

IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF INDIANA
INDIANAPOLIS DIVISION

THE CITY OF BLOOMINGTON, INDIANA;)
THE UTILITIES SERVICE BOARD OF)
BLOOMINGTON, INDIANA; and MONROE)
COUNTY, INDIANA,)

Plaintiffs,)

vs.)

Civ No.
IP 83-9-C

WESTINGHOUSE ELECTRIC CORPORATION,)
a Pennsylvania corporation; and)
MONSANTO COMPANY, a Delaware)
corporation,)

-----Defendants.-----)

The deposition of W. B. PAPAGEORGE,
called for examination by the Plaintiffs, pursuant
to notice and pursuant to the provisions of the
Federal Rules of Civil Procedure of the United
States District Courts, pertaining to the taking
of depositions for the purpose of discovery, taken
before Arnold N. Goldstine, a Notary Public and
Certified Shorthand Reporter within and for the
County of Cook and State of Illinois, at 1313
Merchants Bank Building, Indianapolis, Indiana,
commencing on June 25, 1986, at the hour of nine
o'clock a.m.

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APPEARANCES:

Mr. Joseph V. Karaganis and
Mr. James G. McConnell
Bell, Boyd & Lloyd
Three First National Plaza
70 West Madison Street
Suite 3200
Chicago, Illinois 60602

-and-

Mr. Geoffrey M. Grodner
Law Offices of Geoffrey M. Grodner
One City Centre
Suite 100
Bloomington, Indiana 47401

appeared on behalf of the Plaintiffs;

Mr. Michael R. Fruehwald
Barnes & Thornburg
1313 Merchants Bank Building
Indianapolis, Indiana 46204

appeared on behalf of Defendant
Monsanto Company.

1 I N D E X

2 WILLIAM B. PAPAGEORGE

3 Direct Examination

By Mr. Karaganis

4 Continued

5

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5 E X H I B I T S

6 BLOOMINGTON DEPOSITION NOS.

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16	103 and 104	168
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E X H I B I T S

BLOOMINGTON DEPOSITION NOS.

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1 MR. KARAGANIS: Would you swear the witness.

2 (Witness sworn.)

3 Let the record show that this is the
4 deposition of Mr. William Papageorge, pursuant to
5 a 30 (b) 6 notice served upon Defendant Monsanto
6 Company, under the Federal Rules of Civil
7 Procedure.

8 As a preliminary matter Mr. Fruehwald, we
9 served upon you a 30 (b) 6 notice for a number of
10 categories of information. And you are tendering
11 Mr. Papageorge as the person designated by
12 Monsanto in response to one or more of those
13 categories.

14 Could you identify which categories?

15 MR. FRUEHWALD: Well, the categories as
16 appears in the notice were exceptionally broad
17 and, to some extent, we have raised objections to
18 that in the document portion of the request.

19 We have put forth Mr. Papageorge as being
20 the employee of Monsanto who is most likely to
21 have the knowledge as to all the categories that
22 you have listed of anybody we can find.

23 What we propose to do is for you to go
24 ahead and ask the questions. We believe Mr.

1 Papageorge has the largest amount of knowledge in
2 this area. If there are areas that are identified
3 that he cannot cover within the categories that
4 you have elicited, we will have to deal with that.

5 But we are designating him as our
6 corporate representative to attempt to answer
7 questions in all the categories.

8 MR. KARAGANIS: Okay.

9
10 MR. FRUEHWALD: Off the record.

11 (Discussion had off the record.)

12 WILLIAM B. PAPAGEORGE,
13 having been first duly sworn,
14 was examined and testified as follows:

15 DIRECT EXAMINATION

16 BY MR. KARAGANIS:

17 Q. Mr. Papageorge, would you state your full
18 name please?

19 A. William B. Papageorge.

20 Q. That is P-a-p-a-g-e-o-r-g-e?

21 A. That is correct.

22 Q. And where do you reside, sir?

23 A. St. Louis County, Missouri.

24 Q. What is that address?

1 A. 321 Pebble Valley Drive. Mail code
2 63141.

3 Q. And by whom are you employed, sir?

4 A. Monsanto Company.

5 Q. And at what location?

6 A. Their general offices in St. Louis
7 County, Missouri.

8 Q. And what is that address?

9 A. 800 North Lindbergh Boulevard, St. Louis,
10 Missouri 63167.

11 Q. Mr. Papageorge, what is your date of
12 birth?

13 A. September 7, 1922.

14 Q. And would you state your educational
15 background for us, please?

16 A. I have a bachelor of science in chemical
17 engineering from Washington University in St.
18 Louis, in 1943. A master of science in chemical
19 engineering from Washington University in 1947.

20 I have postgraduate courses in chemical
21 engineering, taken at Oklahoma State University,
22 Stillwater, Oklahoma.

23 Q. The MS was at Washington as well?

24 A. Yes.

1 Q. When was your BS in chemical engineering?

2 A. 1943.

3 Q. When did you begin work for Monsanto
4 Company?

5 A. 1951.

6 Q. Would you list your employment history
7 prior to coming to Monsanto?

8 A. I was employed by Phillips Petroleum
9 Company, Bartlesville, Oklahoma from 1947 to 1951.

10 Q. In what role was that?

11 A. I started as a research engineer and then
12 I became a design engineer.

13 Q. You say research engineer and a design
14 engineer. In what area or field?

15 A. Research effort was in the field of
16 secondary recovery of spent oil wells and in
17 drilling mud research.

18 Q. How about as a design engineer?

19 A. As a design engineer, I was involved in
20 designing equipment used in the processing of
21 petroleum products.

22 Q. You say you left Phillips in 1951 and
23 started at Monsanto in 1951; is that correct?

24 A. Yes.

1 Q. Would you state from 1951 on your
2 employment history at Monsanto?

3 A. All right.

4 I was initially employed at the John F.
5 Queeny plant of Monsanto, located in St. Louis,
6 Missouri.

7 Q. Would you spell Queeny, please?

8 A. Q-u-e-e-n-y.

9 Q. And in what capacity?

10 A. As a design engineer of chemical
11 processing equipment.

12 That assignment lasted about two years or
13 so.

14 I was then made a supervisor in chemical
15 producing units in the plant.

16 Q. At the Queeny plant?

17 A. Yes. As I recall that lasted for about
18 roughly three years.

19 Then I became a maintenance supervisor,
20 still at that plant. Responsible for new
21 construction and maintenance of existing equipment
22 for an assigned area within the plant, geographic
23 area.

24 Q. That was at Queeny?

1 A. That was still at Queeny. And about
2 1955, '56, I became the maintenance
3 superintendent.

4 I was then responsible for maintenance
5 and construction for the entire plant, with
6 supervisors reporting to me.

7 Q. How long did you have that spot?

8 A. The best I remember, that was about two
9 or three years.

10 Q. Still at that plant, I was then made a
11 superintendent in the plant engineering
12 department, which at that plant was called the
13 plant technical services department. I believe
14 that takes me to about 1960, '61.

15 I was then assigned as a general
16 superintendent. I don't recall the exact title.
17 But it was the services function in the plant that
18 took care of receiving, shipping, steam
19 generation, steam distribution, trash pick up, all
20 the services, other than maintenance that support
21 the manufacturing activities.

