name any individuals who--

21 A. Monsanto people, or--

22 Q. Yes, sir.

23 A. Ooh: I can't recall specific individuals,
24 but they were part of the operating group that was
25 involved with the processes in the plant other than

1 the parathion-malathion team.

2 Q. Okay. Was an outside contractor used, as
3 well, as part of the dismantling of the chlorine
4 plant?

5 A. Yes.

6 Q. Do you recall who that contractor was?

7 A. No.

8 Q. Do you know if an outside contractor was
9 used for dismantling the Aroclor facility?

10 A. I do not.

11 (Defendant's Exhibit 26
12 marked for
13 identification.)

14 BY MS. LAVEY:

15 Q. We're handing you a document that we've
16 marked as Exhibit 26, Bates number DSW 150415, ask you
17 to take a moment to review it.

18 (Witness peruses said
19 document.)

20 A. I have read it.

21 Q. And your name is listed on this document as
22 a recipient, is it not?

23 A. It is.

24 Q. Do you recall receiving it?

25 A. Not really.

1 Q. Who is J. R. Savage?

2 A. Mr. Savage was located in St. Louis as a
3 member of the manu--group that followed manufacturing
4 operations.

5 Q. Did he have responsibility for the
6 dismantling of the Aroclor facility in Anniston, do
7 you know?

8 A. He was involved. I don't know the extent of
9 his involvement or responsibilities.

10 Q. What was his first name?

11 A. James.

12 Q. Do you know if Mr. Savage is still living?

13 A. I do not.

14 Q. This memo refers to, quote, "Plan to bury
15 all of--all the equipment." Do you know if equipment
16 was buried, in fact?

17 A. I do not.

18 Q. Do you know if demolished equipment was
19 sold?

20 A. I do not.

21 Q. How often was the equipment used in the
22 manufacturing of Aroclors cleaned?

23 A. I don't ever remember a frequency that was
24 established or programmed. The cleaning occurred at
25 the--based on the judgment of the supervisors of that

1 operation, and that judgment usually was based on
2 difficulties encountered in producing the amount of
3 product they had scheduled and the quality of that
4 product, so it varied as far as timing was concerned,
5 and the frequency was not great. It was rather
6 infrequent.

7 Q. How would the need to clean relate to the
8 supervisor's ability to produce the quantity of
9 product?

10 A. Well, I--there are situations in which there
11 is a cleanliness problem that results in the
12 contamination of the finished product. Instead of a,
13 let's say, a water-clear solution, you've got one
14 that's tan or brownish that's caused by a, let's call
15 it an unclean situation back somewhere in that
16 process. The supervisor then determines that he is
17 losing the ability to produce an acceptable product.
18 He's got to find the problem, shut down, clean out,
19 and get back on stream.

20 Q. Does--would his, would his personnel do that
21 clean-out, then, rather than bring in someone from
22 Maintenance or wherever?

23 A. It depends, again, on what activities are
24 involved in getting to the source. If it involves
25 using wrenches to disconnect a pipeline, you ask the

1 maintenance department to supply the pipefitter. If,
2 on the other hand, it doesn't require tools to work on
3 equipment, the operators, themselves, do what is
4 necessary, turning on the heat, or turning off the
5 heat, or flushing with water, or steam, whatever is
6 available to them.

7 Q. Since we're on day three, today, do you
8 recall the name of the superintendent for the
9 Maintenance Department?

10 A. I still can't remember.

11 Q. I thought maybe you slept on it and it came
12 to you in the middle of the night.

13 A. No.

14 Q. Okay.

15 A. Didn't work for me this time.

16 (Defendant's Exhibit 27
17 marked for
18 identification.)

19 BY MS. LAVEY:

20 Q. The court reporter is handing you what we've
21 marked as Exhibit 27. Do you recall generally, before
22 we focus on this particular document, do you recall
23 generally receiving monthly reports from the Technical
24 Services Department while you were plant manager?

25 A. Yes, that was a--the normal routine, yes.

1 Q. So whether or not you recall the specific
2 document, there's no reason to believe you would not
3 have seen this June 1968 monthly report?

4 A. That is correct.

5 Q. I'd like to direct your attention to page 11
6 of this document, and for the record, the entire
7 document is DSW 165426 through DSW 165443, and I have
8 directed Mr. Papageorge to page 11, which is DSW
9 165438.

10 (Witness peruses said
11 document.)

12 Q. (Continuing) Under the heading "Pollution
13 Control," it's up toward the top, there is a "TSD,"
14 which I assume stands for Technical Services
15 Department, "Objective F-4," entitled "Develop a plan
16 for reporting spills and other non-routine emissions
17 in the plant." Do you see where I am?

18 A. Yes.

19 Q. Okay. Do you recall, when you first arrived
20 in 1965, whether there was a written plan on reporting
21 of spills or non-routine emissions?

22 A. There was no written plan. It was
23 understood--

24 Q. How was it under--

25 A. --that that was to be done.

1 Q. --stood? I'm sorry.

2 A. Oral communication between the bosses and
3 the team members.

4 Q. Why was there a need in 1967 to develop a
5 plan for reporting spills and other non-routine
6 emissions in the plant?

7 A. I don't remember specifically, but it
8 touches on the need to improve communications, not
9 only amongst the two or three people that are close to
10 the situation, but to the rest of the plant personnel,
11 as well as the individuals located in the St. Louis
12 area, so it was really an attempt to improve
13 communications regarding this kind of situation.

14 Q. Do you recall if the manner for reporting
15 spills and other non-routine emissions changed as a
16 result of development that this is referring to, that
17 this document is referring to?

18 A. You say the manner in which it was
19 reporting? It was established, I mean it was adopted.

20 Q. Was it any different than what had been in
21 place previously?

22 A. Previously, was an oral communication.

23 Q. Okay, so this is referring to a written
24 plan?

25 A. Written plan, yes.

1 Q. Okay. What is meant by the phrase
2 "non-routine emissions"?

3 A. Well, that's a way to describe the release
4 of material into the atmosphere, analogous to the
5 release of material through a spill.

6 Q. So is it fair to say that non-routine
7 emissions did occur from time to time at the Anniston
8 plant?

9 A. Yes.

10 Q. Were those--were spills in the non-routine
11 emissions reported to you as plant manager as part of
12 this plan?

13 A. Yes.

14 Q. Do you have a general recollection of
15 approximately how many spills or non-routine emissions
16 occurred on an annual basis while you were plant
17 manager?

18 A. I have no, no number. It was, it was a rare
19 situation when the incident occurred that warranted
20 this kind of attention.

21 Q. As part of the plan, was it the--who was
22 responsible for preparing a written report about the
23 spill or the non-routine emission?

24 A. The individual was designated in the plan as
25 developed. I don't want to guess.

1 Q. Okay. Well, if I had the plan, I wouldn't
2 have to ask you these questions, but I don't have the
3 plan. We haven't seen the written plan, so I'm trying
4 to sort out who generated the reports, whether it came
5 out of the Maintenance Department, Technical Services
6 Department, the operating unit, if you recall.

7 A. It had to come out of the operating unit,
8 and according to the way the operations are managed,
9 the report would have to be--would have to involve the
10 supervisor of that operation, so it's conceivable that
11 the person who reports the incident, spill or
12 emission, very likely was the supervisor of that
13 activity.

14 Q. When the written report was prepared, who
15 was it sent to, then?

16 A. Ooh: To the management personnel in the
17 plant, like the superintendent of that operation, to
18 the maintenance person, all the representatives of the
19 activities at the plant. In the meantime, depending
20 on the perception that supervisor or individual had,
21 it could conceivably have been sent to St. Louis to
22 either an engineering person or a manufacturing
23 individual. It's the judgment of the author that
24 helped determine who should be tuned in.

25 THE VIDEOGRAPHER: Counsel, may I change

1 tape? This end tape number 1 of the deposition of
2 William B. Papageorge. We're off the record at 9:40
3 A.M.

4 MR. WETMORE: We'll take a short break.

5 (Recess.)

6 THE VIDEOGRAPHER: We're back on the record
7 at 9:44 A.M. This begins tape number 2 of the
8 deposition of William B. Papageorge.

9 BY MS. LAVEY:

10 Q. Mr. Papageorge, the plan that we referred to
11 that was developed for reporting of spills and
12 non-routine emissions, who was involved in the
13 preparation of that, the development of that plan?

14 A. The leadership in this development was with
15 the Technical Services Department. I do not recall
16 the individuals involved, but there were
17 representatives of the Safety Group, this
18 Manufacturing Production Group--

19 Q. By "Manufacturing Production Group," you
20 mean within the Technical Services Department--

21 A. No, the Production--

22 Q. --or separate?

23 A. --Group stands alone.

24 Q. Okay.

25 A. Technical Services--

1 Q. But the Safety Group is within Technical
2 Services, isn't it?

3 A. No, it's, it's a little group--

4 Q. Oh.

5 A. --that's off by itself.

6 Q. Do you remember any specific personnel
7 involved in the development of the plan?

8 A. I do not.

9 Q. Do you know if the written plan defined what
10 would constitute a reportable spill, or what would
11 constitute a non-routine emission?

12 A. I do not recall the, the wording, no.

13 Q. Do you think it was defined in the plan,
14 though? Was that guidance provided to the employees?

15 A. There again, normally, it would be. Whether
16 it is, it was in this case, I do not know.

17 Q. In your mind, as plant manager, how would
18 you distinguish between a non-routine emission and a
19 routine emission?

20 A. I can give an example of a non--a routine
21 emission would be the venting of steam from a, an
22 operation. That's routine. It's designed to do so.
23 The non-routine emission would result from a
24 situation, for example, where the pressure in the, in
25 the system got too high and the safety devices to keep

1 that pressure under control function and release the
2 material that's causing the high pressure. Those
3 would be the non-routine ones.

4 (Defendant's Exhibit 28
5 marked for
6 identification.)

7 BY MS. LAVEY:

8 Q. Handing you what has been marked as Exhibit
9 Number 28, Mr. Papageorge, you'll see it's another
10 Technical Services Department monthly report with a
11 date of September 1968. This is Bates range DSW
12 165476 through DSW 165495. Again, as we discussed
13 before, in September 1968, this is the type of monthly
14 report you would routinely receive as plant manager;
15 correct?

16 A. That is correct.

17 Q. Direct your attention to page 11 of this
18 document, Exhibit 28, which is Page DSW 165488. At
19 the bottom of that page, under the heading "Pollution
20 control,"--

21 A. I see it.

22 Q. --it states "20 air emission and spill
23 reports were filed by maintenance and operating
24 personnel during September. 10 were non-routine
25 liquid spills and 10 were unusual air emissions." Do

1 you see that?

2 A. I do.

3 Q. Would that be a typical number of reportable
4 events on a monthly basis?

5 A. I have no way of determining what is typical
6 and what isn't. There's no basis for me to make that
7 type of evaluation.

8 Q. Is there any reason to believe, at least for
9 the month of September 1968, that this is an untrue
10 statement? Too many negatives in that question. Let
11 me try again.

12 Is there any reason to doubt that, in fact,
13 ten non-routine liquid spills and ten unusual air
14 emissions occurred in September of 1968 as reported in
15 this document?

16 A. No. No, there is no reason to doubt it.

17 Q. When we talked about spills yesterday, you
18 described the use of sand and the use of rags as a
19 means for cleaning up those spills. Do you recall
20 that yesterday?

21 A. I do.

22 Q. Was sawdust used on occasion, as well?

23 A. Yes.

24 Q. How was--where did the sawdust come from?

25 A. It was purchased, delivered to the plant.

1 Q. Did it arrive by dump truck?

2 A. Yes.

3 Q. Was there a place within the plant that

4 the--that there were piles of sawdust?

5 A. I recall more than one spot.

6 Q. Where do you recall the piles were?

7 A. I associated the location with the periphery

8 of the active part of the plant.

9 Q. The overall Anniston plant or specific to
10 the biphenyl and Aroclor area?

11 A. The overall plant.

12 Q. Okay. Inside the fence line or outside the
13 fence?

14 A. Oh, inside the fence line.

15 Q. Was--were the piles of sawdust in the same
16 place as the piles of sand that were used for the
17 spills?

18 A. Not identical, but the general areas could
19 contain a pile of each, for example.

20 Q. Do you recall specifically seeing where
21 piles of sand were kept?

22 A. Yes.

23 Q. Where were they?

24 A. I don't remember the exact spot, but it was
25 kind of removed from the active area so they didn't

1 get in the way of any vehicle movements, and so on,
2 and yet reasonably close where they could be quickly
3 used for a spill, example.

4 Q. Do you remember if those piles were near the
5 entrant entrance?

6 A. The entrance was more--well, you have
7 to--there are two entrances, primarily.

8 Q. Okay.

9 A. One entrance involved the office personnel.
10 Another entrance involved the op, the opera--the work
11 force of all groups.

12 Q. Are those--what roads are those entrances
13 off?

14 A. What roads?

15 Q. You had indicated earlier, in earlier
16 testimony, that your entrance was through Clydesdale.
17 Is that one of the two entrances you are speaking of
18 now?

19 A. They both came off of Clydesdale and they're
20 parallel, entering the plant.

21 Q. And were piles located at either one of
22 those entrance areas?

23 A. No, they were closer to the operations than
24 to the parking lots and the gates where employees and
25 personnel entered.

1 Q. Were they up against the fence line?

2 A. I don't remember any that were that close to
3 the fence line, no.

4 Q. Were they near 202?

5 A. 202? No. No, 202 wasn't present when I was
6 there that I recall. At least, we didn't refer to it
7 as 202.

8 Q. Was crushed rock used on occasion to cover
9 spills on the soil?

10 A. I'm sorry?

11 Q. Crushed rock, was that used on occasion to
12 cover spills in the soil?

13 A. There was crushed limestone, if you include
14 that in your description of rock, and this was placed
15 deliberately into a--I'm going to call it a catch
16 basin, an excavation at the low end of the plant, at
17 the low end of the normal flow of strong water flow,
18 so that crushed limestone was placed to scroll, to
19 neutralize--

20 Q. You are speaking of the limestone pit,
21 correct?

22 A. Yes. That's another description of it.

23 Q. But not for purposes of taking crushed rock
24 and covering soil. That's not the kind of--

25 A. Oh, no.

1 Q. --use you are talking of?

2 A. No.

3 Q. PCBs are a very sticky substance, aren't
4 they?

5 A. The stickiness varies with the amount of
6 chlorine in the PCBs.

7 Q. Which way does it go? The higher
8 chlorinated are stickier?

9 A. Yes.

10 Q. So did handrails and stairs, steps, often
11 get sticky?

12 A. Yes, they--since it is a nuisance, it's
13 perceived to be often, but that is difficult to
14 measure also, but it's present, it was present.

15 Q. Did the handrails, and steps, and so forth,
16 need to be washed down on--

17 A. On occasion, it would be cleaned off as
18 best, without scraping down to bare metal.

19 Q. Was that a Maintenance Department
20 responsibility?

21 A. No, that's a responsibility of the operating
22 unit.

23 Q. And would detergents be used, or solvents of
24 some sort be used in order to clean off the handrails?

25 A. There were attempts at trying detergent and

1 trying different solvents, and the best device to
2 control the amount that got on stairwells, for
3 example, was a box of sand at the bottom of the stairs
4 that would in many ways take care of a good bit of the
5 contamination on the boots or shoes that the employees
6 wore. The handrail part was due primarily to the, the
7 use of dirty gloves, and the employees were encouraged
8 to once those gloves got to that point, get a new
9 pair, because they'd go up with those dirty gloves,
10 grabbing the handrail, and dirtying it and extending
11 this unwelcome situation.

12 Q. So the sandboxes that were at the base of
13 the stairs were intended for the workers to step into
14 so that their shoes would be covered in the sand and
15 they would not then track PCB material?

16 A. That was the intent, yes.

17 Q. And that was a longstanding practice, wasn't
18 it, to have both sandboxes at the stairs?

19 A. Well, it was there when I arrived. I don't
20 know when they started it.

21 (Defendant's Exhibit 29

22 marked for

23 identification.)

24 BY MS. LAVEY:

25 Q. The court reporter is handing you a document

1 is that we have marked as Exhibit Number 29, DSW
2 348567 through DSW 348568. Take a moment to review
3 it, please.

4 (Witness peruses said
5 DOCUMENT.)

6 A. I have read it.

7 Q. Do you recall preparing this memorandum,
8 Mr. Papageorge?

9 A. I recall the visit that I made to the plant
10 which resulted in this memorandum.

11 Q. This was a visit that you made on July 31st,
12 1970?

13 A. Yes.

14 Q. What was the purpose of that visit?

15 A. The purpose for it was primarily, from my
16 vantage point, was to get an idea of how active the
17 plant personnel was in controlling loss of PCBs to the
18 environment, and it was also an opportunity for the
19 plant personnel to share with me their activities,
20 both successes and frustrations, and to seek help for
21 me to get involved in influencing other management,
22 higher management, to provide the resources that the
23 plant needed, whether it be money, or people, or
24 equipment, so it was an opportunity for both the plant
25 and, and me to communicate and be brought up-to-date.

1 Q. Do you recall any specific frustrations, to
2 use your term, that the plant communicated to you?

3 A. I do remember some frustrations, but not the
4 specifics. At that point in time, I just don't
5 remember specifics any longer.

6 Q. Do you remember generally what the
7 frustrations were?

8 A. Well, in a general way, for example, there
9 were some frustrations initially on getting the
10 analytical equipment for the laboratory, and there
11 were frustrations on getting quick approval for those
12 facilities to be separated from the existing
13 laboratory so that cross-contamination would not
14 occur. All of those were eventually resolved, but
15 they, they would express those, how hard they were
16 working at certain activities of that nature.

17 Q. Was it the frustration about the lab
18 equipment because they didn't have the type of
19 equipment that allowed them to do the level of
20 analytical analysis that they needed to do?

21 A. They did not have the equipment required in
22 the extremely sophisticated analysis which was also
23 evolving, of PCBs in different samples, all kinds of
24 samples, and that equipment, in many ways, had the
25 virtually be special ordered, and the initial versions

1 of that equipment came from Europe.

2 Q. Was there an outside lab that was used on
3 occasion for PCB analysis that you recall?

4 A. Not an outside lab. There was a lab in
5 St. Louis that had acquired this equipment and
6 expertise that would be doing what amounts to routine
7 sampling, which research departments don't normally do
8 for plants, but in this case, they had to until the
9 plant was capable of doing it.