22 Q. How long did you have the general
23 superintendent responsibility?

24 A. That was up to '64. At that point I was

1 assigned to the plant in Sauget, Illinois,
2 S-a-u-g-e-t, as a general superintendent of
3 manufacturing.

4 Q. All right.

5 A. And that assignment lasted about a year,
6 year and a-half, as I remember.

7 In 1965, I was assigned to the Anniston,
8 Alabama plant, as plant manager.

9 In 1970 I returned to St. Louis with the
10 title of manager environmental control with the
11 assignment of addressing my total time to the then
12 evolving pcb issue.

13 As best I recall, the job in itself
14 didn't change but the title changed, I believe, in
15 about 1971 to the manager environmental
16 protection.

17 Q. So your job didn't change but your title
18 switched to manager of environmental protection;
19 is that correct?

20 A. In about 1971 or thereabouts.

21 Q. Okay.

22 A. At about that time I began to pick up
23 assignments for products other than pcb's. In
24 roughly 1973 the title was again changed, this

1 time it was manager of product acceptability.

2 Q. I am sorry, when?

3 A. Manager of product acceptability.

4 Q. When was that?

5 A. About 1973. As best I recall.

6 I retained that title with varying
7 product assignments until 1977.

8 Q. Okay.

9 A. My involvement with pcb's terminated in
10 1977.

11 In 1977 I was then appointed director
12 environmental operations for an operating unit of
13 Monsanto, which was the Monsanto Chemical
14 Intermediates Company.

15 In 1983 I had the same title, but with a
16 new operating unit, the Monsanto Industrial
17 Chemicals Company.

18 Q. And from 1983 to the present?

19 A. No.

20 On January 1st this year, 1986, following
21 another reorganization, I am now manager of
22 occupational health for the chemical operating
23 unit, that is Monsanto Chemical Company, within
24 Monsanto Company.

1 Q. Is that your current position?

2 A. Yes.

3 Q. Recognizing that there may have been
4 changes in organizational structure over time,
5 would you describe the organizational structure of
6 Monsanto that has existed during the course of
7 your employment at Monsanto Company?

8 In other words, how is it organized? Is
9 there a parent company, different subsidiaries,
10 how is it structured?

11 A. I don't know that I am fully
12 knowledgeable. I can share with you my
13 impressions, my understandings.

14 Q. Please.

15 A. The parent company, and I don't even know
16 if that is the appropriate word, but the entity
17 that is in my mind the controlling entity is
18 called Monsanto Company.

19 There are within that unit operating
20 units. In the past they were referred to as
21 divisions. Through the years, it has evolved into
22 reference to these units as companies.

23 In addition to the operating units, there
24 are subsidiaries; there have been. Currently

1 there are to my understanding two operating units.
2 The chemical company unit, to which I belong, and
3 the agricultural products unit.

4 There are several subsidiaries. I don't
5 claim to know them all. There is a Fisher Control
6 Company, I believe there is one called Farmers
7 Hybred Company. I am not real positive of these
8 names.

9 There is a subsidiary referred to as
10 Monsanto Reserach Corporation. And there is the
11 Searle Company, recently acquired.

12 I believe those are still considered
13 subsidiaries.

14 Q. Within the period of time that you have
15 worked for Monsanto, would it be fair to say you
16 have always worked for one of the operating units
17 of Monsanto as opposed to one of the subsidiaries?

18 A. Yes, correct.

19 Q. Would it be fair to say that the question
20 of pcb manufacture, disposal, management, et
21 cetera, health effects, was dealt with by the
22 Monsanto operating units as opposed to the
23 subsidiaries?

24 A. Yes. .

1 Q. Now, you have identified two operating
2 units currently in place, the chemical company
3 unit and the agricultural products unit.

4 During the period of your employment,
5 have there been other organizational structures as
6 to those units, have there been more units than
7 two?

8 A. Yes.

9 Q. Would you describe those and the times
10 involved?

11 A. I will try. There have been so many
12 really through the years.

13 At one time there was a combination of
14 product and geographic designation applied to
15 different divisions. Examples are the plastics
16 division, the phosphate division, the organic
17 chemicals division. Then we had the Texas
18 division and the West Coast division.

19 Q. Excuse me.

20 Were the product divisions in existence
21 at the same time as the geographic divisions were?

22 A. Yes.

23 Q. So how did the two interrelate, if at
24 all?

1 A. Well, the geographic divisions produced
2 some of the products that were managed by the
3 product divisions. I don't know how I can make
4 that clear.

5 But, for example, the Texas division had
6 plants, had a plant in Texas, at that time, that
7 manufactured chemicals. Some of them belonged to
8 the plastics division, in terms of managing the
9 business, and some of them belonged to the
10 phosphate division, as examples.

11 Q. In terms of managing raw product
12 acquisition and the manufacturing of chemical
13 products, under whose responsibility was that
14 between the geographic and products divisions?

15 A. The products divisions had the total
16 overall responsibility for planning, purchasing,
17 marketing, advertising and the like, profit
18 responsibilities.

19 The Texas division had, the primary
20 responsibility there was efficient manufacture of
21 products designated by the product divisions. So
22 they were a manufacturing-oriented group.

23 The western division was primarily a
24 marketing service to the product divisions.

1 Q. So would it be fair to say that the
2 geographic divisions operated under the
3 directional control of the product division?

4 A. That is a little bit firmer than I
5 understand it.

6 It was -- they got their guidance and
7 direction, but there was no direct reporting
8 responsibility. Reporting responsibility went on
9 up to the top officials of the company.

10 Q. So would it be fair to say that the
11 geographic divisions provided services to the
12 product divisions at the request of the product
13 division?

14 A. That is more accurate. Yes.

15 Q. Now, you mentioned that those divisions,
16 be they geographic or product, reported up to the
17 senior officials of the company?

18 A. Yes.

19 Q. How was the company organized above the
20 product and geographic division?

21 A. As I understood it, they had at that time
22 vice presidents of each of the functions.

23 Q. When you say that time, what period of
24 time is involved in the description?

1 A. This is up to the middle fifties.

2 Q. So from when to when?

3 A. Oh, it was in place when I joined
4 Monsanto in '51. I don't know when it originated
5 prior to that.

6 Q. So from '51 through the middle fifties?

7 A. Middle fifties is the organization I am
8 trying to recall here.

9 Q. Okay.

10 You say there was a vice president?

11 A. There were vice presidents of different
12 functions. For example, vice president of
13 marketing, vice president of engineering, a vice
14 president of manufacturing. And the different
15 divisions had general managers.

16 Q. Let me see if I get this straight for
17 this period of time.

18 Was the general manager of the geographic
19 division such as Texas, which was manufacturing,
20 would he report to the vice president for
21 manufacturing?

22 A. I am a little -- my recollection isn't
23 clear on that.

24 I am under the impression that these

1 general managers were assigned to one of the vice
2 presidents, either manufacturing or marketing.
3 But I don't recall exactly which division was
4 assigned to which vice president.

5 Q. Within the structure that existed from
6 the time you joined through the mid-fifties, where
7 were polychlorinated biphenyls within this
8 structure?

9 A. They were in the phosphate division.

10 Q. Is there some logic to that or it just
11 happened by a historical accident or what?

12 A. There is an element of accident involved,
13 where the original polychlorinated biphenyls were
14 manufactured in and Anniston, Alabama, that plant
15 was a part of the phosphate division. In fact,
16 the Anniston, Alabama plant was the headquarters
17 for the phosphate division at that time.