10 Q. Turning back to Exhibit 29, in the second
11 paragraph, it states or you state, "I was, however,
12 disappointed that we are still using considerable
13 quantities of sand to keep the floors in the
14 department partially dry." Why were you disappointed?

15 A. My emphasis was one on don't let it get away
16 from you in the first place. The fact that you are
17 using this sand to pick it up means you don't really
18 have a good program for controlling it, not correcting
19 it. There's a difference. Once it gets away from
20 you, it creates a very difficult approach to cleanup
21 than preventing it from existing in the first place in
22 areas where it doesn't belong.

23 Q. Had you previously instructed the plant to
24 make some progress on having less of a need for these
25 sandboxes?

1 A. Yes.

2 Q. Okay, so when you arrived in July 1970, you
3 didn't see that progress being made?

4 A. As I recall, the intent to control these
5 spillages was instituted while I was still there in
6 late '69, and I had hoped that by six months later in
7 the following year, that it would be further along
8 than they were.

9 Q. By "further along," do you mean in terms of
10 the amount of spill material on the floors?

11 A. Yes, that they controlled it much better
12 than, than it appeared to be.

13 Q. Was any action taken in response to your
14 disappointment?

15 A. There was action taken. I don't know if
16 it's in response to my letter or not, but that was
17 part of the overall plan to start with. For example,
18 the installation of sampling points that lended
19 themselves to capturing any spills that dripped out of
20 the, the valve that you used to get the sample, or
21 there were also attempts made to put areas with
22 curbing so if any spills did occur, the curbing would
23 control the extent of that spillage, where did it go
24 and how difficult was it to clean up.

25 Q. The drip pans below the spigots and such,

1 those didn't come into place until sometime during
2 your tenure as plant manager; correct?

3 A. In some places, and I wanted to extend it.
4 That was the purpose of the program.

5 Q. And the curbing, there were areas during
6 your tenure as plant manager that did not have curbing
7 to contain spills; is that correct?

8 A. That is correct.

9 Q. Where were the areas that did not have
10 curbing while you were plant manager? Or maybe it's
11 easier to ask it the other way: Areas that did have
12 curbing.

13 A. Curbing was not the common feature in the
14 Sixties. I have forgotten just when in the Seventies
15 there was curbing installed in the manufacturing area,
16 for example, so that the--any spillage that occurred
17 didn't flow down this storm water flow pattern. In
18 fact, underneath the major PCB-producing facility,
19 eventually, a sump was installed and the curbing was
20 also in place so that if any hosing of the floor took
21 place for other kinds of dirt, and dust, and what have
22 you, that that water will not mingle with the liquid
23 loss that occurred during manufacturing, and that
24 liquid loss in that sump would be salvaged to pump it
25 out, put it in drums, and eventually reintroduce it

1 into the process to recover the useful or acceptable
2 part.

3 Q. Do you recall when the sump was put in?

4 A. As best I can tell, it was in the Seventies.

5 Q. After you left as plant manager?

6 A. After I left, yes.

7 Q. Was there curbing in the biphenyl production
8 area when you left in 1969?

9 A. Not when I left, no.

10 Q. I'm still a little confused about the
11 sandboxes at the bottoms of the stairs. Was the sand
12 in those boxes also used to spread around the floor on
13 spills to dry them up or to cover them?

14 A. In some cases, yes, if the spill was more
15 than just a stain on the floor.

16 Q. Do those sandboxes at the base of the stairs
17 have to be emptied periodically?

18 A. Yes.

19 Q. Whose job is it, was it to empty the
20 sandboxes?

21 A. It was usually the junior member in the
22 production unit who was given the task of tidying
23 things up and--

24 Q. So the general housekeeping that included
25 things like the sandboxes fell within the production

1 responsibility, again not the Maintenance Department?

2 A. Correct.

3 Q. And the sand that was put in those boxes
4 came from the same pile of sand that we talked about
5 yesterday?

6 A. Yes.

7 Q. On Exhibit 29, the document that you have in
8 front of me, the last paragraph on the first page
9 states, "I have concerns regarding the containment of
10 Aroclors from the vault storage, drumming, tank car,
11 and tank truck loading areas." Do you see that--

12 A. I do.

13 Q. --sentence?

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

15 Q. What concerns did you have?

16 A. As best I recall is the fact that I could
17 see areas in these particular activities that looked
18 like there were some spills, and that went against our
19 intent, to prevent escape into the environment even
20 though the environment was right under your feet.

21 Q. The next sentence states that "The crushed
22 rock areas should be replaced the concrete pavement."
23 That's the first part of that sentence. What areas
24 were crushed rock that you were asking, suggesting
25 should be replaced with concrete pavement?

1 A. Some of the areas were--an example, where
2 tank cars were located, were away from the areas that
3 had poured concrete pavements on each side of the
4 track. Further down the track, there would be some
5 loading done, and the tracks in that area did not have
6 the concrete pavement. They just put some crushed
7 rock on each side of the rails, and that's the area
8 where any spillage would show in that crushed rock,
9 and is difficult to clean up.

10 Q. Where would the drainage be from that
11 location if it were to rain on any spills in that
12 crushed rock area?

13 A. It would, it would follow the natural storm
14 water, the existing natural storm water flow, which
15 was really at the, what I call the bottom of the
16 plant, instead of up the hillside.

17 Q. Was that a--was that the 11th Street ditch?

18 A. I'm sorry?

19 Q. The area that received in a storm water
20 flow, was that, was that a ditch?

21 A. It included areas that I would call
22 naturally formed drainage ditches.

23 Q. Where did those ditches lead, ultimately?

24 A. Ultimately, they flowed into a creek called
25 Snow, Snow Creek.

1 Q. On Exhibit 29, when we--the sentence we were
2 looking at, "The crushed rock area should be replaced
3 with concrete pavement, curbing and drainage to the
4 interceptor basin," the complete sentence we were
5 looking at previously. Do you know whether those
6 steps were, in fact, taken at some later point in
7 time?

8 A. Yes. Eventually, yes.

9 Q. Do you know when?

10 A. Late '70, early '71 era, somewhere in there.

11 Q. The next sentence reads, "The amount of
12 Aroclor on the drumming area floor appeared excessive
13 and could overload the small sump which is in the
14 present drainage channel from this area." Do you
15 recall when that--is this a different sump than the
16 one we were talking about earlier?

17 A. We talked earlier, limestone pit.

18 BY MS. LAVEY:

19 Q. I was talking, we were talking about a sump
20 that was put in, and I just wanted to be clear what we
21 were talking about earlier about with the sump was in
22 the production area, I believe.

23 A. Yes.

24 Q. Correct? So now we're in the drumming area,
25 and there's also a small sump, apparently, in the

1 drumming area, according to this statement?

2 A. No, a small sump is in the present drainage
3 channel, which, to me, means this is the limestone
4 pit.

5 Q. Okay. Do you know if any steps were taken
6 to address what you are identifying in this sentence?
7 The excessive amount of Aroclor on the drumming area
8 floor and overloading of the sump?

9 A. Yes, they did take some steps to be more
10 careful, make sure that the hoses are drained before
11 they're thrown, thrown aside, that kind of activity
12 did take place.

13 Q. So there was a period of time when the hoses
14 that were taken off were not drained and they were
15 just thrown aside?

16 A. No, not completely. The operator would say
17 "I filled the tank car," and he might let a little bit
18 more pour out and then set the hose aside. In the
19 meantime, what's in that hose dribbles out onto the
20 surrounding area.

21 Q. On the second page of this memo, you
22 conclude with "We should strive for an operation in
23 which no Aroclor is visible and one that we would not
24 hesitate showing to a severe critic such as
25 Congressman Ryan." Was that goal ever achieved?

1 A. I think so, yes.

2 Q. There was a point in time where you did not
3 believe any Aroclor was visible?

4 A. I can't say any Aroclor. The type that
5 would get into the environment was diminished. You
6 could still see strain marks here and there, but they
7 were perceived to be of such a nature that the, the
8 general environment would not be affected by that
9 stain.

10 Q. After you made this visit on July 31st and
11 prepared your August 17th memo, did you return for a
12 follow-up to see if progress was being made?

13 A. Yeah, it seems to me I was there a couple of
14 more times. I don't remember--

15 Q. Was that 1970, or--

16 A. I don't remember the exact dates. I just, I
17 know I was there more than once.

18 Q. The memo that you wrote that we're looking
19 at here, Exhibit 29, lists some individuals, here, as
20 also receiving a copy of your memo in addition to Gene
21 Jesse, the plant manager. The first name, there, is
22 H. S. Bergin? Who is that?

23 A. Howard Bergin was the director of the
24 functional fluids marketing and manufacturing part of
25 Monsanto.

1 Q. And that included the Aroclor group?

2 A. Yes.

3 Q. And he was located in St. Louis?

4 A. Yes. He was my boss.

5 Q. When you moved to St. Louis,--

6 A. Yes.

7 Q. --he was your boss?

8 A. Yes.

9 Q. I think we already did P. B. Hodges. Others
10 are nodding, so--F. J. Holz--oh, boy.

11 A. Holzapfel.

12 Q. Thank you.

13 A. Fred Holzapfel.

14 Q. Who is Fred Holzapfel?

15 A. He was part of the group that was located in
16 St. Louis that concerned itself with manufacturing in
17 the division at Monsanto referred to as the Organic
18 Division.

19 Q. The Organic Division included the Functional
20 Fluids--

21 A. Yes.

22 Q. --Group?

23 A. Yes.

24 Q. This memo makes a reference in the second
25 paragraph toward the bottom, where you say, "I

1 recognize that this poses a very challenging
2 objective, but it can be achieved as demonstrated by
3 both the Newport and Sauget operations." So Aroclor
4 operations were going on at both Newport and Sauget?

5 A. Yes.

6 Q. Is that correct?

7 A. (Nods head in affirmative manner).

8 Q. Any other Monsanto plants manufacturing
9 Aroclors at any time?

10 A. That's it. Those two.

11 Q. Were you involved in efforts at Newport and
12 Sauget to improve the spill situation similar to
13 Anniston?

14 A. Yes.

15 Q. That's within your job duties at Monsanto
16 when you were in St. Louis?

17 A. Yes.

18 Q. You went on to state, same paragraph, "I
19 believe it would help psychologically if the sandboxes
20 at the bases of all stairs were removed." Why did you
21 believe that?

22 A. Oh, just a personal, very subjective
23 approach where it occurred to me that perhaps,
24 individuals with dirty overshoes or work shoes were
25 relying too much on that little sandbox of correcting

1 a situation where they, instead of getting a new pair
2 of boots--I had no real basis for arriving at that.
3 It's just a subjective opinion that I offered.

4 Q. How big were these sandboxes?

5 A. I would say they were a yard by a yard,
6 three-by-three, or about that, and about four inches
7 deep in sand.

8 Q. Were they at the base of any staircase
9 within the Aroclor production area?

10 A. Yes.

11 Q. Where were--where were stairs located for
12 the Aroclor production area? Are they all over the
13 area, or is, is there only one--

14 A. Each platform--

15 Q. --or two stairwells?

16 A. --had at least two stairwells. Some had
17 three or four, depending on the activity involved and
18 the need to get to certain parts of the platform.

19 Q. I'll set that aside, and one more question
20 on that document. In that second paragraph, you
21 previously talked about the first sentence of that
22 paragraph when you were--the second sentence says
23 "This longstanding practice creates sand disposal
24 problems as well as a difficult floor scraping and
25 cleaning problem." What did you mean by that?

1 A. By which part of that? The--

2 Q. Let's start with the sand disposal problem
3 part, first.

4 A. Well, it's--it required that the sand that
5 was used for this purpose be placed in a suitable
6 steel container which was eventually sealed and taken
7 to the plant landfill. That was perceived as a
8 disposal problem, sending it up there, making sure
9 it's handled properly when you do so, and burying it
10 properly when you do finish placing it, these kinds of
11 things had to be monitored, and I was trying to reduce
12 that need as much as I could.

13 Q. And the part of the sentence that refers to
14 a difficult floor scraping and cleaning problem, what
15 are you referring to there?

16 A. This referred to gritty floors stuck to
17 gooey Aroclors that have to be scraped up and--to
18 remove.

19 Q. Okay, now you can put that one aside.

20 Was sand used for any other purpose at the
21 Anniston plant other than with respect to spills and
22 the sandboxes that we've talked about?

23 A. The only other use I could recall--and it
24 was a small use--is the use of sand in mixing with
25 concrete to pour a concrete pad or something similar

1 to place a pump on, for example, that kind of use was
2 made with sand and concrete, of course, and water. I
3 cannot think of any other use at the moment.

4 Q. Were any of the storage tanks or other
5 equipment placed on a, a sand base? Only sand, not
6 sand and concrete, but just the sand?

7 A. No. To my memory, they were all on a
8 concrete platform.

9 Q. Do you know if that was true prior to your
10 arrival as a plant manager?

11 A. I do not.

12 Q. You referred to PCB losses earlier. Would
13 that include PCB losses to the atmosphere?

14 A. Would that what?

15 Q. You referred to PCB losses earlier today.
16 Would that include PCB losses into the atmosphere?

17 A. Can you help me recall what I said about the
18 losses earlier?

19 Q. It was a--

20 A. What kind--

21 Q. --phrase--

22 A. --of losses?

23 Q. --you used, you were referring to to reduce
24 the amount of Aroclor losses or PCB losses.

25 A. Oh.

1 Q. I--

2 A. For environmental control purposes?

3 Q. Yes.

4 A. When I refer to that type of loss, I was
5 really referring to the physical movement on the
6 ground. The losses to the atmosphere, the
7 characteristics of PCBs are such that the minute a
8 little bit of PCBs get up into the vapor, they're so
9 heavy, they sink, so if anything was released near a
10 tank into the atmosphere, it would generally end up in
11 that area; it doesn't go very far. Unless you have a
12 tornado driving it, it's just not going to move.

13 Q. So were there PCB vapors in the air
14 immediately around various pieces of equipment in the
15 Aroclor facility?

16 A. On occasion, when the operator, for example,
17 would open a tank and put this lye that they had near
18 the end of the process, some fumes would come up, and
19 as soon as he finished, he would seal that.

20 Q. Do you recall occasions when the workers
21 would wear ventilator equipment around the equipment?

22 A. I don't remember a specific occasion, but I
23 do know that they were issued, respirators, and of
24 course, other protective equipment, in the event the
25 vapors became greater than that bit that escapes while

1 they are adding an ingredient.

2 Q. Do you recall testing being done for PCBs in
3 the atmosphere in and around a Monsanto plant?

4 A. I don't recall any specific, but I do know
5 that there was an interest in the presence of PCBs in
6 the atmosphere, and I also recall samples being taken,
7 and I remember that the answer came that the quantity
8 found, if any, was extremely low, and at that time,
9 the ability of the analytical method to even measure
10 that low amount was dependable.

11 Q. Was not dependable? Is that what you meant?

12 A. Whether the ability to detect the PCBs at
13 such a small quantity was giving us a realistic
14 answer. It could have even been zero, but the method
15 says it's 1 part per billion kind of number.

16 (Defendant's Exhibit 30
17 marked for
18 identification.)

19 BY MS. LAVEY:

20 Q. The court reporter is handing you what we've
21 marked as Exhibit Number 30, which is entitled "The
22 Determination of Aroclor Concentrations in the
23 Atmosphere at Monsanto Chemical Company's Anniston,
24 Alabama, plant," Bates number MONS 058072 through MONS
25 058089. I'll ask you to take a few minutes,

1 Mr. Papageorge, and then let me know whether you
2 recognize this document.

3 (Witness peruses said
4 document.)

5 A. I have--

6 Q. Have you ever seen this document?

7 A. As I read it just now, I was reminded that
8 this kind of study had been made, but it was perceived
9 to be inadequate in terms of methods of analysis. As
10 I understand, this was back in the Forties.

11 Q. I was going to ask you if you know when this
12 was prepared or if there was something in the document
13 that told you when it was prepared, because I don't
14 see a date.

15 MR. WETMORE: There is something at page 18,
16 the last page, there are some initials, with what
17 looks to be a date. It looks like June 26. I can't
18 tell what the other--it looks like 1953.

19 A. '53. The initials are Paul Benignus'.

20 Q. Paul who?

21 A. Benignus, B-e-g-n-i-g-n-u-s.

22 Q. B-e-n-i--

23 A. B-e-n-i-g-n-u-s.

24 Q. Who is Paul Benig--Benignus? I'm not going
25 to be able to say that.

1 A. He was a Monsanto employee located in--at
2 the time I met him, he was located in St. Louis. I
3 don't know where he was in '53. I think he was in
4 Research Department; I'm not sure. Anyway,
5 Mr. Benignus was the, I'm going to call him a
6 technical advisor to the marketing people regarding
7 PCBs.

8 Q. What time frame are you referring to?

9 A. These are not exact dates, but from my
10 perspective, they refer to the time that I was at the
11 Anniston plant, '65-ish, and through '75 type
12 of--about ten-year period or so.

13 Q. Did you say you had seen this specific
14 report before?

15 A. I don't remember it as a specific report,
16 but the, the information it contained was relayed
17 verbally at discussions, and this was--this is the
18 memory that I recalled after reading this, was that
19 this is not totally new news, but it had been
20 considered.

21 Q. Do you know if subsequent studies similar to
22 this were done?

23 A. I don't remember the specifics, but I do
24 know that with modern analytical technology, sampling
25 of air in the plant was made, and the results of that

1 study show that PCBs were found at this tank opening I
2 mentioned earlier but not found at the plant fence;
3 that kind of logic was evolved as a result of the
4 study.

5 Q. You recall there was sampling at the plant
6 fence?

7 A. I used that as the end--that they took
8 samples away from the origin, and see how far they
9 could detect it.

10 Q. Did the sampling go off site?

11 A. I have a faint recollection that some were
12 taken out in the neighborhood, so to speak, but the
13 results, there, was zero detectable.

14 Q. What personnel would be more familiar with
15 the, any of the air sampling that was done that might
16 know this information more than you?

17 A. Ooh: I would personally start with
18 Mr. Wright.

19 Q. That's Eugene Wright?

20 A. Eugene Wright, yeah.

21 (Defendant's Exhibit 31
22 marked for
23 identification.)