18 The other Monsanto pcb unit in Illinois
19 was in a plant managed by the organic chemicals
20 division. The product itself was managed by the
21 phosphate division.

22 Q. What was that other plant?

23 A. The Sauget, Illinois plant.

24 Q. So the Sauget plant was under what

1 division?

2 A. Organic chemicals division.

3 Q. Am I correct that the Sauget plant did
4 not begin manufacturing pcb's until sometime after
5 the Anniston plant was manufacturing them?

6 A. That's correct.

7 Q. When did the Sauget plant begin
8 manufacturing pcb's?

9 A. The middle thirties. '34, '35.

10 MR. FRUEHWALD: You are talking about the
11 Sauget plant?

12 A. Yes.

13 BY MR. KARAGANIS:

14 Q. Okay.

15 Now, we are in the mid-fifties and you
16 indicated the past unit structure in the
17 mid-fifties.

18 A. Yes.

19 Q. Would you describe the structure that
20 existed after the change?

21 A. Again, as best I recall. There was, at
22 that time the organization consisted of the
23 organic chemicals division, the inorganic
24 chemicals division, plastics division. I believe

1 it was at about that time that Monsanto acquired
2 the Lyon Oil Company.

3 Q. L-y-o-n?

4 A. L-y-o-n. Which was operated as a
5 subsidiary for a period of time.

6 Q. Was the same structure of a general
7 manager for each division reporting to a
8 functional vice president still in existence?

9 A. Yes.

10 Q. So you had a general manager of each
11 division reporting to either a vice president for
12 manufacturing or vice president for engineering or
13 that kind of system; is that right?

14 A. Correct.

15 Q. Go back to the prior, to the mid-fifties,
16 prior to this organizational change.

17 Was there a medical department or an
18 environmental department, or environmental
19 organization of any kind within Monsanto from '51
20 into the mid-fifties?

21 A. There was no environmental organization
22 as such. Matters that pertained to the
23 environment and the health were handled by the
24 corporate medical department.

1 Q. Now, when you say the corporate medical
2 department, where was that within the Monsanto
3 structure?

4 A. It was physically located in St. Louis at
5 the world headquarters. And as I understand it,
6 it dates back to the thirties.

7 In the earlier days it reported to the
8 individual responsible for personnel matters. I
9 don't know his exact title. But it was considered
10 a personnel function. And later, about the 1950's
11 or so, it was reporting in to the vice president
12 of technology.

13 Q. Okay.

14 How big was the medical department?

15 A. At what point in time?

16 Q. In the period from '51 to the
17 mid-fifties.

18 A. As best I recall, it consisted of the
19 director, who was a medical doctor, and an
20 industrial hygiene manager and an environmental
21 health manager and nurses. I don't know how many
22 nurses they had.

23 Q. Were the industrial hygiene manager or
24 the environmental health manager doctors as well?

1 A. No.

2 Q. In the 1950's, who were the personnel of
3 the medical department, what were their names?
4 Who was the medical doctor?

5 A. Doctor R. Emmett Kelly was the medical
6 doctor and director. J. R. Garrett,
7 G-a-r-r-e-t-t, was the industrial hygienist. And
8 Elmer P. Wheeler was the manager environmental
9 health.

10 Q. I am sorry. You were going on and
11 describing your organization that was replaced in
12 the early fifties by an organization in the
13 mid-fifties which had the organic chemical
14 division, the inorganic chemical division, the
15 plastics division and the Lyon Oil operation,
16 operated as a subsidiary.

17 Can you tell me where polychlorinated
18 biphenyl manufacture and distribution fit within
19 that?

20 A. It was now in the organic chemicals
21 division.

22 Q. Again, I am not trying to jump around
23 any, but it used to be in the phosphate division?

24 A. Correct.

1 Q. To whom did the phosphate division
2 report, when it was in existence?

3 A. I just don't remember the name.

4 Q. But it would have been a vice president
5 of some function; is that correct?

6 A. Yes.

7 Q. When it was reorganized in the organic
8 chemical division, to whom did the pcb manufacture
9 and distribution operation report?

10 A. The general manager was a Robert Morris.

11 Q. That is the general the manager of the
12 organic chemical division?

13 A. The organic chemicals division. I just
14 do not recall who he reported to. I don't
15 remember.

16 Q. With respect to pcb manufacture, both in
17 the old phosphate division as well as later in the
18 organic chemical division, who was responsible
19 within those respective divisions for the
20 manufacture of pcb?

21 A. I don't recall the names of the plant
22 manager or his director of manufacturing, prior to
23 the early fifties.

24 Beginning in the middle fifties, the

1 plant manager at Anniston was a Desmond Hosmer.
2 D-e-s-m-o-n-d. H-o-s-m-e-r.

3 Q. Do you recall who the plant manager at
4 Sauget was?

5 A. In the mid-fifties, I can't place him at
6 the moment. I don't recall.

7 Q. All right.

8 A. It could be. It was Joseph Cresce.
9 C-r-e-s-c-e.

10 Q. From the standpoint of plant control of
11 pcb releases at the manufacturing facilities at
12 that time, I am talking about the early fifties
13 and then the mid to late fifties, who was
14 responsible for pcb emission control or waste
15 disposal?

16 A. It was the supervisor of the operating
17 unit, and his superintendent and the plant
18 manager.

19 Q. Was there anyone within the company who
20 had pcb environmental control responsibility at
21 that time?

22 A. Pcb's were not handled any differently
23 than all the other chemicals at the plant.

24 Q. From a marketing standpoint and from the

1 standpoint of instruction to customers, as to the
2 handling and characteristics of pcb products, who
3 was responsible in the early and mid-fifties for
4 that?

5 A. I don't know the names of the
6 individuals. But certainly the medical department
7 was responsible for any health messages that are
8 applied to labels or to the product literature
9 that was issued.

10 Q. Let's go on with regard to the
11 organizational structure, the structure you have
12 described was organic chemical division, inorganic
13 chemical division, plastic division. How long did
14 that structure last?

15 A. About 1971, there was another
16 reorganization.

17 At that time they referred to the units
18 as companies instead of divisions. There was the
19 Monsanto Industrial Chemicals Company. The
20 Monsanto Agricultural Chemicals Company. The
21 Monsanto I think it was Polymers and Resins
22 Company or it could have been Plastics and Resins,
23 P and R Company. Monsanto Textiles Company. I
24 believe that is the organization.

1 Q. In that organization, where did the
2 organic chemical division, in particular pcb's,
3 fit in terms of the manufacture and distribution?

4 A. Most, if not all, went into the
5 industrial chemicals company and pcb's became a
6 part of the Industrial Chemicals Company.

7 Q. And above the individual companies, were
8 the individual companies then headed by presidents
9 or general managers or what?

10 A. They were managing directors and vice
11 presidents.

12 Q. So the managing directors, that
13 terminology was used to replace general managers?

14 A. Correct.

15 Q. From the standpoint of pcb manufacture
16 and distribution, who was the managing director
17 after the '71?

18 A. It was C. Pres Cunningham. C. Preston,
19 P-r-e-s-t-o-n, Cunningham.

20 Q. To which vice president did Mr.
21 Cunningham report?

22 A. Well, he himself was a vice president.

23 Q. I am sorry.

24 A. Managing director, vice president, that

1 is a dual title.

2 Q. All right.

3 A. Also as a vice president he reported to
4 the chief operating officer of the company,
5 president, Edward Bok. B-o-k.

6 Q. And Mr. Bok reported to whom, who was the
7 chief executive officer?

8 A. The board directors.

9 Q. There was no senior executive above Mr.
10 Bok at that time?

11 A. That is correct.

12 Q. So he was both chief operating officer
13 and --

14 A. And chief executive.

15 Q. And chief executive.

16 Prior to the 1971 organization, directing
17 your attention back to the organization that
18 existed from the mid-fifties to 1971, you have
19 identified the general manager of the organic
20 chemical division as Mr. Robert Morris.

21 You indicated you could not recall to
22 which vice president he reported; is that right?

23 A. That's correct.

24 Q. But it is correct that there was a vice

1 president to whom he reported?

2 A. Yes.

3 Q. To whom did that vice president report?

4 A. I believe at that time the chief
5 executive official, CEO, was Charles Sommers.
6 S-o-m-m-e-r-s.

7 Q. Was that true for the whole period?

8 A. No. My memory is not that good. I don't
9 recall who Mr. Sommers replaced. But in that
10 period of time, Mr. Sommers did serve as the
11 president, chief executive, chief operating
12 official.

13 Q. Below, I am now the directing your
14 attention to the mid-fifties period, the
15 mid-fifties to '71, you mentioned the general
16 manager Robert Morris. Was Mr. Morris also
17 responsible for the marketing and distrubition of
18 pcb?

19 A. Ultimately responsible, yes. Not
20 personally and directly.

21 Q. Under Mr. Morris, within the organic
22 chemical division, would you describe the
23 structure that existed in the mid-fifties for the
24 manufacturing, marketing and distribution of

1 pcb's, who was in charge?

2 A. As best I recall, the manufacturing
3 director was Howard Minckler. M-i-n-c-k-l-e-r.

4 Q. He was manufacturing director of what,
5 pcb's?

6 A. And all the other chemicals assigned to
7 the organic chemicals division, yes.

8 Q. Under Mr. Minckler?

9 A. Mr. Minckler had the plant managers
10 assigned to that division reporting to him.

11 Q. That would be Mr. Hosmer for Anniston and
12 Mr. Cresce possibly for Sauget?

13 A. Yes, among others.

14 Q. Well, the only two plants that did pcb
15 manufacture were those two; isn't that right?

16 A. That's right, for pcb's.

17 Q. Was there any intermediate official
18 between Minckler and the plant managers to your
19 recollection?

20 A. No.

21 Q. Was Mr. Minckler responsible also for the
22 marketing and distribution of pcb's?

23 A. No. Marketing, for a period of time a
24 Monte Throdahl. M-o-n-t-e, T-h-r-o-d-a-h-l.

1 Q. M-o-n?

2 A. Monte, M-o-n-t-e, Throdahl.

3 T-h-r-o-d-a-h-l, Throdahl, was director of
4 marketing.

5 Q. Within the organic chemical division?

6 A. Correct. And also in that period of
7 time, Mr. Throdahl was director of research. I
8 don't recall which assignment came first.

9 I don't recall who succeeded him or
10 preceded him.

11 Q. You don't know what period of time he was
12 involved as director of marketing, other than it
13 was at some point between the mid-fifties and '71,
14 but do you recall the period?

15 A. Not exactly. No. I do know that Mr.
16 Throdahl had both assignments, reporting to Mr.
17 Morris.

18 Q. In the period the fifties to '71, during
19 that organizational structure, who had
20 responsibility for medical effects, customer
21 instructions as to medical effects, customer
22 instructions as to how to properly dispose of pcb?

23 A. The responsibility for medical effects
24 rested with the medical director and his staff of

1 two.

2 Q. That would have been again, the period in
3 the mid-fifties to '71, was that Kelly as
4 medical director, Garrett as industrial hygienist,
5 and Wheeler as environmental health?

6 A. Yes. You mentioned 1971. From the
7 middle sixties to '71, there were additions to the
8 staff.

9 Q. Let's talk from mid-fifties to
10 mid-sixties?

11 A. To mid-sixties. That was the staff. Mr.
12 Wheeler, Mr. Garrett and Dr. Kelly.

13 Q. Then in approximately when?

14 A. About 1965. As I remember, Dr. Kelly had
15 another medical doctor assist assisting him. I
16 have forgotten his name. And also at about that
17 time, a toxicologist was added to the staff,
18 William Hunt.

19 Q. As to the medical effects, was there
20 anybody else at that time?

21 A. That is all I recall on medical.

22 Q. Let's talk about who was responsible for
23 giving customer warnings as to either handling or
24 disposal practices with regard to pcb's from

1 understanding that is conveyed in discussions,
2 informal or even the formal type, when you talk to
3 a customer regarding a potential sale.

4 I wasn't personally present in the room
5 when these discussions were held. So I can't
6 speak for the exact words that were exchanged.
7 But, the state of the science and state of the art
8 in industry at the time, as it applied to all
9 chemicals, was be careful with them. That is the
10 message that was generally conveyed.

11 But there is no specific piece of
12 literature or piece of advice that was offered
13 there.

14 Q. Was there any instruction given as to
15 whether it was appropriate to pour pcb's down the
16 sewer?

17 A. No. No different than for sulfuric acid,
18 battery acid, just understand those things. You
19 don't talk about them specifically.

20 Q. So would it be fair to say that to your
21 knowledge there was a general understanding that
22 you didn't pour pcb's down the sewer?

23 A. Or any other chemical. Motor oil, you
24 don't pour down the sewer.

1 Q. Was there any understanding with respect
2 to placement of pcb's or other chemicals in
3 landfills?

4 A. The understanding was one of put it in a
5 permitted landfill, permitted by local
6 authorities, generally, at that time.

7 Q. Was there any understanding with respect
8 to the kind of landfill, without arguing with you
9 about what was permitted and what did permitted
10 mean; was there anything with respect to the
11 engineering characteristics of the landfill, the
12 geologic characteristics of the landfill?

13 A. The state of the art was not -- had not
14 reached that point at that time.

15 Q. Based on this general understanding that
16 you had, would you put industrial chemicals in a
17 gravel pit?

18 A. No. I wouldn't.

19 Q. Why not?

20 A. Most gravel pits have fractures and
21 breaks in them and water will percolate through
22 them and get out of control.

23 Q. So you wouldn't put it in a place where
24 the water could reach the chemicals and move the

1 chemicals away from the landfill; is that right?

2 A. That's right.

3 Q. So that would be true of gravel pit or
4 would it also be true with respect, for example,
5 to a sink hole; is that right?

6 A. Yes.

7 Q. So you wouldn't put industrial chemicals
8 in a landfill that was characterized with sink
9 holes; is that right?

10 A. That is correct.

11 Q. Was that communicated to Monsanto
12 customers from the fifties to the late sixties,
13 don't put things where there can be a release,
14 where it can get into the water or where there are
15 such things as gravel pits or sink holes or
16 fractured material?

17 A. Not to that degree. No. That was not
18 common.

19 Q. What was not common?

20 A. Discussions of that kind in the fifties
21 just were uncommon. If anybody brought that
22 subject up, it is most unusual.