24 BY MS. LAVEY:

25 Q. Handing you what's been marked Exhibit

1 Number 31, Bates range DSW 175777 through DSW 175786,
2 which, for the record, is a collection of several
3 different documents, so I'll give Mr. Papageorge a
4 chance to look through them.

5 (Witness peruses exhibit.)

6 BY MS. LAVEY:

7 Q. Although, Mr. Papageorge, these are all
8 stapled together, I'm going to refer to them
9 separately. I'm not quite sure why this collection is
10 all in one--

11 A. All right.

12 Q. --stapled set, so we'll--

13 A. All right. I've read it.

14 Q. We'll--

15 A. I have scanned through it.

16 Q. Okay. In reviewing, in reviewing these
17 pages, has the identity of R. Thomas come back to you
18 at all, Mr. R. Thomas? Previously, you indicated you
19 weren't sure who that was.

20 A. R. Thomas, no, I still don't recall him.

21 Q. I think the easier page to read is on the
22 last page, DSW 175786, a June 1st, 1970, memorandum
23 which you prepared; correct?

24 A. Yes.

25 Q. And directed it to Mr. Savage. You state in

1 the first paragraph that "We should not neglect to
2 consider losses to the atmosphere through jet exhaust,
3 vents, stacks, et cetera. " Do you see that?

4 A. I do.

5 Q. So would you agree with me that there were
6 losses to the atmosphere through jet exhaust, vents,
7 stacks, et cetera?

8 A. No, that's--

9 Q. Okay.

10 A. That doesn't say that. It says "consider
11 losses," which means look to see if there are any, and
12 how much if you do find them.

13 Q. Why was it important not to neglect to
14 consider that potential loss?

15 A. Well, the atmosphere is part of the
16 environment, and we had limited, if almost no data
17 regarding PCBs in the atmosphere, and we needed that
18 to assure ourselves that the atmosphere was considered
19 as part of the overall environment.

20 Q. And do you believe there were PCB losses to
21 the atmosphere from the Monsanto plant in Anniston?

22 MR. WETMORE: Did you just ask him that
23 earlier, 15 minutes ago?

24 A. I--

25 MR. WETMORE: You can answer it again. I

1 think you did.

2 A. (Continuing) I believe there were losses to
3 the atmosphere at the site of the source. I had no
4 data at all to support the thought that those PCBs
5 would find themselves in the distance of any signature
6 enough cans.

7 BY MS. LAVEY:

8 Q. And you said earlier that PC--what you did
9 say earlier was that you believed the PCBs were such
10 that if they did emit into the atmosphere, they were
11 such that they would just drop right back down again.

12 A. Correct.

13 Q. So it's your belief that PCBs that are
14 released from a vent or whatever piece of equipment
15 would not move far from that facility?

16 A. That is correct. The movement will depend
17 on the wind velocity and direction.

18 Q. Wouldn't those, wouldn't those losses, even
19 if they didn't move far and they just dropped down,
20 doesn't that mean they dropped down on surfaces or on
21 to the ground in and around that equipment?

22 A. Yes.

23 Q. And then it would get washed away by storm
24 water, or washing off floors, or some activity like
25 that in that location?

1 A. And would be detected by analysis of those
2 streams.

3 Q. Of the water?

4 A. Yes.

5 Q. In your memo that we were looking at on the
6 last page of this collection, DSW 175786, in the last
7 paragraph, you ask, "Will you have each plant develop
8 a program for auditing the present situation,
9 monitoring on a plan basis and taking corrective
10 action to achieve targeted losses to the atmosphere?"
11 Do you see that at the end of the memo?

12 A. I do.

13 Q. Do you see if such a program for auditing
14 was, in fact, put into place?

15 A. I am left with an impression, yes, but I
16 don't recall all the details.

17 Q. Do you know who would be familiar with that
18 program if it was put in place?

19 A. Well, Mr. Savage for sure. That's the
20 person I would start with.

21 Q. If there weren't significant losses to the
22 atmosphere going on, why would it be important, why
23 would it be necessary to develop a program for
24 auditing losses to the atmosphere? I'm having trouble
25 understanding why we're going to the trouble of

1 creating a program if losses to the atmosphere, to
2 your belief, aren't really going on.

3 A. Well, first of all, we had to confirm that
4 suspicion, and the suspicion is based on the
5 properties, the physical properties of the materials
6 called PCBs. In order to develop a program for
7 controlling the escape of PCBs into the environment,
8 you have to know, first of all, which PCBs, where are
9 they coming from, how do they get into the
10 environment, and with the information you accumulate,
11 you, you take action, whatever seems appropriate for
12 the--based on the information you get. This is just
13 one area that we wanted to become more familiar with
14 at that time.

15 Q. Did you, in fact, set targeted losses to the
16 atmosphere that's referred to, here, at the end of the
17 question I read?

18 A. Targeted loss is an expression--is an
19 attempt to set a goal for the participants in this
20 controlled program to meet and eventually, Monsanto
21 proposed, as I remember, eventually a one-part-per-
22 billion target, and that's the kind of targeted loss
23 that I had in mind.

24 Q. A one-point or one-part-per-billion loss in
25 total to wherever, whether atmosphere or, or--

1 A. In the sample.

2 Q. In any sample, whether taken from water or
3 air?

4 A. Correct.

5 Q. And was that target achieved, to your
6 knowledge?

7 A. Yes. The EPA adopted it.

8 Q. Was there a time period where the sample
9 data came back and that target had not yet been
10 achieved?

11 A. The only occasion--are you talking about all
12 environmental samples or just atmospheric,--

13 Q. Um--

14 A. --vapors.

15 Q. We'll go with atmospheric.

16 A. Atmospheric? Ooh, that was achieved almost
17 instantly. They never did find evidence that such a,
18 a number existed.

19 MR. WETMORE: How you doing, Bill? All
20 right?

21 MS. LAVEY: Why don't we take a five-minute
22 break?

23 MR. WETMORE: Good idea.

24 MS. LAVEY: This will end tape number 2,
25 deposition of William B. Papageorge. We're off the

1 record at 10:54 A.M.

2 (Recess.)

3 THE VIDEOGRAPHER: We're back on the record
4 at 11:05 A.M. This will begin tape number 3 of the
5 deposition of William B. Papageorge.

6 BY MS. LAVEY:

7 Q. Mr. Papageorge, while you were plant
8 manager--

9 THE VIDEOGRAPHER: Excuse me a second.
10 We'll have to go off the record. We're off the record
11 at 11:05.

12 (Discussion off the record.)

13 THE VIDEOGRAPHER: We're back on the record
14 at 11:07 A.M.

15 BY MS. LAVEY:

16 Q. Mr. Papageorge, to your knowledge, was any
17 incineration done at the Monsanto plant in Anniston?

18 A. Help me; with incineration of what?

19 Q. Were PCBs or PCB waste material ever
20 incinerated at the Monsanto plant in Anniston?

21 A. No.

22 Q. Was any burning of waste taking place of any
23 kind at the Anniston plant?

24 A. Yes.

25 Q. Where would that take place?

1 A. In the general area of the--that we've
2 referred to as the plant dump that is a form of
3 landfill, there was at one time when I arrived a
4 location at which the burnable material of the plant,
5 which included waste lumber, office trash, broken
6 pallets, these kinds of things, were burned. When the
7 amount that accumulated reached a reasonable
8 level--level, the decision would be made to ignite it
9 and let it burn.

10 Q. So this was at a set location within the
11 plant dump area?

12 A. Correct.

13 Q. Who had responsibility for that burn area?

14 A. The individual in charge of warehousing,
15 shipping, and I still cannot remember his name.

16 Q. You knew I was going to ask that next,
17 didn't you?

18 Over what period of time, if you know, was
19 the burning done out on the plant dump? You said it
20 was there when you arrived?

21 A. It was there when I arrived, yes.

22 Q. Had that been a practice that had been going
23 on, to your knowledge, for some time prior to your
24 arrival?

25 A. Yes.

1 Q. And was it still going on when you left?

2 A. I don't recall when it was discontinued. It
3 was my intent to discontinue it, and I don't know if I
4 instituted it before I left or whether it was followed
5 up later.

6 Q. Why was it your intent to discontinue that
7 practice?

8 A. Well, one of the principal reasons was that
9 there were services becoming available to haul such
10 kind of waste away from the plant to a commercial
11 disposal site, and the amount of material that
12 accumulated there at times became a burden on the
13 people to get set, go out and manage the burning
14 process, so it struck me that a more efficient way to
15 do it is to have commercial waste haulers arrive and
16 pick up that kind of waste.

17 Q. Were distillate bottoms ever burned at that
18 location?

19 A. No.

20 Q. Any PCB-containing waste material at all?

21 A. No.

22 Q. Did everybody in the plant have access to
23 the plant dump, or was access restricted?

24 A. The, the transfer of chemical waste was to
25 the dump was conducted by the group that had the

1 warehousing, shipping material movement
2 responsibility. That group would be the ones to man
3 the forklifts and the trucks, whatever it took to get
4 wastes up there, so it was monitored and handled
5 properly by a group that was instructed on how to
6 handle that kind of waste.

7 Q. Was the entrance to the dump area gated and
8 locked?

9 A. No.

10 Q. So orthopedics could get into that dump area
11 if they chose to; correct? Other than this
12 warehousing group of people charged with the
13 responsibility?

14 A. You mean people could walk up there?

15 Q. Sure.

16 A. Yeah, there was nothing to stop any walkers,
17 but the use of equipment would have attracted
18 attention, trucks, and forklifts, and that kind of
19 activity, and to my--that was never done in my era
20 there.

21 Q. Was there a roadway leading up to the top of
22 the dump area?

23 A. Yes, there was a--it's a dirt road. It was
24 not a paved road.

25 Q. Was the paved road also leading to the area

1 that the burning was done?

2 A. No. It was a gravel road.

3 Q. Okay. To your knowledge, did Monsanto ever
4 test emissions at the Anniston plant for heavy metals?

5 A. Not to my knowledge.

6 Q. Do you know if Monsanto ever studied
7 emissions from any of its other plants for heavy
8 metals?

9 A. I do not know.

10 Q. Could you see dust in the air at the
11 landfill?

12 A. Dust in the air? Never.

13 Q. Could you see plumes in the sky originating
14 from the Monsanto Anniston plant?

15 A. When you--when I used to drive up close to
16 the plant, I could see the expected steam plumes, but
17 I don't recall any situation that resulted in a, a
18 cloud of some strange material.

19 Q. What about when there were these non-routine
20 emissions that we spoke about earlier that were
21 covered in the plan that was put into place for
22 reporting spills and such? Would those unusual air
23 emissions cause a cloud of material into the
24 atmosphere?

25 A. When such an emission occurred, the, the

1 plume would only be, at most, six feet, right above
2 the tank, so you wouldn't see anything out surrounding
3 the facility or its neighboring facility.

4 Q. When you refer to the plant dump, do you
5 know if that is what is referred to today as the
6 south landfill? Is that term familiar to you?

7 A. I have never used the expression
8 "south landfill," so I don't know what it refers to.

9 Q. Are you aware that there was a second dump
10 location that had been utilized by the plant prior to
11 your arrival as plant manager in 1965?

12 A. I was not aware of a previous landfill.

13 Q. So you are only familiar with one location
14 that you are calling the plant dump?

15 A. Correct.

16 Q. Where was the plant dump located?

17 A. Again, I'm not oriented east, west, north or
18 south. All I know is it was uphill from the general
19 plant area.

20 Q. Wasn't it--was it located across the road
21 from the manufacturing area, as well?

22 A. I'm hesitating because I'm confused with the
23 installation of that new roadway, and since I wasn't
24 there when that road was constructed, I have a hard
25 time visual--I don't remember crossing a road to get

1 high up on that landfill.

2 Q. Do you remember that, that landfill being up
3 against a clay or dirt wall?

4 A. I suppose you could call that a clay or dirt
5 wall, yes. There was a, there was a, a geographical
6 feature that we used to cut into to make an opening to
7 hold the drums that we wanted to cover the excavation
8 that occurred during the making of that hole was set
9 aside and was eventually used to replace on top of the
10 disposal containers, and that was intended to keep
11 them from contaminating the whole area.

12 Q. So you didn't have to bring in fill from
13 elsewhere? You were able to use the excavated
14 material?

15 A. Correct.

16 Q. And was the responsibility for the landfill
17 again with the same individual or group of folks who
18 were the warehousing--I've forgotten the title, but
19 the warehousing area? They also had responsibility
20 for the entire operation at the landfill?

21 A. Yes.

22 Q. Okay, not just I know we talked about it
23 before, but we were speaking of the burn area before,
24 but for the landfill, same group of people; correct?

25 A. Correct.

1 Q. Do you know when that dump first began to be
2 used?

3 A. I do not.

4 Q. Do you know when they stopped dumping
5 material in that landfill?

6 A. I do not.

7 Q. Do you know how the dump area was
8 constructed initially? In other words, did it
9 have--are you familiar with its, its features in terms
10 of a bottom liner, perhaps, if there was such a thing,
11 or any divisions between cells? I mean physical
12 features of the landfill.

13 A. I do not know what occurred when they
14 started using it.

15 Q. Was there any run-on, runoff controls in
16 place at the landfill to direct storm water flow one
17 way or the other at the landfill?

18 A. At what point in time?

19 Q. When you arrived in 1965.

20 A. No, the water flow was left up to the--to
21 Nature, in a way. It went its own way.

22 Q. So it could flow across the landfill?

23 A. I find it difficult to perceive water going
24 across unless it was coming from a higher level to a
25 lower level. Generally, the height started at the

1 rear and flowed right down toward the plant.

2 Q. Is there any specific individual you can
3 think of who had responsibility for that landfill?

4 A. I think of the plant manager. I don't think
5 that's the person you are looking for. It's this
6 person--I wish I could remember his name--the
7 warehousing superintendent and his team.

8 Q. Did there come a point in time where regular
9 inspections of the landfill began?

10 A. While I was there, or later, you mean?

11 Q. At any point, to your knowledge.

12 A. At any point? There were occasions when
13 individuals would go up that landfill to see if it was
14 creating any kind of problems; in other words, to
15 determine whether the waste material was placed
16 properly, was it covered properly, are there any
17 visible problems. That was done when I was there and
18 the trips that I made thereafter.

19 Q. Were any liquid waste materials placed in
20 the landfill?

21 A. Yes. I'm trying to remember specific
22 examples. There were some containers containing
23 material that was not recoverable for resale and had
24 to be disposed of that were placed in drums, steel
25 drums, liquid drums, not the open top, but the drums

1 with the two openings, they were placed up there. I'm
2 trying to remember the specific chemicals involved. I
3 can't think of it now.

4 Q. Were any bulk liquids placed in the--that
5 were not containerized placed in the landfill?

6 A. No.

7 Q. Do you know prior to 1965 whether liquids
8 were placed in the landfill that were not
9 containerized?

10 A. '65?

11 Q. When you arrived in '65,--

12 A. Oh.

13 Q. --do you know if, before that time, whether
14 liquids were placed in that landfill that were not
15 containerized?

16 A. I do not know.

17 Q. Were there security guards in place at the
18 landfill while you were there as plant manager? Was
19 there any security guards stationed over at the
20 landfill area?

21 A. Not at the landfill area.

22 Q. The liquid wastes that you were--or liquid
23 material you are describing that would have gone to
24 the landfill in the drums, would that be
25 PCB-containing liquid material?

1 A. It's possible, but I don't know for sure,
2 for sure, hmm-mm.

3 Q. Were there specific staging areas within the
4 plant to collect drums, and so forth, before being
5 transferred over to the plant dump?

6 A. There were areas set aside by the department
7 supervisor of each operation where this kind of
8 material would be kept until the warehousing team
9 could come by and put it on pallets and carry it up to
10 the landfill, and this varied, of course, with the
11 type of activity that that production unit had
12 undergone, and the material they were producing, so
13 the frequency, the material, and amount would vary.

14 Q. Was there a staging location at the Aroclor
15 facility for drums of waste material?

16 A. Yes.

17 Q. Do you recall where that was located?

18 A. All I remember was on the edge, out of the
19 way of the operation, so it didn't hamper any
20 movements.

21 Q. So that was out in the open, not undercover?

22 A. That's right, yes.

23 Q. Was that area on the dirt ground, or was
24 there some gravel surface or paved area for the
25 staging location?

1 A. I recall, it could be either a plain old
2 natural dirt environment or it could be crushed rock
3 that had been poured there. I don't recall any
4 deliberately poured concrete pavement for this kind of
5 activity, no.

6 Q. Do you remember any other location for
7 on-site for disposal on site on property owned by
8 Monsanto other than the dump, the plant dump that
9 we've been speaking of?

10 A. For disposal purposes? No. Hmm-mm.

11 Q. Was there ever, to your knowledge, any
12 injection of waste, deep well injection on site of
13 waste material?

14 A. No.

15 Q. Were there dumpsters located throughout the
16 facility?

17 A. I'm sorry?

18 Q. Were there dumpsters located throughout the
19 plant, for trash and such?

20 A. By "dumpsters," you mean containers?

21 Q. My use of the word "dumpster" is generally
22 envisioning kind of a rectangular-shaped large box
23 without a lid, into which you can throw trash.

24 A. I don't recall any such container.

25 Q. Do you recall any type of receptacle for

1 waste material generated in any of the production
2 areas other than the drums that you've talked about,
3 either the open drum or the closed one with the hole
4 in it?

5 A. That's the only kind I recall.

6 Q. Are you aware of any location offsite that
7 was used by the Monsanto Anniston plant for disposal
8 of waste?

9 A. No, I'm not.

10 Q. Was trash checked by the, by the city from
11 the plant?

12 A. Not to my knowledge.

13 Q. We talked, probably on the first day, about
14 montars, and as I understand it, some of the montars
15 were sold, some of the montars were disposed. Do you
16 remember talking about the that on the first day?

17 A. That is correct.

18 Q. And would that montar that was not sold go
19 to the, to the plant dump that we've been talking
20 about?

21 A. Yes.

22 Q. How is it determined which montars could be
23 sold and which would need to be disposed?

24 A. The montars that were sold were prepared in
25 anticipation of receiving an order, so a modest

1 inventory was kept. Once that inventory was
2 fulfilled, any montars that were still being created
3 would go straight to the landfill until the inventory
4 of the salable material reduced to a low point and
5 then they'd make some more of it.

6 Q. What's the--the montars that went to the
7 landfill, what was its consistency? Is this a liquid?
8 Semi-solid? I'm not--I have trouble picturing montar.

9 A. When it went to the landfill, it, it looked
10 an awful lot like road asphalt. It was a solid; black
11 solid.

12 Q. Are you aware of any testing that was done
13 to determine the content of montars?

14 A. I'm not.

15 Q. What was in a montar pit? Are you familiar
16 with that term?

17 A. No, I can't place that expression.

18 Q. When you said there was an inventory of
19 montars built up for anticipated customers, where
20 would that inventory be stored?

21 A. It'll be in, excuse me, metal containers,
22 the open-top type, with a label on it, in with the
23 finished product, warehousing facility.

24 Q. Was it kept heated in order to keep it in
25 more of a tarry consistency?

1 A. No, it was allowed to reach the solid state.
2 It's a round, solid chunk of black material.

3 Q. Okay, and then you indicated that if you had
4 enough of an inventory built up, then any further
5 montars that were generated would go straight to the
6 landfill.

7 A. Correct.

8 Q. Would they--are they taken from the
9 production process and hauled immediately off to the
10 landfill, or is there an intermediary step where they
11 are stored?

12 A. No--well, they were temporarily stored until
13 you got enough to, to make the trip worthwhile.

14 Q. And how were they temporarily stored?

15 A. Out in the open, in these steel containers,
16 and when, when time permitted the warehousing team to
17 come by, they would put these drums on pallets, and
18 then when the next opportunity came, they'd take those
19 pallets and take them up the hill to the landfill.

20 MS. LAVEY: Okay.

21 (Defendant's Exhibit 32
22 marked for
23 identification.)

24 BY MS. LAVEY:

25 Q. The court reporter has handed you what--a

1 document we've marked as Exhibit Number 32, which is
2 DSW 090928 through DSW 090932. The top of the
3 document says, "Tier 1 Waste Handling Summary
4 Document," and I'll direct you generally to some of
5 the last pages, which would suggest this document was
6 prepared in the 1988 vintage.

7 (Witness peruses
8 said document.)

9 Q. I know this is only a 1988 document or
10 thereabouts. I only have a couple of questions for
11 you and recognize it's past your time as an employee
12 at Monsanto, but I did want to ask you just to clarify
13 for me this--the first page refers to production of
14 polyphenyls. Would that include--would that be a term
15 that would encompass biphenyl production and
16 terphenyl?

17 A. Correct.

18 Q. Under number 3, it describes current waste
19 handling and land disposal practice, stating the
20 molten material is currently pumped into open pits in
21 the ground where it is allowed to harden by cooling.
22 Do you recall whether such a practice was in place
23 while you were at the Anniston plant?

24 A. That is news to me.

25 Q. When you arrived at the Anniston plant in

1 1965, there was a waste water treatment plant at the
2 facility, wasn't there?

3 A. Yes.

4 Q. Was that associated with the Aroclor
5 production area or the insecticide production?

6 A. Insecticide production.

7 Q. So--and that was separate, then, from the
8 Aroclor area?

9 A. Correct.

10 Q. Did there come a point in time when a waste
11 water treatment plant was put into place specific to
12 the Aroclor-producing area?

13 A. No.

14 Q. Who had the responsibility for the waste
15 water treatment plant in the parathion area?

16 A. At what point in time?

17 Q. When you arrived in 1965.

18 A. Arthur Liese.

19 Q. He was the manufacturing superintendent for
20 that production area, correct?

21 A. Correct.

22 Q. Was he still the person responsible for that
23 waste water treatment facility in 1969, when you left?

24 A. No.

25 Q. Was there a subsequent superintendent of

1 manufacturing at that point?

2 A. Yes.

3 Q. Who was that individual?

4 A. Lloyd Bosch, B-o-s-c-h.

5 Q. Was his area of responsibility limited to
6 parathion and the intermediate products that were
7 made--used to produce parathion?

8 A. Correct.

9 Q. Was he also responsible for the HB-40
10 production?

11 A. No.

12 Q. That would lie within Robert Moody's area of
13 responsibility when he was production superintendent?

14 A. When he, when he was--yes.

15 Q. And his successor?

16 A. Right.

17 Q. Okay. Did that waste water treatment plant
18 receive process waste water from the parathion
19 production process?

20 A. Yes.

21 Q. Did it also handle storm water in any way?

22 A. Some of the storm water ended up in that
23 treatment basin. That did not take care of all the
24 storm water that was possible from all directions.

25 Q. So that treatment plant system included an

1 open settling pond of some kind?

2 A. Yes, it was, it was a rectangular-shaped
3 basin.

4 Q. This is prior to treatment in the plant, or
5 after going through treatment?

6 A. That was part of the treatment.

7 Q. The first step before any further treatment?
8 I'm just trying to get the order of things. What did
9 the treatment plant psychiatrist of?

10 A. It included this basin, to which they would
11 add some--I forget the detail--some materials to help
12 partially treat that waste.

13 Q. Was--was sanitary waste water tied into
14 public sewer system, do you recall?

15 A. Yes. Yes.

16 Q. Throughout the period that you were there?

17 A. Yes.

18 Q. Do you know at what point in time the
19 sanitary system tied into the public sewers?

20 A. No, I don't.

21 Q. Switching over to the biphenyl and Aroclor
22 facility area, you've talked a number of times about
23 the natural flow of storm water. Was there also a
24 process waste water generated at the Aroclor facility?

25 A. You say was there a process waste water

1 generated?

2 Q. Yes.

3 A. Yes.

4 Q. Where would that--what, what production
5 process would create that waste water stream?

6 A. The chlorination of the bi- and tribiphenyls
7 (sic) would result in a waste acid stream that, on
8 occasion, would contain some of the chlorinated
9 products, and that's the stream that went into the
10 limestone pit.

11 Q. Do you recall when the limestone pit was put
12 in?

13 A. It was there when I arrived. I do not know
14 when it was erected, when it was constructed.

15 Q. Do you know--could you describe how big the
16 limestone pit was?

17 A. I don't remember the definitions: About
18 double this room or something like that. I'm
19 guessing, now.

20 Q. What was it made out of? Is it just a pit
21 dug in the ground, or is there a wall of some sort?

22 A. It was a hole in the ground, and they put in
23 some clay, and I don't know where the clay came from,
24 but it was brought in and lined with this clay which
25 was supposed to reduce the water absorbency, and that,

1 in turn, the clay was covered with crushed limestone,
2 and the process water from the chlorination process
3 would flow into that facility.

4 Q. And at some point in time, it then is
5 allowed to flow from that pit, I assume? It exits
6 that pit eventually; correct?

7 A. Oh, yes. Yes.

8 Q. And where does it go at that point?

9 A. It would follow the natural flow of storm
10 water from the area into a--I personally call it a
11 drainage ditch.

12 Q. So is it--was the pit designed to allow a
13 certain amount of retention time before the flow would
14 follow the storm water direction?

15 A. It was, it was sized to accomplish that,
16 depending on the expected flow, the size of the
17 stream, and there was some attempt made to allow for
18 severe storms that would come up, but that's a
19 difficult estimate to make, but the whole intent was
20 to release to this ditch a material that was reduced
21 in acidity and in PCB content.

22 Q. How would the PCB content be affected by the
23 presence of limestone in the pit?

24 A. Gravity would take over. The PCBs, being
25 heavier than water, sink once they're allowed to

1 settle down instead of being churned through the
2 system, and those PCBs would end up down with the
3 limestone which, in turn, was reacting with the acid
4 to neutralize the acid.

5 Q. Would the, the limestone pit need to be
6 periodically cleaned out?

7 A. Yes.

8 Q. How frequently would that occur?

9 A. Oh, I don't have a recollection of the
10 frequency.

11 Q. Who would know that type of information?

12 A. It would have to be the supervisor of the
13 operation.

14 Q. The Aroclor operation?

15 A. The Aroclor operation, based on the amount
16 of products they produced for a period of time, and
17 some products produce more acid, some products produce
18 heavier PCBs, settle and sort of affect this acid
19 reduction process, so it's up to the manufacturing
20 supervisor to tell his team, "Hey, we've got to clean
21 it out."

22 Q. Would you say that's a once-a-year event, or
23 more or less frequent than that, during the time that
24 you were plant manager?

25 A. I, I, personally, did not keep score, but it

1 seems to me it was a matter of twice a year, maybe.

2 Q. And was the Aroclor Department, itself,
3 then, responsible for doing that clean-out?

4 A. They were responsible for seeing that it was
5 done. They did not have any of the equipment
6 necessary, like the bulldozers and that kind of thing,
7 so they would arrange for it to be done.

8 Q. And then who, who did have the
9 responsibility of actually doing the cleanout?

10 A. It would fall on the Maintenance Department
11 to help them.

12 Q. Do you know where the cleanout material
13 would be taken after it was removed from the pit?

14 A. To this landfill.

15 Q. So it would be hauled over there in dump
16 trucks?

17 A. Yeah.

18 Q. Would it be allowed to drain? The material
19 that's removed from this pit, is it allowed to drain
20 prior to being moved over to the landfill?

21 A. Mm, that, I don't know how they did that,
22 no.

23 Q. Do you recall ever seeing the material piled
24 up alongside the pit after having been removed?

25 A. I do not recall that.

1 Q. And the, the general setup was such that the
2 water is going to exit the pit dependent upon the
3 level of the water within the pit; correct? It's
4 essentially an overflow--

5 A. Yes.

6 Q. --situation?

7 A. Yes.

8 Q. So if you had a heavy rain event, it would
9 overflow--

10 A. Yes.

11 Q. --out of that pit, whether or not it had had
12 the desired retention at that point in time?

13 A. That is correct.

14 Q. Somewhat subject to the whim of the weather?

15 A. Correct.

16 Q. The ditch to which this flowed, you've not
17 heard a name associated with that ditch? Just the
18 plant ditch?

19 A. I've heard a name. The plant personnel
20 referred to it as Snow Creek.

21 Q. Okay.

22 A. But really, it's not Snow Creek, it's a
23 ditch leading to Snow Creek, but since it had no name,
24 the plant personnel adopted Snow Creek as the
25 reference because the material, the liquid, eventually

1 ends up in Snow Creek, so--

2 Q. Do you know if people called it the Monsanto
3 ditch?

4 A. I've never heard that expression.

5 Q. Do you know if it's the same as the 11th
6 Street ditch?

7 A. 11th Street ditch? I've never heard that.

8 Q. Were there cooling waters used in connection
9 with the--with compressors at the plant? Is there any
10 non-contact cooling water? I'll break the question
11 up. Was there non-contact cooling water used at the
12 plant?

13 A. Yes, there were.

14 Q. In what connection was the non-contact
15 cooling water used?

16 A. Well, we made reference to it earlier in
17 relationship to the flaking--

18 Q. Right.

19 A. --and using cooling water to cool down the
20 liquid to make a flake? That kind of water. And of
21 course, that was recycled, and reused, and--

22 Q. That's what I was going to ask. That was
23 not a once-through cooling, that was a recirculating
24 system?

25 A. Recirculating, yes.

1 Q. Was there a holding tank,--

2 A. Yes.

3 Q. --then, that fed the water to that system?

4 A. The water, mm-hmm.

5 Q. Can you think of any other system that was
6 using a non-contact cooling water?

7 A. Not at the moment, but it's not a, an
8 uncommon usage.

9 Q. Do you recall whether non-contact cooling
10 water was directed to the limestone pit?

11 A. To my knowledge, it never was.

12 Q. When you referred earlier to occasionally
13 hosing down the floors in the Aroclor area,--

14 A. Mm-hmm?

15 Q. --that water would flow to the limestone
16 pit; is that correct?

17 A. Correct.

18 Q. I believe you said that the water you were
19 using was all city water? Is that--am I remembering
20 that correctly?

21 A. That's my understanding, yes.

22 Q. Do you know if there was a point in time
23 when well water was being used?

24 A. I don't remember any mentioning of wells.

25 Q. Were there fire protection systems, water

1 systems on--at the plant?

2 A. Yes.

3 Q. And was that water also city water?

4 A. Yes.

5 Q. Do you remember when the scrubber was put in
6 at the Aroclor facility?

7 A. The scrub--

8 Q. The scrubber? There's a scrubber associated
9 with the off gases, with the HCl, I believe we were
10 describing the other day?

11 A. Yes, I remember a reference to "scrubber."

12 Q. Do you remember when the scrubbers were put
13 in?

14 A. I do not.

15 Q. Do you know where the--was water generated
16 off of those scrubbers? Water was used in the
17 scrubber, correct?

18 A. Water was used to scrub.

19 Q. And where would that water go?

20 A. It would end up in the muriatic acid that
21 was formed.

22 Q. Okay. Did the limestone pit receive any
23 waste water streams from any location other than the
24 Aroclor production facility?

25 A. Not to my knowledge.

1 Q. Do you know if the--any waters from cleaning
2 or something from the warehouse would end up at the
3 limestone pit? The new, the new warehouse?

4 A. I believe, yeah, the, the topography is such
5 that even from the warehouse, the flow, the natural
6 flow of that whole area was such that it would end up
7 at that limestone pit area.

8 Q. Were there floor drains throughout the
9 Aroclor facility?

10 A. Not while I was there.

11 Q. Were there sewer--were there actual storm
12 drains located throughout the, the area around the
13 Aroclor facility?

14 A. Storm drains? No.

15 Q. So the water is not flowing through hard
16 piping, it's just flowing over land; right?

17 A. That's right.

18 Q. And were there storm sewers located
19 elsewhere at the plant that you recall?

20 A. I don't remember any reference to storm
21 sewers, hmm-mm.

22 (Defendant's Exhibit 33
23 marked for
24 identification.)

25 BY MS. LAVEY:

1 Q. I'm handing you what's been marked as
2 Exhibit Number 33, Bates range DSW 106999 through DSW
3 107002. I'll give you a few moments, here, to take a
4 look at it before I ask a question.

5 (Witness peruses said
6 document.)

7 A. I have reviewed the exhibit.

8 Q. Although I don't see your name on this
9 anywhere, do you have any recollection of seeing this
10 memo previously?

11 A. First time I've seen it.

12 Q. The document refers to--is titled "Analysis
13 of Anniston Plant Waste Streams For Metals." Do you
14 have--do you know why the Anniston plant waste streams
15 were being analyzed for metals?

16 A. I do not.

17 Q. Did you have any involvement in waste
18 analysis if it didn't deal with PCBs at this time
19 frame?

20 A. No.

21 Q. At the end, the bottom of the page, it
22 states "Possible problem areas in meeting the
23 standards for public water supplies exists with lead,
24 mercury, selenium and phenyls." Reading that sentence
25 as you sit today, do you have--do you know what--why

1 there would be possible problem areas in meeting those
2 standards?

3 A. No, I don't.

4 Q. Waived based on your understanding of the
5 production processes while you were plant manager, why
6 would there--why, why would any of these heavy metals
7 be present, in your mind? Is there reason to believe
8 any of these heavy metals would be present in the
9 waste streams, based on your understanding of the
10 manufacturing processes?

11 A. For the Anniston plant?

12 Q. Yes, sir.

13 A. I have no basis for that.

14 Q. Who is M. E. Webb?

15 A. Don't know.

16 Q. Up at the top, do you notice who T. Bell is?

17 A. I do not know or remember him.

18 Q. At any other time when you were employed
19 with Monsanto, do you recall an analysis being done of
20 heavy metals in waste streams?

21 A. No.

22 Q. Hopefully, in your pile, there is exhibits
23 from the first day. If you can go back in there and
24 find Exhibit--

25 MR. WETMORE: That's my copy, but I'm happy

1 to let him do it.

2 MS. LAVEY: Oh, we have the originals right
3 here. That's right, we pulled those out before. I'm
4 going to pull out what were marked as 4 and 5 on the
5 first day, I'll ask a few questions, and then I think
6 we'll do our lunch break.

7 MR. WETMORE: Okay.

8 BY MS. LAVEY:

9 Q. Starting--I'll talk a little bit about what
10 was going on in 1973 that these letters relate to,
11 Exhibit 4 and 5. In 1973, you were in St. Louis,
12 correct?

13 A. Correct.

14 Q. With the "Product Acceptability" title or
15 something like that?

16 A. That's correct.

17 Q. And was one of those responsibilities, then,
18 to respond to inquiries from customers as to the
19 content of different Monsanto products?

20 A. Yes.

21 Q. Do you recall the time period that is being
22 referenced here in your 1973 letter talking about
23 newly promulgated OSHA standards?

24 A. Well, both of these are dated '73, so--

25 Q. Do you remember a period of time when in

1 your position as with product acceptability, you had
2 to respond to a series of inquiries from different
3 customers about the possible content of chemicals of
4 concern under the OSHA regulation?

5 A. Yes.

6 Q. Okay. Looking at Exhibit 4, which talks
7 about lampblacks, which you have testified to on
8 Monday as a Monsanto product you don't recall, now
9 that we're on day three, do you have any recollection
10 today of lampblack number 2 or lampblack generally?

11 A. I do not.

12 Q. Do you recall specific communications with
13 Worcester Coatings and Chemicals, to whom you
14 addressed this letter?

15 A. I do not.

16 Q. Do you know, when you are looking at Exhibit
17 4, recognizing this is back in 1973, when your letter
18 says, "Lead less than 10 parts per million," do you
19 know, sitting here, is that an indication that there
20 is some amount less than 10, or is that a detection
21 limit? Do you have any recollection today?

22 A. I do not.

23 Q. Do you remember whether there were further
24 communications back and forth relating to the
25 potential heavy metal content of various Monsanto

1 products?

2 A. I do not.

3 Q. Was one of your responsibilities in the
4 1970's in the product acceptability role to
5 communicate with customers on the proper use and
6 handling of PCB products?

7 A. That was part of my product group, and when
8 a request would come in about--or a question would
9 arrive about, concerning PCBs, I tried to respond.

10 Q. Were you tasked with affirmatively going out
11 to customers to discuss with them the appropriate use
12 of PCB material, whether or not they wrote to you
13 first?