23 Q. Did you ever inquire -- I am sorry, when
24 I say you, did Monsanto ever inquire of its

1 customers where they were putting pcb's?

2 A. I can't speak. I don't know.

3 Q. I am asking you this, Mr. Papageorge, not
4 only in your personal role, but you have been
5 identified as a what is called by lawyers a 30 (b)
6 6 witness. So you may not have the personal
7 knowledge, but Monsanto is tendering you as
8 someone who might, or who presumably does. And
9 if you don't somebody else will have to testify.

10 A. I understand.

11 Q. With respect to the fifties to 1971, you
12 have identified Kelly, Wheeler and Garrett as
13 having responsibility for medical effects. And
14 you indicated that a doctor was added in 1965.

15 Did any other individuals have
16 responsibility or a role during this period of
17 time in controlling the release of pcb's or
18 checking with customers and seeing what they were
19 doing, making sure they weren't being released?

20 A. Starting in the late sixties, '69 or
21 thereabouts, our marketing representatives, who
22 were the normal customer contact, began to talk
23 along the lines of disposal and better control.

24 Q. Whose direction, under what circumstances

1 did they begin to talk about better disposal and
2 control?

3 A. Well, beginning in the middle to the late
4 sixties, Monsanto began to receive information
5 that these pcb's were discovered in environmental
6 samples.

7 By 1968, '69, we had established that
8 these reports had some validity to them. The
9 reports centered on two of our products. And the
10 message then began to be sent out to our customers
11 regarding the discovery of these two materials in
12 environmental samples. The fact that the effects
13 on the environment were unknown, but, in any
14 event, we should all prevent their discharge into
15 the environment.

16 That was the initial message that was
17 beginning to be sent out in the late sixties.

18 Q. You indicated before that before the
19 message went out, it was generally understood
20 practice, you can't recall the specific
21 conversations, but in the trade, in the chemical
22 manufacturing and use trade, that you didn't dump
23 industrial chemicals down the sewer and you didn't
24 put them in places like landfills that would leak;

1 is that correct?

2 A. That is the general practice. Yes.

3 Q. But to your knowledge, at least to your
4 personal knowledge, Monsanto did not prior to the
5 late sixties actually check up on its customer to
6 see what they were doing; is that right?

7 A. That is correct.

8 Q. Did Monsanto prior to the late sixties
9 have any system in place for the reprocessing of
10 pcb's that had been sent to customers and
11 returned?

12 A. The only reprocessing I am aware of is
13 the situation where a shipment of Monsanto
14 material was rejected by the customer, because it
15 did not meet specifications. That shipment would
16 be returned to the source plant and be reprocessed
17 to the point where it did meet specifications.

18 Q. So this is where the shipment sent to the
19 customer would be tested by the customer, found
20 that it did not meet the customer's purchase order
21 specifications or contract specifications, and
22 rejected prior to use; is that correct?

23 A. That's correct.

24 Q. But -- I am sorry.

1 A. This covers the period late sixties.

2 Q. Well, from --

3 A. As I remember your question said prior to
4 '69.

5 Q. Well, let's go back to mid-fifties to the
6 late sixties, before this awareness developed, or
7 communication program developed.

8 I asked you whether or not there was a
9 program for the return of pcb's to Monsanto. As I
10 understand your answer, the only program that
11 existed was for the return of material that failed
12 to meet specifications of the customer, the
13 customer would test it, say it didn't meet
14 specification, and return it to you prior to its
15 use; is that correct?

16 A. That's correct.

17 Q. Now, can you tell us from the standpoint
18 of personnel involved with advising customers as
19 to methods of disposal and advising customers of
20 return and possible environmental effects, you
21 have identified Kelly, Wheeler and Garrett. You
22 have identified a Mr. William Hunt who was a
23 toxicologist and a doctor.

24 Do you recall the doctor's name, was it

1 Levinskis?

2 A. Dr. Levinskis didn't join Monsanto until
3 1971 is when Dr. Levinskis joined the staff.

4 Q. So you don't remember the name of the
5 specific doctor?

6 A. There was another medical doctor
7 assisting Dr. Kelly with human medical problems or
8 issues.

9 Q. Other than Kelly, Wheeler, Garrett, Hunt
10 and this other doctor, who at Monsanto was
11 involved in identifying the health and
12 environmental effects and essentially warning
13 customers, developing a policy with regard to
14 warning and supervising what customers were doing
15 with pcb's?

16 You mentioned some marketing people. Who
17 in specific?

18 A. It would be a Mr. Paul Benignus, who was
19 manager of marketing for the pcb's.

20 B-e-n-i-g-n-u-s.

21 Q. So we have our timing straight, we are
22 now dealing with the period from the mid-fifties
23 to '71, prior to the '71 reorganization.

24 You had indicated that the marketing

1 manager was a Mr. Throdahl?

2 A. He was director of marketing.

3 Q. Director of marketing.

4 Did Mr. Benignus work under Mr. Throdahl?

5 A. We are getting our dates all messed up
6 here, I am afraid.

7 Q. I am now in the period from the
8 mid-fifties to '71.

9 A. Mr. Throdahl was director of marketing in
10 the fifties.

11 Q. Okay.

12 A. I do not recall who followed Mr. Throdahl
13 in the period mid to late fifties on to 1971.

14 Q. Okay.

15 A. There were several individuals there in
16 that period of time.

17 But Mr. Benignus was with pcb's
18 throughout that total period.

19 Q. From beginning when to through '71,
20 mid-fifties to '71?

21 A. At least, if not earlier.

22 Q. And you can't recall exactly when. But
23 it was earlier than the mid-fifties?

4 A. To the best of my recollection, yes.

1 Q. Now, to whom did he report?

2 A. To Mr. Benignus.

3 Q. So he was in the marketing branch?

4 A. Correct.

5 Q. Okay.

6 Anybody else?

7 A. All right.

8 Now, in pcb uses other than dielectrics,
9 there were others involved.

10 Q. Such as?

11 A. Mr. Walter Schalk was the director of
12 marketing for plasticizers and reporting to him
13 was Dr. Cumming, C-u-m-m-i-n-g, Paton. P-a-t-o-n.

14 Q. Pcb usage other than dielectrics was?

15 A. In the plasticizer application, we had
16 Mr. Walter Schalk as director of marketing and
17 working under him was Dr. Paton.

18 Q. Under him was was that a medical doctor
19 or just a PhD?

20 A. Chemist doctor.

21 Q. Chemist doctor, Cumming?

22 A. Cumming Paton. P-a-t-o-n.

23 Q. P-a-t-t-o-n?

24 A. Single T.

1 Q. Single T?

2 A. Yes:

3 We had a hydraulic fluids application, we
4 had a manager of marketing for that application,
5 Norman Johnson, which was late sixties, I don't
6 know who preceded Mr. Johnson.

7 Also in the heat transfer applications
8 there was another individual whose name escapes me
9 at the moment.

10 Q. With regard to --

11 A. I cannot remember the name. It would be
12 the marketing manager for heat transfer
13 applications.

14 Q. Any other individuals involved in the
15 question of how to control pcb release.

16 A. These names that I just mentioned are
17 involved.

18 Q. Yes.

19 A. And, in addition, there was a Roger
20 Hatton, H-a-t-t-o-n, who was associated with the
21 hydraulic fluids applications. A Don Rausch,
22 R-a-u-s-c-h, associated with the heat transfer
23 applications.