14 A. Yes.

15 Q. Do you recall what customers you made those
16 approaches to?

17 A. No, I didn't.

18 Q. Would it be to the big customers like
19 Westinghouse and General Electric, as examples?

20 A. That's unlikely, because they were so
21 familiar with those materials and had established
22 their own guidelines that they used for their
23 operations, they'd be the least apt to request
24 additional information.

25 Q. Did you have any dealings with any of the

1 foundry operations in Anniston after you left as plant
2 manager of the Anniston plant?

3 A. I did not.

4 MS. LAVEY: Why don't we break?

5 MR. WETMORE: Okay.

6 THE VIDEOGRAPHER: This will end tape number
7 3 in the deposition of William B. Papageorge. We are
8 off the record at 12:08 P.M.

9 (Luncheon recess.)

10 THE VIDEOGRAPHER: We're back on the record
11 at 1:29 P.M. This will begin tape number 4 in the
12 deposition of William B. Papageorge.

13 EXAMINATION

14 QUESTIONS BY MS. O'NEAL:

15 Q. Good afternoon, Mr. Papageorge.

16 A. Good afternoon.

17 Q. My name is Lynne O'Neal, and I represent
18 Phelps Dodge, and I want to ask some questions that
19 are follow-ups, primarily, of what you've been asked
20 over the past three days, nothing that would be
21 duplicative, hopefully, but just to fill in some gaps.

22 You testified on our first day that you
23 served as a consultant to a law firm involved with
24 Monsanto/Solutia litigation. What was the name of
25 that law firm?

1 A. Smith Moore, LLP.

2 Q. And they are located where?

3 A. Greensboro, North Carolina.

4 Q. And how long have you had that consultancy
5 relationship with the Smith Moore firm?

6 A. Help me with the relationships. Initially,
7 I first met members of that firm in 1970 or
8 thereabouts, '71. Later, the relationship became more
9 formal in terms of I signed an agreement with them
10 that I would participate in issues involving PCBs and
11 Monsanto at that time, so--and this was roughly
12 1972-ish. These dates are not exact, but it's that
13 period.

14 Q. Has the relationship that you have with the
15 Smith Moore firm changed any since you signed the
16 agreement with them for the more formal arrangement in
17 the 1972 time period?

18 A. The relationship hasn't changed. My--the
19 role I play is roughly the same except that it becomes
20 now one--it has become through the years a case of
21 discussing with new attorneys that come on board, the
22 preparation of some TV video tapes that are used by
23 the firm whenever I am not available, and that's
24 about--it continues that way.

25 Q. Now, you mentioned some videos you had made

1 for when you are not available, are those basically
2 provided as a educational materials where you provide
3 your knowledge and information concerning the PCBs and
4 the Monsanto processes to these other lawyers? Is
5 that what the purpose is?

6 A. That's one type.

7 Q. Okay, what other types are there?

8 A. The other type is similar to the tape now
9 being taken. Portions of those tapes that are
10 available are used; I don't know how, but I know
11 they're used somewhere.

12 Q. Okay. How long have you been on a retainer
13 basis as a consultant with the Smith Moore firm?

14 A. About 1972-ish.

15 Q. About the time the relationship was
16 formalized?

17 A. Yes.

18 Q. And has the amount of the retainer, the
19 thousand dollars that you mentioned the first day,
20 remained, per month remained constant during that
21 period of time or has it changed?

22 A. At one time, it increased.

23 Q. Above the thousand or--

24 A. Above.

25 Q. Okay, and do you receive that retainer each

1 month from that firm, regardless of whether any
2 services are required for that month?

3 A. Yes.

4 Q. You also testified on the first day that you
5 had spent approximately eight to ten hours with
6 Mr. Nassif and Mr. Mike Kelly from the Smith Moore
7 firm in preparation for your deposition. Do you
8 recall that?

9 A. Correct.

10 Q. Did you have the opportunity or did you
11 actually review the Complaint in this lawsuit in
12 connection with your preparation?

13 A. I don't remember any review of the
14 Complaints.

15 Q. Okay. Have you ever seen the Complaint or
16 read the Complaint--

17 A. No.

18 Q. --that we're deposing you about in this
19 case?

20 A. No.

21 Q. Okay. Have you assisted anyone in
22 connection with answering interrogatories or providing
23 information to be disclosed to the parties in this
24 case?

25 A. No.

1 Q. What is your understanding, Mr. Papageorge,
2 with regard to the nature of this lawsuit that we're
3 deposing you about today?

4 A. My understanding is that the presence of,
5 I'm going to call them chemicals, materials in the
6 Anniston area are such that representatives of
7 Solutia-Monsanto find it puzzling as to where these
8 materials got to where they are, first of all, what
9 are they and how did they get there, and that seems to
10 be the, the major issue.

11 Q. And what was the source from which you
12 derived that understanding?

13 A. Mr. Nassif and Mr. Kelly.

14 Q. And you mentioned that some representatives
15 of Monsanto/Solutia find it puzzling as to the
16 materials that have been found and how they got to
17 where they are. What representatives of
18 Monsanto/Solutia were you referring to?

19 A. I'm referring to these attorneys who, in my
20 mind, represent Monsanto and Solutia.

21 Q. You also indicated that during your
22 employment at the Queeny plant, you were involved with
23 the making of production that contained PCBs; is that
24 correct?

25 A. Yes.

1 Q. What were the names of the products that you
2 were involved with?

3 A. Pydraul, P-y-d-r-a-u-l.

4 MR. WETMORE: Who's ever typing on phone,
5 could you hit your mute button? Thanks.

6 BY MS. O'NEAL:

7 Q. Go ahead, Mr. Papageorge. You mentioned
8 Pydraul.

9 A. Some of the Therminols. I believe some of
10 the Skydrols, which are aircraft hydraulic fluids.
11 That's all that comes to mind now.

12 Q. Now, you indicated that you became plant
13 manager in Anniston in 1965; is that correct?

14 A. That is correct.

15 Q. Prior to becoming plant manager, did you
16 have an understanding as to the reasons that your
17 predecessor was being replaced as the plant manager in
18 Anniston?

19 A. I can share with you my understanding at the
20 time.

21 Q. And that's what I'd like to have, sir.

22 A. The individual was being promoted. He was
23 perceived to have done a good job and deserved a
24 higher level position as a reward.

25 Q. Is that Mr. McClain?

1 A. Yes.

2 Q. And do you know what position he was
3 promoted to?

4 A. Plant manager, I think, of the Nitro, West
5 Virginia, plant.

6 Q. Now, you said that was your understanding
7 that you came to have before you came to Anniston.
8 Did that understanding change in any way as time
9 passed as to the reason he was leaving the Anniston
10 facility?

11 A. No.

12 Q. What is your understanding, Mr. Papageorge,
13 as to the reason you were selected to be the Anniston
14 plant manager in 1965?

15 A. I can only share with you my--I was never
16 given an official reason. I was just told by
17 Mr. Robert Soden, who became the Director of
18 Manufacturing that's involved with all these plants in
19 the Organic Division, that he had to replace
20 Mr. McClain, and he decided I was the one to do so.

21 Q. Now, you described in some detail the
22 organizational structure at the Anniston plant with
23 regard to direct reports, and there were two
24 manufacturing superintendents, a personnel
25 superintendent, a superintendent of Technical

1 Services, a maintenance superintendent, a
2 superintendent of warehousing, shipping, and waste
3 hauling, and a part-time plant physician; is that
4 correct?

5 A. Yes.

6 Q. Those were your direct reports?

7 A. And I added two further positions, as I
8 remember.

9 Q. What were those?

10 A. The purchasing agent. The second one
11 escapes me. It'll come later, I hope.

12 Q. And when did you create the position of a
13 direct report of a purchasing agent?

14 A. When did I--

15 Q. When did you add the direct report of the
16 purchasing agent? You said you added that sometime
17 after you came.

18 A. Oh. When did I?

19 Q. Yes, sir.

20 A. It was in existence when I arrived.

21 Q. You added that in your earlier testimony to
22 your initial--

23 A. To the,--

24 Q. --structure. Okay.

25 A. --to the--and I'd like to add the other one

1 that avoided me earlier, the safety director.

2 Q. And all of these direct reports were in
3 place when you came to the facility in 1965 as plant
4 manager; is that correct?

5 A. That is correct.

6 Q. Now, did that organizational structure
7 change during your tenure as plant manager?

8 A. No.

9 Q. When you left Anniston in the end of 1969 to
10 take the new position at headquarters, Gene Jesse
11 became the plant manager; is that correct?

12 A. That is correct.

13 Q. What is your understanding as to the reason
14 that Mr. Jesse was named as your replacement?

15 A. My understanding is based only on an
16 assumption of my own.

17 Q. What is that assumption?

18 A. It's that Mr. Jesse was selected by
19 Mr. Soden to the replace me because Mr. Soden felt
20 Mr. Jesse was the best qualified of all the other
21 potential candidates that he reviewed.

22 Q. Prior to coming to Anniston as the plant
23 manager, where was Mr. Jesse employed?

24 A. I believe it was the J. F. Queeny Plant in
25 St. Louis.

1 Q. Do you have any recollection of what
2 position he was in at Queeny before he came to
3 Anniston?

4 A. No, I don't.

5 Q. Did Mr. Jesse serve some time at the
6 Anniston plant, getting his feet wet, so to speak,
7 while you were still officially plant manager?

8 A. No.

9 Q. You also testified that there was an
10 increase in personnel at the Anniston plant during
11 your tenure from approximately 150 to 350; is that
12 correct?

13 A. I did.

14 Q. And you also indicated that that increase
15 was the result of several factors, one being an
16 increase in production of existing products, one being
17 an increase in technical personnel, and one being the
18 introduction of new products; is that correct?

19 A. That is correct.

20 Q. Okay. What existing products had increased
21 production that resulted in more personnel being
22 added?

23 A. The insecticide team increased their
24 production, there was a new P2S5-producing unit added,
25 phosphorus pentasulfide, there was an increase in

1 production in the Paranitrophenol Department, which is
2 a raw material for the Insecticide Group, and as we
3 indicated earlier, the Aroclor line of products
4 increased in capability, requiring more labor.

5 Q. What was the reason for the increase in
6 technical personnel?

7 A. I don't know that there's any one reason.
8 There are several.

9 Q. What are they, sir?

10 A. There was an increased need, of course, in
11 the gathering of knowledge, information relating to
12 the PCB issue which was evolving in the latter part of
13 that '68-'69 period. There was--hmm: There was a
14 need for technical people to help the plant introduce
15 some of the information and design that we talked
16 about earlier for the expansion, and for these
17 individuals at the plant to work with the Corporate
18 Engineering Department, to coordinate the plant
19 efforts with the corporate efforts. That is all that
20 comes to mind at present.

21 Q. Now, you indicated that with regard to the
22 biphenyl production, there was a change in the process
23 during your tenure. I think one description has been
24 from a one-pot to a cascading-pot process; is that
25 correct?

1 A. That's the chlorinated biphenyl, not just
2 the biphenyl.

3 Q. So the chlorinated biphenyl process changed
4 from a one-pot to a cascading-pot process while you
5 were there; is that correct?

6 A. Well, the cascading was added to the
7 original--the original one-pot process stayed in
8 place, and the cascading was added to increase the
9 amount of material produced via a different approach.

10 Q. So in connection with the change in adding
11 the cascading process, additional pots were added; is
12 that correct?

13 A. Yes.

14 Q. Okay, and the old pots remained in place and
15 in use, as well; is that correct?

16 A. Yes.

17 Q. You were asked by Miss Lavey about what she
18 marked as Defendant's Exhibit Number 9 to your
19 deposition, and I'll hand it back to you. I just have
20 a couple of quick questions. This document, which
21 purports to be the standard manufacturing process for
22 biphenyl, describes in some detail what is called the
23 lead pot process. Do you recall that having been in
24 this document earlier, Mr. Papageorge, when we looked
25 at it?

1 A. Yes.

2 Q. Okay. Now, you also testified that you
3 didn't know anything about a lead process at Anniston.
4 Is that right?

5 A. It just, in my memory, doesn't ring any
6 bells. I--

7 Q. But you have no reason to, to question the
8 fact that document Defendant's Exhibit 9 was the
9 standard manufacturing process in place at Anniston at
10 some point in time at least by September 17, 1957, the
11 date of the document; is that correct?

12 A. That is correct.

13 Q. And is it your testimony that during the
14 course of your tenure at Anniston, you didn't learn
15 anything about the historical use of lead at the
16 Anniston facility?

17 A. True.

18 Q. Now, during your employment at Anniston,
19 which plants, through which plants was Monsanto
20 manufacturing or producing PCB-related products?

21 A. In addition to Anniston?

22 Q. In addition to Anniston, yes, sir.

23 A. There was a W. G. Krummrich Plant located in
24 Sauget, Illinois, and the John F. Queeny Plant located
25 in St. Louis.

1 Q. Did Monsanto operate a plant in Newport,
2 Wales, at that time?

3 A. Yes.

4 Q. And did they make products containing PCBs?

5 A. Yes.

6 Q. Also during the time that you were the plant
7 manager at Anniston, was Monsanto involved in a joint
8 venture with Mitsubishi Corporation in Japan for the
9 manufacture of PCB-containing products?

10 A. Yes.

11 Q. Now, in connection with your duties as a
12 plant manager in Anniston, did you talk with the plant
13 managers at any of these other facilities that
14 produced PCB-containing products?

15 A. I talked with all but Mitsubishi people.

16 Q. Who was your counterpart at the Newport
17 Wales facility?

18 A. Oh, I don't remember his name.

19 Q. Do you recall anyone that was involved in
20 the manufacturing process at the Newport, Wales
21 facility?

22 A. No, I don't.

23 Q. At Sauget, do you recall who your
24 counterpart was?

25 A. Sauget at that time? Jerry Bratsch,

1 B-r-a-t-s-c-h.

2 Q. Do you recall anyone else at Krummrich or
3 Sauget that was involved in the production process of
4 PCB-related products?

5 A. There was a Jack Malloy. I can't recall any
6 others.

7 Q. Is Mr. Bratsch still alive or is he
8 deceased, to your knowledge?

9 A. I, I don't know.

10 Q. How about Mr. Malloy?

11 A. I don't know.

12 Q. If you would, Mr. Papageorge, would you
13 please describe for us the equipment that was used in
14 the production of biphenyls at Anniston?

15 A. When you say biphenyls, are you talking
16 about--

17 Q. Chlorinated biphenyls?

18 A. Chlorinated?

19 Q. Yes, sir.

20 A. It consisted, really, of tanks, or pots, or
21 whatever is the best word to use. These are vessels
22 that are designed to heat the contents, and in these
23 vessels, the biphenyl, itself, would be introduced.
24 There was a provision made for chlorine gas to be, I'm
25 going to use the word "bubbled" through, and the

1 intent, there, being for the chlorine to replace the
2 hydrogen to make chlorobiphenyls and to activate that
3 process, there was a container of iron filings
4 introduced, and that would be slowly consumed, so that
5 container would last for months.

6 Q. What was the size of that container?

7 A. As best I remember, about the size of that
8 wastebasket, there, five-gallon pail, about that size.

9 Q. And was one of those five-gallon-pail-sized
10 baskets in each of the pots that was used in the
11 biphenyl-producing process?

12 A. Each of the pots that were chlorinators.

13 Q. Chlorinators.

14 A. Yes.

15 Q. And how many of those chlorinators were
16 there?

17 A. At Anniston?

18 Q. Yes, sir.

19 A. Three of them, as I remember.

20 Q. And did that change any during the time you
21 were at Anniston? Were there more added or some taken
22 away?

23 A. The three chlorinators that were designed to
24 operate in series were added.

25 Q. Okay. So three were added. How many were

1 there when you got there?

2 A. Three.

3 Q. Okay.

4 A. Three were added, making a total of six.

5 Q. Of six? Now, you answered those questions
6 with regard to the equipment used in creating the
7 chlorinated biphenyls.

8 A. Yes.

9 Q. Was there a process first by which the
10 biphenyls were created from benzene?

11 A. Were what? I didn't hear that one word.

12 Q. I'm sorry. You were describing the
13 equipment used in the process creating chlorinated
14 biphenyls.

15 A. Correct.

16 Q. Now, was different equipment used in a stage
17 earlier? Is there an earlier stage of the process
18 where you actually created the biphenyls from the
19 benzene?

20 A. Oh. To me, that's a different process.
21 That the process of making biphenyl.

22 Q. What equipment was used in the process
23 creating biphenyl?

24 A. Again, it's a, a tank or a pot that is used
25 to take benzene and remove hydrogen, which allows the

1 two benzene rings, which are represented chemically as
2 a--hexagons, to make the biphenyl.

3 Q. Now, in addition to the pots that are used
4 in the biphenyl production process, what other
5 equipment is used? Is there piping involved?

6 A. Piping, and pumps, and a source of heat.

7 Q. What was the source of heat?

8 A. Steam, in this case.

9 Q. And how was the steam generated?

10 A. Over in the power plant that we had.

11 Q. And that steam was piped into the biphenyl
12 production facility?

13 A. Correct.

14 Q. And then there were pipes also that brought
15 the benzene from the benzene tanks into the facility,
16 as well; is that correct?

17 A. That is correct.

18 Q. Then the benzene, how was it delivered--the
19 biphenyl, how was it delivered into the facility for
20 making the Araclors?

21 A. For making which?

22 Q. The Araclors.

23 MR. WETMORE: Araclors.

24 A. Oh, the Araclors? Oh, no, it's kept heated,
25 so it stays a liquid and is pumped from the collection

1 tank or storage tank over to these chlorinating pots
2 in the chlorinated biphenyl setup.

3 BY MS. O'NEAL:

4 Q. So it was piped from the biphenyl facility
5 to the chlorinating facility; is that correct?

6 A. Yes.

7 Q. Okay, and there was a storage tank for the
8 biphenyls; is that correct? Once they were created?

9 A. Yes.

10 Q. What was the size of that tank?

11 A. Oh, I don't, I don't have any idea.

12 Q. Do you have any understanding or
13 recollection as to the quantity that that tank would
14 hold?

15 A. No, I don't anymore.

16 Q. Was there one tank or more than one tanks
17 for biphenyl storage?

18 A. I don't remember.

19 Q. Do you recall where in relation to the
20 biphenyl production facility the storage tank was
21 located?

22 A. All I can recall is it was nearby. That's
23 it.

24 Q. In connection with the creation of the
25 biphenyls, I think you testified that hydrogen had to

1 be removed from that--

2 A. I did.

3 Q. And how was the hydrogen removed?

4 A. I don't recall the chemistry involved, at
5 this point.

6 Q. Was it a function of a catalyst causing a
7 reaction, or was it a heat-induced reaction, or was it
8 a combination of a number of factors, if you recall?

9 A. Chemically speaking, I would suspect that a
10 catalyst and heat both were involved.

11 Q. And that would be just based on your
12 chemistry background; correct?

13 A. Correct.

14 Q. But not a direct recollection of the--

15 A. Correct.

16 Q. --process. Now, in connection with the
17 manufacturing processes for both the biphenyls and the
18 chlorinated biphenyls, were the pipes involved in
19 those processes cleaned out on occasion?

20 A. On occasion, yes.

21 Q. And were those done at stated frequencies or
22 whenever there was an apparent need to do so, based on
23 the judgment of the operator?

24 A. It's based on the need as perceived by those
25 people who are familiar with the normal situation and

1 an abnormal situation.

2 Q. Now, did the cleaning out of the pipes
3 require, on occasion, the dismantling of some of the
4 production equipment?

5 A. Occasionally.

6 Q. And when a dismantling was required, that
7 would be a function given to the Maintenance
8 Department; is that correct?

9 A. The disconnection or disassembly of the pipe
10 system is given to the Maintenance Department. The
11 actual cleaning effort was done by the operating
12 personnel.

13 Q. And how would they effect the cleaning? How
14 would they clean? Would they clean under air
15 pressure? Would they use water? Would they use
16 solvent? What, what type of process would be used to
17 clean out these pipes?

18 A. That will vary with the cause for the
19 stoppage or blockage. Sometimes, just air pressure
20 will push the material forward and open up the line.
21 Other times, they had to prod it with rods and at
22 least start an opening, and other times, it required
23 just the presence of steam to melt the material to get
24 it to flow out and out of the way, so it would vary,
25 depending on the cause of the stoppage.

1 Q. And what causes were there for stoppages in
2 those pipes?

3 A. Well, many times, it's the presence of a
4 material that is intended to stay in the distillation
5 system but unwantingly goes on up with the purified
6 product and ends up in the pipelines.

7 Q. Such as? What type of, of material that was
8 supposed to stay in the distillation process?

9 A. Well, we've talked earlier about montars.
10 Those chemicals that make up montar will sometimes
11 get, because of a temperature change or something,
12 would be distilled over with the finished product
13 instead of staying at the bottom of the pot, and once
14 they get up the distillation system, they go on
15 following the path of the--that's intended for the
16 finished product, and that's where they create the
17 blockages.

18 Q. So what other substances other than
19 montar-type substances would create blockages?

20 A. I can't think of any other. That's the only
21 type that could possibly be present.

22 Q. Do you recall a gentleman by the name of Jay
23 Johnson serving as a purchasing agent while you
24 were--Jay Johnson?

25 A. Jay Johnson. I do not.

1 Q. Was there a point in time in which the
2 purchasing for the plant was conducted or handled out
3 of St. Louis, as opposed to the plant, itself?

4 A. I'm not aware of that happening.

5 Q. It didn't happen during your watch as plant
6 manager; is that correct?

7 A. At least no one told me.

8 Q. Okay.

9 (Laughter.)

10 Q. (Continuing) Now, you testified that iron
11 turnings were used in the chlorinator, and I think we
12 talked about the fact earlier that those were
13 basically iron filings; is that right?

14 A. That's my understanding.

15 Q. Okay. Were there written specifications for
16 those turnings?

17 A. I didn't see any.

18 Q. I think you mentioned that those turnings
19 were purchased in the form in which they were used; is
20 that correct?

21 A. That's my understanding.

22 Q. Okay, and would it have been the practice
23 when you were at Monsanto as plant manager for there
24 to have been written specifications for material such
25 as the iron turnings?

1 A. That was the ongoing practice.

2 Q. And who would have been responsible for
3 creating those specifications if there were written
4 specifications?

5 A. The information would have to come out of
6 the Research Department and conveyed to a group of
7 individuals that write up the manufacturing process,
8 which would include a production person, a research
9 person, a safety person, and so on, and those
10 specifications for that kind of material would then be
11 conveyed to the Purchasing Department, who would then
12 work to find out a supplier who is willing to meet
13 that specification and can meet the needs or demands
14 for so many pounds a year, or so many pounds a month,
15 whatever is required.

16 Q. Now, you testified that when the iron
17 turnings were depleted, they would be replenished, the
18 baskets would be refilled as the levels dropped; is
19 that correct?

20 A. Yes.

21 Q. What caused the filings or the turnings to
22 diminish or be depleted?

23 A. The iron reacts with the chlorine, with the
24 was acid, hydrogen chloride, to make ferric chloride.
25 This is not a rapid process, it's a slow process, but

1 it does happen.

2 Q. You testified, Mr. Papageorge, that you
3 couldn't say how the manufacturing process for the
4 chlorinated biphenyls changed from 1957 until 1966.
5 We had looked at two separate standard manufacturing
6 processes; one predated you, one came after you. Who
7 would know, who would have a understanding as to the
8 changes in that process at this Anniston facility?

9 A. Are you referring to the step-wise
10 chlorination process or the single-pot process?

11 Q. What I'm referring to, Mr. Papageorge, is
12 the lead pot process that we looked at marked as
13 Defendant's Exhibit 9, which was the SMP in place in
14 1957 versus the process in place in 1966, which was in
15 place when you were there that has been marked
16 previously as Exhibit 13, and all I'm asking you is,
17 you said that you couldn't--you didn't know how the
18 process had changed between the 57 marked as
19 Defendant's Exhibit 9 and the process that was in
20 place while you were there that is marked as
21 Defendant's Exhibit 13, and my question was very
22 simply, who would know? Who would know how that
23 process had changed?

24 MR. WETMORE: If anyone.

25 A. Well, the management of the production team

1 that is assigned the responsibility for that process,
2 is the group that would be responsible for being aware
3 of any changes and to document those changes, train
4 their production team, so it's not just one person,
5 it's really the supervisor, and his foremen, with
6 advice coming from Research, and Engineering, and
7 wherever else they feel they need it.

8 BY MS. O'NEAL:

9 Q. So someone in Mr. Moody's department,
10 perhaps, would have known about the changes in the
11 process; would that be correct? I think you testified
12 that Robert Moody was the superintendent for
13 manufacturing of everything other than insecticides.

14 A. That's true, but I'm looking at the year,--

15 Q. Right.

16 A. --and this document I'm looking at, here, as
17 Exhibit 13, lists Mr. Moody as the superintendent.

18 Q. Right.

19 A. So if he was in place in 1966, he's the top
20 individual on the production team.

21 Q. And he was in place when you came in 1965;
22 is that right?

23 A. Yes.

24 Q. You testified, Mr. Papageorge, about
25 material being drummed, various types of material

1 being drummed to take into what was called the dump.

2 Do you recall that?

3 A. I do.

4 Q. Okay, and I think that, that we narrowed
5 down this morning that there was only one dump that
6 was used, to your knowledge, while you were plant
7 manager; is that correct?

8 A. That is correct.

9 Q. And that was at, basically at the base of a
10 hill; is that correct?

11 A. That is correct.

12 Q. Outside the fenced area of the plant.

13 A. Yes.

14 Q. Okay, and you don't recall that that was
15 across the street from Old Birmingham Highway which we
16 us used to call Old Highway 202 from the plant, do
17 you?

18 A. I recall there was a roadway across. What I
19 was surprised to see later that there is a second
20 road.

21 Q. There are now two roads between the plant
22 and the landfill?

23 A. Parallel to each other.

24 Q. Correct.

25 A. But I was not aware at that time, back in

1 when I was plant manager, of that second, newly-
2 constructed roadway.

3 Q. It wasn't there when you were plant manager.

4 A. That is true.

5 Q. But when you were plant manager, there was
6 one road between the production facilities of the
7 plant, the fenced part of the plant, and the landfill
8 that was referred to as the dump during your tenure;
9 is that right?

10 A. That is correct.

11 Q. Okay. Are you aware of any occasions during
12 your tenure, Mr. Papageorge, where material was taken
13 to the Anniston City Landfill from the plant?

14 A. I am not aware of any site referred to as
15 the Anniston City Landfill.

16 Q. Are you aware of any waste material being
17 taken from the plant facility to the Catlin County
18 Landfill?

19 A. I am not.

20 Q. Are you aware of any offsite disposal of
21 materials from the Anniston facility?

22 A. The only offsite disposal that I am aware
23 of, and not knowing in detail, is the disposal of
24 dismantled, old equipment by outside contractors who
25 would haul it away. That's the only material. I'm

1 not aware of any material created during manufacturing
2 and accumulating and then disposed by an outsider.

3 Q. What equipment do you recall being
4 dismantled and eventually taken away by an outside
5 contractor?

6 A. I don't recall any specifics. We mentioned
7 earlier about shed space or a little office space kind
8 of construction that was dismantled during this
9 warehouse expansion, that kind of thing.

10 Q. Do you recall any production equipment being
11 dismantled?

12 A. No.

13 Q. You indicated, I believe it was yesterday,
14 that the drum material would be taken to the dump and
15 would eventually be covered with soil. Was all of the
16 soil that was used as cover retained on the landfill,
17 itself?

18 A. Yes.

19 Q. Okay, and was all of the soil used as cover
20 soil that had been excavated when the landfill had
21 been created?

22 A. Each, I'm going to call it each using
23 facility would create a place for the waste by digging
24 into the hillside, setting that soil aside and saving
25 it for later, depositing the waste, and then using

1 that same soil to cover up.

2 Q. How frequently was the cover placed on the
3 landfill? Because your testimony had been that
4 eventually, it was covered.

5 A. Yes. There is no set time period. It
6 really depended on how fast the drums containing waste
7 material accumulated, and when they reached the point
8 where they covered the old hole, so to speak, that
9 deposit of material would be covered by soil and
10 another hole dug, waiting for the next batch of
11 discarded material.

12 Q. And do I understand correctly,
13 Mr. Papageorge, that the responsibility for delivering
14 the waste to the landfill, as well as responsibility
15 for covering the waste in the landfill, was not the
16 Maintenance Department but was rather under the
17 direction of the superintendent of warehousing and
18 waste disposal?

19 A. Yes.

20 Q. You also indicated that there were lots of
21 possible sources for Aroclors on the floor in the
22 manufacturing facility. Do you recall that?

23 A. Yes, there are possible sources, yes.

24 Q. Tell me all the possible sources that you
25 can think of.

1 A. I don't think I can remember all of them,
2 but activities such as sampling; the equipment used in
3 sampling can fail. A hose can have a leak, and while
4 you are using that hose to fill your sample bottle,
5 the leak is occurring back in the hose. The, the
6 valves that are used to shut off the, the flow of
7 sample material, an example, would leak, just like my
8 faucet at home leaks, so--and then there is the
9 connection, say, to a pump that's working, vibrating
10 and so on, the flange between the metal, the gasket
11 between the metal flange could fail and it could start
12 dripping from a pipe fitting. It's possible, too, for
13 the tank, itself, developing a leak after years of
14 service, the wall gets in this and starts oozing
15 through and then there's a leak observable on the
16 floor below it, and in every piping system where
17 connections are made for different parts of the
18 system, the potential for leakage is always there.

19 Q. From time to time, were pipes replaced?

20 A. Oh, yes. That's, that's normal. It doesn't
21 happen often, but it does happen.

22 Q. And how were those pipes disposed of?

23 A. The best I recall is that they would sell
24 them to a scrap dealer.

25 Q. Do you recall what scrap dealer was the

1 scrap dealer of choice with regard to disposing of the
2 pipe?

3 A. No, I never did get that detail.

4 Q. Who would have been responsible for handling
5 that type of transaction at the plant?

6 A. Well, the maintenance superintendent would
7 have to communicate with this individual in charge of
8 warehousing, shipping, movement, and tell him that he
9 had a need to ship so many tons of steel that used to
10 be pipe and when they get rid of it, and it would be
11 up to the, really, the purchasing man to negotiate how
12 much the receiver of this scrap iron was willing to
13 pay for it.

14 Q. What were the causes, Mr. Papageorge, for
15 pipes having to be replaced?

16 A. The general cause--and it's not a frequent
17 one--is just what I would call plain rusty old pipes.
18 Now, many of these heated pipes are covered with
19 insulation, and sometimes the, the space between the
20 insulation and the pipe, itself, accumulates, let's
21 say, some acidic water, and that acid is kind of
22 slowly eating into the wall of the pipe until the wall
23 gets so thin, it springs a leak, which initially is
24 just an ooze, you don't notice it because the
25 insulation is absorbing it, and eventually, it starts

1 dripping and becomes observable.

2 Q. Were periodic inspections done by the
3 Maintenance Department or the Production Departments
4 of their equipment to look for possible leaks, pipes
5 that needed replacing, things like that?

6 A. Well, I'm not aware of any inspection
7 program that will lead to any discovery any better
8 than the leak, itself, and if it does, if that leak
9 does occur, it's obvious there's a problem. You don't
10 have to have a formal inspection with a check sheet to
11 say it's okay or it's not okay.

12 Q. So there wasn't a formal inspection program
13 where every month, somebody from Maintenance walked
14 through and checked out the pipes?

15 A. No.

16 Q. It was just when they became observable, the
17 issue was addressed as to whether replacement was
18 needed or not needed. Is that--

19 A. Correct.

20 Q. --correct? What was the location of the
21 biphenyl production facility to that road that you and
22 I talked about that later became two roads, that was
23 known as the Old Birmingham Highway?

24 A. My best description of that is downhill from
25 it, down where the mostly level area occurred,

1 although it still sloped, but not as dramatically as
2 the upper level.

3 Q. Before it turns into Clydesdale?

4 A. I think that's a correct description, yes,
5 mm-hmm.

6 Q. Was there anything, plant-wise, between the
7 biphenyl production facility and that roadway?

8 A. I'm trying to recall where the office
9 building was located. It sounds like it might have
10 been in that area between.

11 Q. I thought the office building was more on
12 the Clydesdale entrance area than at the foot.

13 A. You mentioned Clydesdale. That's what--

14 Q. No, I was talking about before we curbed
15 onto Clydesdale.

16 A. Oh, the upper part of it? No, there's,
17 there's nothing there.

18 Q. There's nothing between that facility and
19 the highway?

20 A. Correct.

21 Q. Okay.

22 A. At that point.

23 Q. At that point in time. Do you recall during
24 your tenure, Mr. Papageorge, there being any thefts or
25 losses of raw materials from the facility?

1 A. Losses of raw material?

2 Q. Or thefts of raw materials.

3 A. I don't recall any.

4 Q. Do you recall any thefts of mercury from the
5 facility?

6 A. No.

7 Q. Was mercury used at the facility?

8 A. Yes.

9 Q. And what application was mercury used for?

10 A. It was used in the facility that created
11 chlorine gas.

12 Q. And was that true at the time you were the
13 plant manager?

14 A. Yes.

15 Q. As plant manager, did you have a role in the
16 budgeting process for the plant operations?

17 A. In which--

18 Q. Budgeting process. Budgeting.

19 A. Budgeting process?

20 Q. Yes, sir.

21 A. Oh, yes. I--

22 Q. Were budgets prepared at the plant level and
23 then sent to St. Louis?

24 A. Yes.

25 Q. And did you budget for your plant to acquire

1 raw materials?

2 A. Yes.

3 Q. Now, we talked earlier this morning about
4 the use of sand to clean up spills, Aroclors from the
5 floor. Do you recall that?

6 A. Yes.

7 Q. How was the sand transferred from the piles
8 in which it was maintained to the spill?

9 A. Well, I saw sand transferred in these steel
10 containers with the full open top.

11 Q. And were those carried by forklift?

12 A. Yes.

13 Q. And who was responsible for transporting the
14 sand from the piles to the operating facility? Was
15 that Maintenance, or was that--

16 A. The warehousing team.

17 Q. The warehousing folks. Are you aware,
18 Mr. Papageorge, of any maps or plats that showed the
19 facility as it existed at the time that you were
20 there?

21 A. I have seen such maps or plats.

22 Q. Have you seen any maps or plats of the
23 facility that predated your tenure, to give historical
24 perspective?

25 A. I've seen the older ones, yes.

1 Q. Okay. Do you recall references on those
2 older plats or maps to lead pots?

3 A. I do not.

4 Q. Where were those mats--excuse me, maps or
5 plats maintained, if you recall, Mr. Papageorge?

6 A. The best I recall, they were under the
7 custodianship of the Technical Services Department.

8 Q. At the plant, itself?

9 A. At the plant, itself, and that does not mean
10 that Monsanto's home office didn't have copies of
11 that.

12 Q. In fact, you would expect that they would,
13 wouldn't you?

14 A. That would make sense, yes.

15 Q. When is the last time you recall seeing any
16 of those facility maps, Mr. Papageorge? When is the
17 last time you recall having seen--

18 A. Seen? Hmm: I just don't remember a purpose
19 or a reason for seeing any for several months.

20 Q. You've seen them before in connection with
21 lawsuits that were brought against the company?

22 A. I believe that's when it happened, but
23 this--it's been many months since I've seen it.

24 Q. But you had access to them when you were at
25 the plant as plant manager; correct?

1 A. Yes, but being at the plant, I didn't need
2 the map. I--

3 (Laughter.)

4 Q. Tell me where--I know your office was in an
5 office building. Was your--did your office have
6 windows?

7 A. Well, in the beginning, we were in an old
8 building, and I had a, a piece of it, and it had a
9 window, and then a new office was constructed, and my
10 office did not have a window.

11 Q. In your old office that had the window, what
12 did the window look out on?

13 A. As I remember, it just looked out on the
14 parking area for the office employees.

15 Q. Now, approximately what portion of your day,
16 on average, was spent inside the office, as opposed to
17 out in the manufacturing facility?

18 A. What portion of my time?

19 Q. Yes, sir.

20 A. Oh, I don't know that I ever measured it or
21 knew how to measure it. Hmm: I would try to spend,
22 say, a couple of hours in the plant, just making
23 myself familiar in what's going on and all, and I
24 would suggest that I, I might have put in a couple of
25 hours meeting with individuals who had certain

1 information to share with me, and the rest of the
2 eight-hour day would be filled with memo writing, and
3 telephoning, and that kind of thing.