24 Q. These are all marketing people?

1 A. Yes. They are part of the marketing,
2 customer service, technical service team.

3 Of course, in 1970, I start becoming
4 involved. If we are talking about 1971, that
5 includes me in there.

6 Q. In terms of customer warnings and any
7 limitations imposed upon customer utilization,
8 restrictions and supervision of customer disposal,
9 in the late sixties were there any other
10 individuals other than the individuals you have
11 mentioned?

12 A. I don't recall any others.

13 I recall the name of that manager whose
14 name I couldn't recall. Jack Fallon, F-a-l-l-o-n.
15 He was the heat transfer marketing manager.

16 Q. You have mentioned people essentially
17 from marketing and from medical up through your
18 getting involved in 1970.

19 Were there any people, any personnel
20 above them, who were involved in decisions as to
21 warning customers or restricting customer
22 application or use or disposal, controlling
23 disposal?

24 A. Involving decisions, yes.

1 Q. Yes.

2 A. Yes.

3 Q. Who were they?

4 A. There was Mr. Bergen, the director of the
5 business group that had responsibilities for
6 functional fluids.

7 Q. You have got to go back.

8 A. I am sorry.

9 Q. You got to go back. Is that Harold
10 Bergen?

11 A. Howard. Howard Bergen.

12 Q. B-e-r-g-e-n?

13 A. Correct.

14 Q. And he was what was his title?

15 A. He was the director of the business group
16 that was responsible for functional fluids, which
17 included dielectric, hydraulic fluids, heat
18 transfer fluids.

19 Q. So I just want to see if we get our
20 organization here.

21 We had the organic chemical division, the
22 general manager of which was Robert Morris. And
23 you indicated that under that person for
24 manufacturing was Mr. Minckler, and for marketing

1 but for a undefined period of time in the fifties
2 you don't remember the names, but there was a Mr.
3 Throdahl.

4 A. Yes.

5 Q. How did Mr. Bergen fit into that
6 organizational structure?

7 A. Sometime in the early sixties, the
8 organic chemicals division was organized into
9 business groups. These groups were managed by a
10 director, who reported to the general manager of
11 the organic chemicals division.

12 Now, within each of those business
13 groups, there were individuals assigned the
14 different functions, marketing, manufacturing,
15 research, planning, distribution and the like.

16 Q. So, am I correct that in the early
17 sixties, then, within the organic chemical
18 division you developed subdivisions called
19 business groups?

20 A. Correct.

21 Q. One of those business groups was called
22 functional fluids?

23 A. Correct.

24 Q. Is that right?

1 A. Yes.

2 Q. And during this period of time from the
3 early sixties to 1971 was Mr. Bergen the director
4 of functional fluids?

5 A. That's right.

6 Q. Now, under Mr. Bergen, was Mr. Bergen
7 then responsible for both manufacturing and
8 marketing of functional fluids, including pcb's?

9 A. That's right, correct. Yes.

10 Q. Did Mr. Bergen report directly to Mr.
11 Robert Morris?

12 A. Yes. Up until Mr. Morris left Monsanto.

13 Q. In what year?

14 A. That was '65.

15 Q. Who replaced Mr. Morris, do you remember?

16 A. Mr. Minckler.

17 Q. So, from the mid-fifties to '65, the
18 organic chemical division had a general manager
19 named Robert Morris who was replaced in 1965 by
20 Mr. Howard Minckler; is that right?

21 A. That is the best of my recollection.

22 Q. Mr. Minckler was general manager of the
23 organic chemicals division until the next
24 reorganization, at least, in '71?

1 A. Yes.

2 Q. Who replaced Mr. Minckler as
3 manufacturing director?

4 A. Each of the business groups had their own
5 manufacturing director now.

6 Q. All right.

7 A. Instead of one for the whole division,
8 there was one for each business group.

9 Q. How was the functional fluids business
10 group organized?

11 A. Mr. Bergen was its business director.
12 Don Olson was the director of marketing, and he
13 was he placed in about 19 -- late seventies I
14 recall by Thomas Gossage.

15 Q. Late sixties or late seventies?

16 A. Late 1970.

17 Q. Late 1970. I thought you said late
18 seventies, late 1970?

19 A. Late 1970, as I remember. I am still
20 looking in '71 as the end point here.

21 Q. Right.

22 A. James Savage, no, wait. Let me back off.
23 I am not real clear on this. But I believe the
24 director of manufacturing initially was William

1 Kuhn, K-u-h-n. Followed by James Savage,
2 S-a-v-a-g-e. But I don't know when that change
3 took -- I don't recall when that change took
4 place.

5 The director of research was William
6 Richard.

7 Q. The director of research, was that a
8 director of research for functional fluids?

9 A. Yes.

10 Q. And was there anybody within the director
11 of research office responsible for pcb's in
12 particular?

13 A. No.

14 Q. In this functional fluids business group,
15 the market section you said there was Olson, later
16 replaced by Gossage.

17 Where did Benignus fit within that
18 structure?

19 A. Benignus reported to Olson, as did Mr.
20 Fallon and Mr. Johnson.

21 Q. Fallon and Johnson, what tasks did they
22 have?

23 A. Mr. Fallon had the heat transfer
24 applications, Mr. Johnson had the hydraulic fluids

1 applications. Mr. Benignus had the electrical
2 applications.

3 Q. Mr. Fallon, was he transfer?

4 A. Heat transfer, yes.

5 Q. During this period of time, from the
6 early sixties to '71, you indicated the two
7 directors of manufacturing, who was below them?

8 Who was below Kuhn or Savage?

9 A. They had no staffs.

10 Q. Did they supervise the plant managers at
11 Sauget and Anniston?

12 In terms of reporting responsibility,
13 they were responsible for manufacturing for a
14 number of chemicals; is that right?

15 A. The business groups at that time did not
16 have plants assigned to them. The plants reported
17 over to Mr. Minckler.

18 Q. So the plants --

19 A. The plants provided the product, and
20 these business groups decided how much to make and
21 where it is sold, and what to sell it for and so
22 on.

23 Q. So the business group was more of a
24 marketing entity as opposed to a manufacturing

1 entity; is that right?

2 A. Well, it is not only marketing. They had
3 the research responsibility as well as the
4 marketing and manufacturing technology
5 responsibility.

6 Mr. Savage, for example, would concern
7 himself with the technical matters regarding
8 manufacturing and see to it that these projects
9 were developed and installed at the plants.

10 Q. But would he route his directives through
11 Mr. Minckler, is that it?

12 A. No. He would deal directly with plants.
13 But he did not have responsibility for the plants
14 in terms of administering, managing them, and the
15 like.