4 Q. So you tried to spend a couple of hours in
5 the day out in the manufacturing facilities,
6 themselves; is that correct?

7 A. Yes.

8 Q. Okay.

9 A. I'm going to correct that, because there are
10 times when I'd spend these couple of hours during the
11 day and then I might come in for the middle shift.

12 Q. Well, that was my next question. What were
13 your normal working hours? And then we'll get to
14 other visits.

15 A. Okay. All right.

16 Q. What were your normal working hours?

17 A. 8:00 to 5:00 or some such.

18 Q. First shift, roughly?

19 A. For the day shift, 8:00 in the morning, 5:00
20 in the evening.

21 Q. And then periodically, you would come in
22 during second shift to just have a feel for what was
23 going on and also in the event that you had heard any
24 rumblings about potential problems? Is that right?

25 A. Yes. I wanted employees who didn't get to

1 see much of me--

2 Q. To know you were there.

3 A. Well, I would arrive unannounced, and this
4 kind of disturbed some of them. They'd start sweeping
5 up quickly.

6 (Witness laughs.)

7 Q. Do you recall, Mr. Papageorge, the names of
8 any of the chief operators or operators who were in
9 the production units?

10 A. Whew: No, I don't.

11 Q. Now, we talked a little bit about the
12 cleanup of the equipment that was required from time
13 to time. Were there any general housekeeping chores
14 done with regard to the manufacturing facilities,
15 themselves? Were the facilities washed down? Were
16 they swept out? How were they maintained?

17 A. When you say how were they maintained, you
18 mean what level --

19 Q. How--

20 A. --or--

21 Q. --how, how, how was housekeeping done? What
22 house--let's strike that and do it this way. Was
23 housekeeping done in the manufacturing facilities?

24 A. Well, the, the whole objective was to
25 maintain a housekeeping level that, first of all,

1 ensured safe working conditions. That's primary, and
2 by "safe working conditions," it isn't only the, the
3 type of hazard that exists when a person slips on
4 something but also cutting down on unnecessary
5 exposure to odors, and fumes, and, and the like. We
6 did not underestimate the value of just the presence
7 of cleanliness being important for morale, and by
8 that, I'm thinking of such things as an instrument
9 room about this size, all the instruments around, that
10 is filthy, it just wasn't acceptable. It's up to the
11 supervisor to make sure that somebody sweeps the
12 floor, and washes the glass on the instrument panels,
13 and so on.

14 Q. Were the supervisors or superintendents
15 responsible for the housekeeping within their
16 respective departments?

17 A. Yes.

18 Q. Okay, and they would charge, probably, the
19 most junior members of their staff with those cleaning
20 chores, that--

21 A. That is the normal arrangement.

22 Q. And those cleaning chores would include
23 things like washing down the floors or swiping
24 sweeping the floors, cleaning the windows, those type
25 of activities; is that correct?

1 A. And cleaning the rest room, and, and so on.

2 Q. You testified this morning about the
3 sandboxes that were at the base of the stairs.

4 A. Right.

5 Q. Do you recall that? Whose job was it to
6 fill those sandboxes? Who put the sand in there?

7 A. Some member of the operating team who the
8 chief operator or foreman would designate, "Your job
9 includes this duty."

10 Q. So would there be these steel drums
11 containing the sand close to the production facility
12 and they would replenish the boxes from those drums?

13 A. Yes.

14 Q. Okay. Were the sandboxes still at the foot
15 of the stairs when you returned to the plant on your
16 subsequent visits after leaving as plant manager, or
17 do you recall them having been removed at some point?

18 A. I recall they were eventually removed, but I
19 think in the first trip or two, they were still there.

20 Q. Okay.

21 A. I remember making some remark about "Hey,
22 let's get rid of these and give the fellas new boots
23 or work shoes to wear."

24 Q. The temptation to use them will be
25 diminished if they're not there to be used; is that

1 accurate?

2 A. Correct. Correct.

3 Q. Now, you testified that the sand that had
4 been swept up off the floor or otherwise discarded
5 would eventually be sealed in drums and taken to the
6 dump; is that correct?

7 A. Yes.

8 Q. What was the need for sealing? Why were
9 those drums sealed?

10 A. Well, we decided that since they contained
11 chlorinated biphenyls, we didn't want to risk any
12 escape into the environment. This is why they were
13 sent to this landfill to start with, and by putting
14 them in a steel container, we felt more comfortable
15 that they would stay under control longer and in a
16 better way.

17 Q. Now, was the practice with regard to sealing
18 those drums the same throughout your tenure? Did you
19 change that practice in any way with regard to sealing
20 the drums during your tenure?

21 A. No.

22 Q. That was a practice in place at the time you
23 came on as plant manager?

24 A. Yes.

25 Q. Now, you testified that the disposal of

1 those drums had to be monitored, that placing items
2 like that in the landfill had to be monitored.

3 A. Yeah.

4 Q. And that's why it was a problem with regard
5 to the use of so much sand; is that right?

6 A. Right.

7 Q. Who monitored the disposal of those drums?

8 A. The--if the drums were on the disposal site,
9 that became the responsibility of the superintendent
10 of the warehousing team.

11 Q. If they were actually still at the
12 production facility and not yet sealed, they were the
13 responsibility of whom?

14 A. Of the manufacturing management.

15 Q. Were any records kept with regard to the
16 disposal of these drums during your tenure?

17 A. I've never seen any.

18 Q. Were there any records kept of what was
19 transported from the plant to the dump?

20 A. No.

21 Q. Okay. Was sand used at the landfill as any
22 type of cover?

23 A. No.

24 Q. You indicated that the folks in Warehouse
25 and Shipping and Waste Disposal had to have some

1 training with regard to the handling of chemical
2 waste. Do you recall that?

3 A. Yes.

4 Q. Who provided that training to the warehouse
5 waste group?

6 A. Well, each of the groups were expected to
7 hold regular so-called safety meetings, at which all
8 kinds of safety matters were discussed, not all at one
9 sitting, but different subject with each meeting.
10 These meetings would take place at a minimum of once a
11 month, and most of the time, every couple of weeks.
12 The subject to be discussed would determine who the
13 speaker was, and if it involved a chemical-producing
14 unit's waste, we would have the supervisor or the
15 superintendent from that group speak to the warehouse
16 group about "This is the material you'll find, this is
17 the kind of container it's in, and these are the kind
18 of things that can happen," that type of discussion
19 would take place.

20 Q. Did the Maintenance Department have any
21 responsibilities with regard to the landfill?

22 A. I'm not aware of any assigned
23 responsibility.

24 Q. Do you recall there being issues with regard
25 to the limestone pit that required it to be upgraded?

1 A second pit to be added?

2 A. Yes. I recall the discussions.

3 Q. And one of the issues that was raised was
4 the fact that PCBs were migrating from the limestone
5 pit, despite the anticipated effects of the gravity;
6 is that correct?

7 A. Yes.

8 Q. Was there a scrap yard at the plant during
9 your tenure?

10 A. I'm not aware of any area that carried that
11 designation.

12 Q. Where were the used and replaced pipes
13 stored until they were shipped off to a scrap yard?

14 A. Oh, the location was not a fixed one. It
15 depended on the convenience of the moment as long as
16 it was orderly done, and this varied, of course, where
17 the major pipe replacement was taking place, they
18 wouldn't want to haul it all over the plant to get it
19 somewhere, they'd pick a spot fairly convenient and
20 yet not get in the way of any other important
21 activity.

22 Q. So would they stack those pipes on the
23 ground, outside the production facility from which
24 they were being taken?

25 A. It's outside of that, and, and like I said,

1 in a place that won't interfere with their activities.

2 Q. Do you recall whether there were any usages
3 of montars within the City of Anniston? Not at the
4 plant, itself, but whether there were any customers
5 who made application of the montar in the City of
6 Anniston.

7 A. I don't remember any of that.

8 Q. Prior to the replaced pipes being sold as
9 scrap, were they decontaminated?

10 A. Yes, if they contain a material that was
11 perceived to be easily released to the handlers of
12 this scrap pipe.

13 Q. Were PCB-related products deemed to be an
14 easily released material that would need--require
15 decontamination?

16 A. Depending on the amount. If it's just a
17 black stain midway through a six-foot pipe and the
18 workers can handle the piece of pipe with a crane or
19 something, it wouldn't be considered a problem.

20 Q. Who handled the decontamination?

21 A. The production people from which that piece
22 of pipe was removed.

23 Q. And how would pipes that were contaminated
24 with sufficient quantities of PCBs to require
25 decontamination, what process was used to

1 decontaminate them?

2 A. Well, as we said earlier, depending on what
3 the material was, you can use a rod to poke it
4 through, you can use steam, or just high water
5 pressure. It depended on the consistency of the
6 ingredient, what the material was, and what would it
7 respond to.

8 Q. Are you familiar with the substance known as
9 chat? Chat, c-h-a-t?

10 A. Chat?

11 Q. Yes.

12 A. I've heard that expression. I don't use it
13 personally, but--

14 Q. What--do you have an understanding as to
15 what that expression means?

16 A. I have an understanding. It may not be
17 accurate.

18 Q. What is your understanding?

19 A. I'm trying to find the right words to
20 explain. It's just chips of things. I don't know how
21 else to describe it.

22 Q. Did Monsanto use chat as a cleanup agent
23 like it used sawdust, or dirt, or sand?

24 A. I'm not aware of any such use.

25 Q. Was slag used at the Monsanto facility to

1 cover PCB spills in the tank car area?

2 A. No.

3 Q. Do you recall there being any slag on the
4 facility, itself?

5 A. Never.

6 Q. Do you recall whether, in your subsequent
7 visits or in connection with your continued
8 interaction with the Anniston facility, you
9 subsequently learned that slag was used to cover PCB
10 spills following your tenure as plant manager?

11 A. I don't recall that at all.

12 MS. O'NEAL: Mr. Papageorge, thank you, very
13 much.

14 MR. WETMORE: Could we go off the record to
15 talk about where we are?

16 THE VIDEOGRAPHER: This will end tape number
17 4 of the deposition of William B. Papageorge. We are
18 off the record at 2:44 P.M.

19 (Recess.)

20 THE VIDEOGRAPHER: We're back on the record
21 at 2:50 P.M. This begins tape number 5 in the
22 deposition of William B. Papageorge.

23 EXAMINATION

24 QUESTIONS BY MR. TAYLOR:

25 Q. Mr. Papageorge, I'm Jerry Taylor, and we met

1 a couple of days ago now. It may seem longer to you,
2 but I represent several of the defendants that Solutia
3 is suing in this case, and I also will try not to
4 duplicate any of the questions you've already been
5 asked, and my goal is to seek a little bit of
6 clarification, if not for the record, then in my own
7 mind, about things you've already talked about.

8 In discussing your role for the Smith firm
9 and your retainer, I don't want to beat a dead horse,
10 but you said that you haven't been as active as you
11 once were; at least, your fee has gone down. Is that
12 in relationship to the amount of time you have been
13 spending lately?

14 A. Yes.

15 Q. All right, and over the last three or four
16 years, there has been a number of lawsuits involving
17 the company with EPA, with the state environmental
18 agency, with other citizens in Anniston. Have you
19 also been involved in assisting the lawyers in those
20 matters?

21 A. I am assisting lawyers during that period of
22 time. Of course, I'm not privy to all of the cases
23 they're involved in and the details, so all I can say
24 is that when they feel they need something from me in
25 the way of information, they'll contact me.

1 Q. For example, there has been a good bit of
2 work that the company has done recently in
3 investigating and doing some cleanup work in the
4 Anniston area. Have you been involved with the
5 company or the lawyers in that particular work?

6 A. To a degree.

7 Q. What role have you served in that aspect?

8 A. I don't know quite how to describe it except
9 that I was in a position where I could bring
10 up-to-date some attorneys from another firm out of
11 Birmingham who were involved to a degree, but I don't
12 know how much, so these new attorneys, I had to, in a
13 way, tutor them, regarding primarily by background and
14 what I knew of the situation at the plant.

15 Q. Is that the Lightfoot, Franklin firm?

16 A. Yes.

17 Q. And following up a little bit on that, your
18 understanding of this suit the way you were describing
19 it to Ms. O'Neal was that Monsanto or the lawyers
20 found it puzzling how certain chemicals got to where
21 they had been found or located. Can you tell me what
22 your understanding is of the chemicals that are
23 puzzling?

24 A. That was not discussed with Lightfoot
25 people. What sketchy information I got came from my

1 discussion with Mr. Kelly and Mr. Nassif, and they
2 were talking about--and I have to confess I forgot the
3 chemical specifically, but they were concerned not
4 only about the identity of the material found but the
5 locations described as to where they found it and then
6 comes the question of how in the world did it get
7 there.

8 Q. And "it," was it PCBs?

9 A. Yes, some of them were PCB examples.

10 Q. Okay, what other materials or chemicals do
11 you recall, or what is your understanding of other
12 than PCBs that were the subject of your--of the
13 conversations you've had? And I'm not going to spend
14 a lot of time on this, I just want to know your
15 understanding.

16 A. My understanding. All I remember is there
17 were other chemicals mentioned.

18 Q. Do you recall any?

19 A. I wish I--I don't recall them. I didn't
20 write them down, so I don't recall them.

21 Q. More than one?

22 A. Yes.

23 Q. Metals?

24 A. Metals.

25 Q. Lead?

1 A. I think lead was in there, but I wouldn't
2 swear to it, no.

3 Q. You were also asked, I think, by Ms. Lavey
4 earlier whether you had had any interactions with or
5 had learned about foundries in the Anniston area after
6 you left Anniston. You said no, as I recall your
7 testimony.

8 A. That is true.

9 Q. When you were in Anniston, did you have
10 occasion to become familiar with the foundries in the
11 area, and what they did and how they did things?

12 A. The only observation I could make of the
13 foundries was as I drove down the roads, I could see
14 the flames at night and the fumes during the day, and
15 that's as close as I ever got to the foundry
16 activities.

17 Q. Never went in a foundry?

18 A. I never went in a foundry.

19 Q. Have you ever been in a foundry--

20 A. No.

21 Q. --to today, in your life?

22 A. No.

23 Q. So you are not familiar with how they
24 operated, their procedures?

25 A. That is true.

1 Q. Their waste streams?

2 A. That's true.

3 Q. How they handled spills?

4 A. No.

5 Q. Anything like that, you would not have any
6 of that?

7 A. I don't even know the management of those
8 places. They didn't--they were not approachable.

9 Q. Do you have any knowledge about if any of
10 the foundries in Anniston had PCBs in their operations
11 or facilities? Do you have any personal knowledge
12 yourself?

13 A. Personal knowledge? No.

14 Q. And as an example, do you know whether, in
15 fact, the Monsanto Anniston facility supplied their
16 products to any of the foundries in the Anniston area?
17 Do you know that yourself?

18 A. The Anniston plant shipped these Aroclors on
19 orders based from the Marketing Department, and some
20 of those shipments could have gone to these foundries
21 but indirectly. There's no way for the Anniston plant
22 to know exactly where those shipments end up.

23 Q. And I take it from your testimony you, in
24 the five, four and a half or five years that you were
25 in Anniston, you did not have interactions with the

1 foundries such that those folks would call you and say
2 "Hey, I need some more Aroclor at our facility"? You
3 did not have that setup?

4 A. We did not.

5 Q. One of the exhibits that you were shown,
6 perhaps on your first day, was an old Sanborn map that
7 depicted the Monsanto facility, and you couldn't
8 orient yourself on it, but I also recall that there
9 was a--and we can pull it out, if you'd like to see it
10 again--a depiction, an identification of an Anniston
11 soil pipe foundry on the map not too far from the
12 Monsanto facility. Do you recall that on the map?

13 A. I recall it on the map.

14 Q. Do you recall that from your, from your
15 presence in Anniston, that there was a foundry there?

16 A. They ever knew about it until I saw that the
17 other day.

18 Q. I believe there's an indication on there
19 that it says, "Not in operation." Was there a
20 physical foundry located where it's depicted on the
21 map when you were in Anniston?

22 A. No.

23 Q. What was the, if you can recall, what was
24 the closest foundry to the Monsanto operation?

25 A. I don't know.

1 Q. I'm going to make an observation, and I want
2 you to tell me if it's accurate or not. In listening
3 to you talk about the biphenyl process and then the
4 chlorinated biphenyl process, I got the impression
5 that you were a lot more familiar or remembered a lot
6 more about the chlorinated biphenyl process than you
7 did about the biphenyl process. Is that--is my
8 impression accurate?

9 A. Yes.

10 Q. Now, is that because that was true 35 years
11 ago that you paid more attention to or knew more about
12 that part of the facility, or is it just time, and the
13 time you've spent with lawyers and other people has
14 been more on the chlorinated biphenyl part of the
15 product, process?

16 A. The chlorinated line of products was
17 perceived to be the booming activity at this plant.
18 The biphenyl was just a backup, a supply unit, and
19 rather in a secondary position. Without a biphenyl,
20 you wouldn't have the, the very active and profitable
21 chlorinated biphenyl business.

22 Q. The money maker was the chlorinated biphenyl
23 business?

24 A. That's the one that was--it was a money
25 maker because it was a, a product much in demand, more

1 so than the biphenyl, itself.

2 Q. And so in your five years at the facility,
3 I'm not suggesting that you ignored the biphenyl part
4 of the process, but it would be accurate to say that
5 you spent more time at and kept up more with the
6 chlorinated biphenyl part of the business. Is that
7 correct? Would that be correct to say?

8 A. Yes, because it was the most active and the
9 one that was growing.

10 Q. I went back through my notes to try and look
11 at what your positions were within the company before
12 you came to Anniston, and I wanted to make sure I
13 noted this correctly. Before you became the plant
14 manager in Anniston, you had not been a plant manager
15 overseeing an entire plant before, had you?

16 A. No. You are correct on that.

17 Q. You had been at a superintendent or
18 supervisor level, so I assumed you would have
19 considered this a promotion.