16 Q. Now, above Mr. Minckler, am I correct,
17 that -- I am sorry.

18 Let's just see if I can recite the
19 players in the late sixties.

20 A. It is complex.

21 Q. In marketing.

22 A. The late sixties.

23 Q. In the late sixties for pcb's.

24 In the dielectric fluids end of it we had

1 Benignus, who was manager of marketing for
2 dielectric fluids; is that right?

3 A. Yes.

4 Q. Working for him were Bryant and Randall
5 Graham?

6 A. Correct.

7 Q. And then he reported to Olson and then
8 later Gossage; is that right?

9 A. Correct.

10 Q. And they in turn reported to Howard
11 Bergen, is that right?

12 A. Right.

13 Q. And Bergen reported in the late sixties
14 to Minckler; is that correct?

15 A. Correct.

16 Q. And Mr. Minckler reported to whom?

17 A. The president, Mr. Bok.

18 Q. Mr. Bok.

19 Do you know when Bok became president?

20 A. I believe it was '67, as best I recall.

21 Q. To your knowledge, in the period from let
22 me break this down in increments, the mid-fifties
23 to 1971, other than your own involvement, have we
24 identified everybody who was involved in pcb

1 control, communications to customers with regard
2 to pcb control, pcb hazards, pcb sales?

3 A. I suspect we haven't found everybody.

4 There were many, many salesmen out there
5 who I don't recall at the moment.

6 Q. Let's talk about the dielectric industry.

7 A. Dielectric, all right.

8 With respect to the sale of dielectric
9 fluids to the electrical industry, I think we have
10 covered everyone.

11 There were discussions between customers'
12 representatives and Monsanto's research people
13 that could have involved discussions regarding
14 disposal and handling and the like.

15 Q. Monsanto's research people would be again
16 whom?

17 A. They were people reporting to Dr. Richard
18 and more specifically it is one key person. Dr.
19 Ralph Munch. He was in contact with our
20 customers' technical people.

21 Q. Dr. Munch is M-u-n-c-h-e?

22 A. M-u-n-c-h.

23 Q. M-u-n-c-h. All right.

24 A. Now, in addition to Dr. Munch in

1 research, we had other researchers who began to
2 get involved in assisting in the analysis of
3 PCB's.

4 I don't know if you want to include
5 those.

6 Q. By the analysis, do you mean chemical
7 analysis?

8 A. Chemical analysis of pcb's in wastewaters
9 and soil and so on.

10 Q. Yes, who were those?

11 A. Dr. Keller, Robert Keller, K-e-l-l-e-r,
12 and reporting to him was Dr. E. Scott Tucker.

13 Q. And where were those gentlemen in the
14 organizational structure, were they in research?

15 A. They were in research, in a group
16 independent of Dr. Richard, providing research and
17 analytical support.

18 I would appreciate a break.

19 Q. A break. You are more than welcome to a
20 break.

21 (Whereupon a short recess was had.)

22 Mr. Papageorge, we were talking about the
23 period prior to the reorganization of '71, where
24 we started in the late sixties, different people

1 became involved in the question of distribution
2 and disposal of pcb's.

3 In terms of the control of pcb's released
4 into the environment, you identified a number of
5 people, let's see if I can again summarize.

6 Within functional fluids, we had the
7 director of research, Mr. Richard assisted by Dr.
8 Ralph Munch; is that right?

9 A. Yes, for dielectric fluids.

10 Q. For dielectric fluids.

11 A. Yes.

12 Q. Was there anybody who was a director of
13 research for pcb's in other applications, for
14 plasticizers?

15 A. Yes.

16 Q. Who were those people?

17 A. Dr. Martin Farrar. F-a-r-r-a-r.

18 Q. Did he have any staff?

19 A. Yes.

20 Q. Director of research for plasticizers?

21 A. Correct.

22 Q. Who worked for him?

23 A. I don't remember his team.

24 Q. How about for heat treatment, heat

1 treating fluids or heat transferring fluids,
2 rather?

3 A. What about it.

4 Q. Was there a director of research for heat
5 transferring fluids?

6 A. That comes under Dr. Richard, who was
7 director of research for functional fluids.
8 Plasticizers is another business group.

9 Q. Okay.
10 That is in a totally different business
11 group?

12 A. Correct.

13 Q. I am sorry.

14 So all functional fluids research for
15 pcb's were under Dr. Richard's?

16 A. Correct.

17 Q. And you are saying that pcb use in
18 plasticizers was under a different business group?

19 A. Yes.

20 Q. Still within organic chemicals?

21 A. Yes.

22 Q. What was that business group?

23 A. The plasticizers business group.

24 Q. Were there any other business groups that

1 involved the manufacture and sale of pcb's?

2 A. No.

3 Q. Who was the head of the plasticizers
4 group?

5 A. James E. Springgate.
6 S-p-r-i-n-g-g-a-t-e.

7 Q. Who was head of the marketing activity
8 within the plasticizers group?

9 A. That is Walter Schalk that we referred to
10 earlier.

11 Q. All right.

12 And he had assisting him Dr. Cumming
13 Paton; is that correct?

14 A. Correct.

15 Q. Then in addition to research, you had
16 manufacturing in the business group which was Kuhn
17 and Savage; is that right?

18 A. In the functional fluids group.

19 Q. I am sorry, in the functional fluids
20 group.

21 A. Correct.

22 Q. Who was in charge of manufacturing in the
23 plasticizer group?

24 A. I don't recall.

1 Q. We had Richard and Munch in research.
2 Then we had Benignus, Johnson and Fallon reporting
3 to either Olson or Gossage in marketing; is that
4 right?

5 A. Correct.

6 Q. And Olson and Gossage in marketing.
7 Do you know -- or, Savage in
8 manufacturing and Richard's in research reported
9 to Benignus as director of functional fluids,
10 correct?

11 A. Correct.

12 Q. Let's go over these individuals in
13 discussing individual documents.

14 Let's move on for a moment to the
15 organizational structure that existed or took
16 place in 1971.

17 Can you describe what the new
18 organization was?

19 A. There were many changes that took place
20 immediately following the '71 reorganization. I
21 don't know that I will get them all correct and in
22 the right sequence.

23 But, at one point in time, I believe Mr.
24 Wendel Corey, W-e-n-d-e-l, Corey, C-o-r-e-y had

1 responsibility for functional fluids.

2 Q. He took Bergen's job?

3 A. No. Mr. Bergen, let me think.

4 Q. Let me go back to how the company was
5 organized as a whole first, and we will work down
6 to functional fluids.

7 A. All right.

8 At that time there was the Monsanto
9 Industrial Chemicals Company. The Monsanto
10 Agricultural Chemicals Company. The Monsanto
11 Plastics and Resins Company. The Monsanto
12 Textiles Company.

13 Q. The pcb activities were within which
14 company, Monsanto Industrial Chemicals?

15 A. Industrial Chemicals.

16 Q. The president of the company after the
17 '71 reorganization, the president and chief
18 executive officer was Edward Bok still; is that
19 correct?

20 A. Yes. I believe Mr. Bok was still there
21 then, yes.

22 Q. And the managing director and vice
23 president for Monsanto Industrial Chemicals was C.
24 Preston Cunningham?

1 A. Correct.

2 Q. Then how did the manufacture and sales of
3 pcb's fit in organizationally under Mr.
4 Cunningham?

5 A. Under Mr. Cunningham, there was F. J.
6 Fitzgerald. I believe his title was general
7 manager, functional fluids and specialty
8 chemicals, or something like that.

9 Q. Then under Mr. Fitzgerald?

10 A. Under Mr. Fitzgerald. As best I remember
11 Mr. Corey, who I mentioned earlier. I have
12 forgotten his title. Director of some sort.