20 A. It was, yes.

21 Q. All right, but had you ever had
22 responsibility before to oversee biphenyl production?

23 A. No.

24 Q. Before you came to Anniston?

25 A. No.

1 Q. Had you ever had the responsibility to see,
2 or to oversee chlorinated biphenyl production before--

3 A. No.

4 Q. --Anniston?

5 A. No.

6 Q. I believe you testified--and I'm jumping
7 around a little bit to just cover some different
8 areas, so that's why my questions may not be a
9 consistent train of thought, but I'm trying to move,
10 move ahead. I believe you testified that you visited
11 the facility about three years ago? And I was--if I
12 recall that correctly, I was going to ask what that
13 occasion was.

14 A. The three years is too short a period. It
15 might have been--

16 Q. You may have said three to five years ago.

17 A. Yeah, three to five, somewhere in there.

18 Q. What was that--I assume it was under your
19 contract with the law firm?

20 A. Yes.

21 Q. And was it--what was it regarding? Was it
22 lawsuits, or was it the EPA ADEM matter, if you
23 recall?

24 A. Lawsuits were involved, because attorneys
25 from the Lightfoot organization were involved and the

1 objective from my viewpoint was to bring me up-to-date
2 on what had been done to the Anniston site to change
3 the condition of the landfill and to answer some of
4 the questions regarding are they properly designing
5 this landfill? Is it properly controlled?

6 Q. And why would they, why would need to be
7 brought up to speed on that particular issue?

8 A. You'll have to ask the attorneys that. I
9 don't know.

10 Q. You received the invitation, and you are
11 under contract, and so you came.

12 A. Yes.

13 Q. When you make trips like that or come to
14 depositions like you are here, are you paid any more
15 than your thousand dollars a month? I assume your
16 expenses are covered, but I mean beyond that, do you
17 receive any additional compensation?

18 A. I receive additional compensation for those
19 activities in which I am not under oath.

20 Q. So you are receiving no additional
21 compensation for your testimony this week?

22 A. That is correct.

23 Q. But for trips to Anniston, you receive
24 additional compensation beyond the thousand dollars?

25 A. Yes.

1 Q. A month?

2 A. Yes.

3 Q. You get paid by the hour?

4 A. Yes.

5 Q. What's your hourly rate?

6 A. It's been awhile since I had--it's about--a
7 little over \$200 an hour, two-ten, two-twenty,
8 something like that.

9 Q. Mr. McClain, whom you replaced, was he--this
10 may not be the best word--was he a transplant to
11 Anniston like you were? You came from St. Louis or
12 another facility, or was he a local Alabama fellow
13 that was the plant manager there?

14 A. I understand he came from somewhere other
15 than Alabama.

16 Q. How about Mr. Hosmer before Mr. McClain?
17 Was he also a company man who came from another
18 location or was he an Alabama fellow?

19 A. No, he's also an outsider.

20 Q. And Mr. Jesse? The same?

21 A. Same.

22 Q. When you came to Anniston in 1965, the folks
23 who reported directly to you, and you've gone through
24 those names for us, were they all similarly
25 transplants coming from other Monsanto facilities or

1 outside the state, or were any of those local people
2 or Alabama people?

3 A. There were no local people.

4 Q. The inorganic processes that had ceased by
5 the time you came to Anniston, you testified you
6 didn't know the exact dates that those situations had
7 ceased. My question, though, is do you have any sort
8 of judgment about how long they had been ceased--had
9 not occurred at the facility when you arrived in 1965.
10 Was it a year or two? Was it five years? Was it
11 fifty years? Do you have any judgment at all that you
12 could give me? A guesstimate?

13 A. I have no judgment. It's never come up for
14 discussion in my presence.

15 Q. You were asked a question about hydraulic
16 equipment, and I believe your testimony was that the
17 only hydraulic equipment you could remember being
18 there that might have had hydraulic oil that contained
19 PCBs were the air compressors.

20 A. I did, yes.

21 Q. Did you have forklifts at the facility?

22 A. Yes.

23 Q. And that would be hydraulic equipment;
24 correct?

25 A. Yes.

1 Q. Okay. Any other hydraulic equipment at the
2 facility other than the air compressors and the
3 forklifts--now that I've given you another
4 category--that you can think of?

5 A. I can't think of any, and of course, the,
6 the tractors you mentioned.

7 MR. WETMORE: Forklifts.

8 A. Forklift, I'm sorry, does not use the
9 fire-resistant Aroclor type of hydraulic fluid.

10 BY MR. TAYLOR:

11 Q. They do not?

12 A. No. Those are regular petroleum products.

13 Q. All right, and did I understand you
14 correctly that in your four and a half or five years
15 at the facility, you never saw any leaks of any
16 hydraulic fluids?

17 A. That's true.

18 Q. Did you hear of any or did you see the
19 evidence of any?

20 A. No.

21 Q. The sand that was brought to the facility, I
22 believe you said, was brought in a dump truck.

23 A. Yes.

24 Q. Can you give me your best judgment about how
25 often you would get a dump truckload of sand to the

1 facility?

2 A. Well, to give you a number, it's a pure
3 guess.

4 Q. That's fine. I'll take your best guess, at
5 this point.

6 A. I never kept score.

7 Q. You may be the only person we talk to, so
8 I'm just going to ask you to give me your best judgment
9 and--

10 MR. WETMORE: Well--

11 BY MR. TAYLOR:

12 Q. --give me your best guess.

13 MR. WETMORE: I'm going to object, because a
14 guess doesn't help anybody. If he has a best
15 judgment, that's okay, but a best guess, you might as
16 well let me or Mr. Jordan testify.

17 MR. TAYLOR: Well, his guess is better than
18 yours, since he was there, so--

19 MR. WETMORE: It's still a guess.

20 MR. TAYLOR: I understand. Your objection
21 is noted.

22 A. Guess, guess--

23 MR. WETMORE: I'll tell you, Mr. Papageorge,
24 if you have a reasonable estimate, you can give it.
25 If you are just--if it's just a guess, a wild guess,

1 I'm not--you don't have to give it.

2 A. I don't know how to define "reasonable." I
3 remember seeing trucks of sand coming in, and the
4 reason I remember that happening is it was unusual to
5 see a truckload of sand coming in, and it doesn't
6 happen every day or anything like that. This is why I
7 remember seeing truckloads of sand, but I didn't keep
8 score as to how many months since the last time I saw
9 it.

10 BY MR. TAYLOR:

11 Q. No, sir, and I'm not asking you to do that.
12 I, I understand there were no records kept, and that
13 wasn't your job to keep up with truckloads of sand.
14 I'm just trying to get some sense, some sense of what,
15 what kind of volume, whether it was once a month, once
16 a year, just your best judgment.

17 MR. WETMORE: You keep asking him for his
18 best judgment and he keeps saying he doesn't know,
19 he'd have to guess, so Jerry, we're at a conflict,
20 here.

21 A. If I'm forced to come up with a number, the
22 closest I could possibly come to is once in eight or
23 nine months.

24 BY MR. TAYLOR:

25 Q. What about the sawdust? Same question. You

1 said that was delivered in dump trucks.

2 A. Yes, see, that's even more rare, as the sand
3 became more used than the sawdust. The sawdust phased
4 out after awhile, so it's a very--it became a very
5 rare occasion when a need for sawdust came up.

6 Q. You were asked, I think, by Ms. Lavey
7 whether or not any of the sand that was used at the
8 facility or brought into the facility was foundry
9 sand, and I believe you said you didn't think so or
10 no. Are you familiar with the term "foundry sand"?

11 A. I have heard the term. I understand it's--
12 looks different than the material that I saw.

13 Q. How did you come to that understanding?

14 A. Somebody implied that the tan-colored sand
15 like you find generally was not the type that one saw
16 in a foundry, and this sand, as I said earlier, was
17 not white beach sand, either, but it was a little more
18 toward the brown, tan side.

19 Q. And your understanding about the color or
20 appearance of foundry sand, can you tell me where that
21 came from? Your understanding?

22 A. The attorneys mentioned a very dark-colored
23 sand.

24 Q. The iron filings that you've been asked
25 about that were used to make the catalyst?

1 A. Yes.

2 Q. What makes up iron chemically? As a
3 chemical engineer, what makes up iron?

4 A. Well, the word "iron," itself, is the name
5 of an element, but my experience has been that when
6 people speak of iron, they're really talking about a
7 mixture of iron with other ingredients, some of which
8 add up to the definition of steel. Other mixtures end
9 up as stainless steel, or chrome steel, so iron is a
10 very common element.

11 Q. Do you have any knowledge about the makeup
12 of the iron filings that was used in the process at
13 the facility?

14 A. I do not.

15 Q. Do you know whether lead composed any
16 component or part of the iron filings?

17 A. I do not.

18 Q. When you were at the facility, were there
19 any odor issues or odor problems?

20 A. I don't know what is meant by the word "odor
21 problems."

22 Q. Let me give you an example.

23 A. Mm-hmm.

24 Q. In your time there, was there ever a
25 complaint received, from the community or neighbors,

1 about odor emanating from the facility?

2 A. Not while I was there, no.

3 Q. Would those complaints have come to you, or
4 was there a person that the operator would have
5 directed such a call to?

6 A. It could happen either way. It could come
7 directly to my phone, or it could go out into the
8 plant and the plant person would tell me. Eventually,
9 I'd hear about it.

10 Q. What about from employees or the union?
11 Were there ever any grievances filed or any issues
12 associated with odor?

13 A. No.

14 Q. How about with the environmental agencies or
15 departments of health? Were there any issues in your
16 time there involving odor?

17 A. No.

18 Q. There is plenty of documentation, and I know
19 you've been involved in some of these issues about
20 PCBs being released from the Monsanto facility;
21 correct?

22 A. Well, there's been reference to that
23 happening, yes.

24 Q. Yes, sir. You are aware, are you not, that
25 PCBs continued to leave the Monsanto facility after

1 the PC production ceased?

2 A. I'm not sure of that. In terms of--

3 Q. Let me be more specific.

4 A. Yeah.

5 Q. You are aware, are you not, that PCBs
6 continued to leave the Monsanto facility after the PCB
7 production ceased through the PCB's being in soil that
8 continued to migrate offsite or being in the sewer
9 system that continued to have discharges into the
10 environment?

11 A. I'm not aware of any sewer system that's
12 involved with PCB.

13 Q. All right, how about the storm water runoff?
14 Are you aware that PCBs continued to migrate off the
15 facility even after the PCB production ceased?

16 A. I'm aware of PCBs downstream from these
17 limestone pits, but I don't recall exactly when that
18 presence was detected downstream from those pits since
19 the termination of production. I don't have a time
20 frame in there.

21 Q. How much time elapsed, Mr. Papageorge, if
22 you know, from the, the plant expansion that you've
23 given testimony about, from that time until the time
24 that Monsanto stopped manufacturing PCBs at its
25 facility?

1 A. About three years.

2 Q. And is it your understanding that Monsanto's
3 decision to cease production of PCBs at its Anniston
4 facility was not voluntary?

5 A. Was not involuntary?

6 Q. No, was not voluntary.

7 A. Monsanto is the one decided to supply the
8 PCBs still in use out of the Krummrich plant in
9 Sauget, Illinois. That was not enforced by any agency
10 anywhere; it was a Monsanto decision.

11 Q. Is your understanding that Monsanto's
12 decision to stop PCB manufacture at the Anniston
13 facility had nothing to do with the ongoing PCB
14 environmental and health issues that were circulating
15 at the time and was a business reason other than that?

16 A. The reason for terminating at Anniston was
17 the fact that first of all, the decreasing use of PCBs
18 to customers under very restrictive conditions, and
19 the fact that the Krummrich plant had a facility that
20 was newer and could produce the material more
21 economically, and was able to offer, because of its
22 plant size, more services to customers who wanted to
23 return PCBs for incineration and that kind of service
24 that they could provide which the Anniston plant was
25 not capable of doing.

1 Q. How new was that facility? You said it was
2 newer.

3 A. The facility I'm talking about, there's two
4 facilities. One is the incineration facility, which
5 was installed about 1972-ish, and then there's the
6 production facility, which was in place in 1965 or so,
7 so that--

8 Q. '65 is when it was built?

9 A. No, it was in place when I went to Anniston.
10 The Krummrich plant had its own PCB unit.

11 Q. I'm only asking this because you said one of
12 the reasons was that the Krummrich plant was newer.

13 A. Yes.

14 Q. But the Anniston facility three years had
15 just been expanded and a lot of money spent, and I'm
16 just wondering, you are saying that the other facility
17 was newer. Was, in fact, Anniston more updated and
18 newer at that point?

19 A. A piece of the Anniston plant was newer, but
20 the whole complex, including the original chlorination
21 vessels, and the downstream--the continuous flow units
22 which were the new ones, the combination was a plant
23 that dated back, gosh, to the 1930's.

24 MR. TAYLOR: That's all I have.

25 MR. WETMORE: I think we have one more

1 lawyer. She said five minutes.

2 EXAMINATION

3 QUESTIONS BY MS. MYERS:

4 Q. Good afternoon, Mr. Papageorge.

5 A. Good afternoon.

6 Q. My name is Stacey Myers, and I represent
7 Southern Tool. I appreciate your patience through
8 what's been a long day of questioning. I promise
9 these will be very quick. First, I'm--

10 A. Thank you.

11 Q. First, I'm wondering, you said that at some
12 point when you were the plant manager at Anniston, you
13 moved into a new office space that had no windows. Do
14 you remember what year that was?

15 A. The best I can come up with, 1966.

16 Q. Do you remember what time of the year?

17 A. Hmm: Not really. The Fall is the closest I
18 can come to.

19 Q. That's perfectly fine. Moving on to when
20 you left the Anniston plant and moved back to
21 St. Louis, I believe you testified that you left in
22 1969, due to the need to assign someone to follow the
23 PCB issue for the company; is that correct?

24 A. To a degree. In 1969, I was informed that I
25 was appointed to fulfill a position which was finally

1 approved by the Corporate Development Committee, I
2 think it was called. This is a group of high-level
3 officers in Monsanto. They approved the appointment
4 of an individual to pursue the PCB evolving issue. I
5 was appointed that, and as best I remember, around the
6 Christmas holidays in 1969.

7 Q. And in that position, you had knowledge of
8 the time periods during which Monsanto stopped
9 producing PCB products; is that correct?

10 A. In that position, eventually, yes, mm-hmm.

11 Q. When did the Anniston plant stop
12 manufacturing PCB products? What year?

13 A. 1970 is as close as I can come.

14 Q. And the Queeny Plant, what year did the
15 Queeny Plant stop producing PCB products?

16 A. About the same time, as best as I can
17 recall.

18 Q. For Sauget, what--when did the Sauget plant
19 stop producing PCB products?

20 A. '72.

21 Q. Were there any other plants in the United
22 States owned by Monsanto that produced PCB products?

23 A. No.

24 Q. So as of 1972, Monsanto had ceased its
25 domestic production of PCBs entirely; is that correct?

1 A. Yes.

2 Q. In your position following PCB issues for
3 Monsanto, were you aware of what Monsanto's
4 competitors were doing in terms of withdrawing PCB
5 products from the market?

6 A. I was aware of a few competitors' activities
7 but not all of them.

8 Q. To your knowledge, did there become a time
9 period after which PCB products were no longer
10 available commercially in the United States?

11 A. There was a date that EPA issued, I think,
12 as best I recall, 1977.

13 Q. Are you aware of any company in the United
14 States offering PCB products to customers after 1977?

15 A. There are none.

16 Q. None after 1987?

17 A. To my knowledge--

18 Q. Excuse me, 1977.

19 A. Correct.

20 Q. As far as foreign corporations or
21 corporations manufacturing in foreign countries, are
22 you aware of any companies that continued to
23 manufacture PCB products after 1977?

24 A. I had heard that the Russian--the country of
25 Russia is still producing PCBs. All other producers

1 have terminated production.

2 Q. As far as Monsanto goes, was it producing
3 any PCBs outside of the United States after 1972?

4 A. They were not.

5 Q. My last questions have to do with Exhibits 4
6 and 5. I believe that you testified that when these
7 documents were written, that you regularly received
8 inquiries about the kinds of products that Monsanto
9 was manufacturing and the makeup of those products; is
10 that right?

11 A. Yes.

12 Q. Was there someone on your staff that would
13 provide you with the information necessary to respond
14 to these inquiries?

15 A. There's nobody--I was the single, one-party
16 staff. The way I would get my information to
17 questions regarding Monsanto products produced by the
18 entire Organic Division was to contact the individuals
19 within the Organic Division who were responsible for
20 those products, then they would give me the
21 information and I would forward it.

22 Q. Do you remember the names of any of those
23 individuals that you would contact?

24 A. I don't remember specific individuals, no.

25 MS. MYERS: Let me take one last look at

1 those documents.

2 (Pause.)

3 MS. MYERS: Thank you. I have no further
4 questions.

5 MR. WETMORE: Thank you. Are we done?

6 MS. LAVEY: Unless you have something, Mike.

7 MR. WETMORE: I have none, and I think we
8 will read the deposition, Jerry.

9 THE VIDEOGRAPHER: This concludes the
10 deposition of William B. Papageorge. We are off the
11 record at 3:29 P.M.

12 (Whereupon, at 3:29 P.M.,
13 the deposition was concluded.)

1 COMES NOW THE WITNESS, WILLIAM B. PAPAGEORGE,
2 and having read the foregoing transcript of the
3 deposition taken on the 1st day of September, 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 1st day of September, 2004.

16 The said witness, being of sound mind
17 and being by me first carefully examined and duly
18 cautioned and sworn to testify the truth, the whole
19 truth, and nothing but the truth in the case
20 aforesaid, thereupon testified as is shown in the
21 foregoing transcript, said testimony being by me
22 reported in shorthand and caused to be transcribed
23 into typewriting, and that the foregoing pages
24 correctly set forth the testimony of the
25 aforementioned witness, together with the questions

1 propounded by counsel and remarks and objections of
2 counsel thereto, and is in all respects a full, true,
3 correct and complete transcript of the questions
4 propounded to and the answers given by said witness;
5 that signature of the deponent was not waived by
6 agreement of counsel.

7 I further certify that I am not of
8 counsel or attorney for either of the parties to said
9 suit, not related to nor interested in any of the
10 parties or their attorneys.

11 Witness my hand and notarial seal at
12 St. Louis, Missouri, this 15th 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
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17 3, TAKEN ON BEHALF OF DEFENDANTS, SEPTEMBER 1, 2004

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17
18 IN WITNESS WHEREOF, I have hereunto set my hand and
19 seal this 15th 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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