13 Q. But you said he was responsible for
14 functional fluids?

15 A. Yes.

16 Q. Under Mr. Corey?

17 A. Mr. Bergen and his team that we talked
18 about earlier.

19 Q. The same group of people we talked about
20 earlier?

21 A. Yes.

22 Q. Were they organized in any different
23 fashion?

24 A. Not that I recall.

1 Q. How long did that reorganizational
2 structure remain in place?

3 A. Until about 1973.

4 Q. Okay.

5 Then what happened?

6 A. I forgot many of the details, but the
7 functional fluids and specialty chemical business
8 groups were combined.

9 Q. What was the distinction that existed
10 between functional fluids and specialty chemicals
11 prior to that time?

12 A. They were two separate business groups.
13 The specialty chemicals group managed such
14 chemicals as water treating chemicals, paper
15 chemicals, fire fighting chemicals.

16 Q. The specialty chemicals prior to this
17 reorganization, did they have anything to do with
18 pcb?

19 A. No.

20 Q. All right.

21 They combined the functional fluids with
22 specialty chemicals?

23 A. Yes.

24 Q. In terms of the personnel that we have

1 described before having responsibility for
2 functional fluids and pcb's, did they change at
3 all?

4 A. Not really.

5 Q. And --

6 A. It is just, the significant change there,
7 Mr. Bergen reported to different individuals.

8 Q. Who did he report to?

9 A. As I remember he reported to Mr. Corey
10 now.

11 Q. You indicated that in the '71
12 reorganization he also reported to Corey.

13 A. All right. '71. Let me think.

14 I cannot recall the details of that. But
15 as far as pcb's are concerned, Mr. Bergen
16 continued to be responsible.

17 Q. And from the standpoint of the personnel
18 involved, would the personnel have stayed the same
19 as far as pcb's go, for marketing, research,
20 manufacture?

21 A. Yes. Except that Mr. Graham left
22 Monsanto in about 1972, as I recall. Either late
23 '71 or in '72, Mr. Graham left.

24 Q. Do you know where Mr. Graham resides

1 today?

2 A. No.

3 Q. Any other changes, was he replaced?

4 A. And Mr. Bryant replaced to a great degree
5 Mr. Randall and his activities, Mr. Randall
6 Graham.

7 Q. This organization that you have
8 described, this '73 organization, how long was
9 that in place, the organizational structure?

10 A. I can't fix the year. Sometime between
11 '73 and '76, there was another restructuring of
12 the business groups. I don't recall what year
13 that was.

14 Q. Was there a restructuring of the
15 functional fluids group?

16 A. Not basically.

17 But some of the individuals had now been
18 reassigned, though.

19 Q. All right.

20 A. Mr. Fallon and Mr. Johnson were no longer
21 involved. Mr. Benignus was still involved. Mr.
22 Bryant was still involved.

23 Of course, at that point in time the
24 plasticizers team was not involved with pcb's in

1 any way.

2 Q. When did you pull pcb's out of
3 plasticizers?

4 A. It was finally completed in 1971.

5 Q. So that after 1971, the only manufacture
6 and distribution of pcb's related to dielectric
7 fluids; is that correct?

8 A. After 1971, that is correct.

9 Q. Go ahead.

10 Were there any other personnel changes in
11 this period of '73 to '76 that are relevant to the
12 manufacture, distribution of pcb's?

13 A. Not that I can recall. I can't recall
14 any others.

15 Q. And again organizationally. That took us
16 to '76.

17 Was there another reorganization in '76?

18 A. Yes.

19 Q. What was that?

20 A. In 1976, the operating units were
21 reorganized. There was still a Monsanto
22 Industrial Chemicals Company. There was still a
23 Monsanto Textiles Company and a Monsanto
24 Agricultural Chemicals Company.

1 There was a new unit called the Monsanto
2 Chemical Intermediates Company. And and a new
3 Monsanto Plastics and Polymers Company.

4 Q. Were pcb's still within the Monsanto
5 Industrial Chemical Company?

6 A. That's correct.

7 Q. Were there still business groups?

8 A. In the Industrial Chemicals Company, yes,
9 there were still business groups.

10 Q. And where were pcb's within the business
11 groups?

12 A. It was referred to as a specialty
13 chemicals business group.

14 Q. That included functional fluids?

15 A. Yes.

16 Q. But now it was called the specialty
17 chemicals business group?

18 A. Correct.

19 Q. And who was in charge of that business
20 group?

21 A. I can't recall.

22 Q. Who was in charge of pcb's within the
23 specialty business group?

24 A. Was that still Corey?

1 A. '76. That would be Robert Potter.

2 Q. He had replaced Corey?

3 A. Yes. It was not a like-for-like
4 replacement. But the responsibilities for pcb's
5 were now Robert Potter's.

6 Q. And who worked under Potter? Was Bergen
7 still there?

8 A. No.

9 Q. When did Bergen leave?

10 A. About 1974.

11 Q. Who had replaced Bergen?

12 A. I don't remember.

13 Q. So after 1974 you don't know who was
14 directly in charge of functional fluids; is that
15 right?

16 A. I just don't remember.

17 Q. Was Gossage still head of marketing for
18 pcb's?

19 A. Gossage was still head through 1975. I
20 don't recall after that.

21 Q. Was Benignus still in charge of pcb
22 dielectrics for marketing?

23 A. Benignus retired in 1974.

24 Q. Did anybody replace him?

1 A. Yes. A David Wood.

2 Q. And who reported to Wood, if anybody?

3 A. No one.

4 Q. So whereas prior to under Benignus you
5 had Randall Graham and James Bryant, Wood had
6 nobody under him; is that right?

7 A. That is true.

8 By that time the pcb business had shrunk
9 considerably. And Mr. Wood would use the other
10 Monsanto field salesmen, there was no salesman
11 specifically assigned pcb's, dielectric fluids.

12 Q. Where had Bryant gone?

13 A. He had left Monsanto.

14 Q. Do you know when?

15 A. About 1975.

16 Q. When we talked about the period and who
17 was involved in pcb marketing and control of
18 disposal decisions in the late sixties, and you
19 said you came aboard in '70.

20 A. Yes.

21 Q. Within the organizational structure that
22 you described, to whom did you report?

23 You were manager of environmental
24 control.

1 A. Yes, to Mr. Bergen initially. And that
2 continued up through 1973. At that time I
3 reported to Mr. Corey.

4 Q. And after Corey?

5 A. After Corey, during the organization,
6 reorganization that I couldn't place in time, I
7 was reporting to Lee Miller. Dr. Lee Miller.

8 Q. What was his organizational slot, where
9 did he fit in?

10 A. He was the business director of the
11 process chemicals business group.

12 Q. So with respect to pcb control, you were
13 reporting out of the specialty products, specialty
14 chemicals business group?

15 A. It was an unusual situation, where I was
16 reporting to a business group that had nothing to
17 do with pcb's. But I retained that pcb contact
18 until 1976.

19 Q. To whom were you reporting with regard to
20 pcb's after Corey?

21 A. To Robert Potter.

22 Q. Directly to Potter?

23 A. Yes.

24 Q. So your chain of command on pcb's was

1 direct reporting to Bergen, then to Corey, then to
2 Potter; is that correct?

3 A. Right.

4 Q. Until you got out of pcb's in '76; is
5 that right?

6 A. Correct.

7 Q. When you say you got out of pcb's, do you
8 recall, was there a reason why you got out of
9 pcb's, no longer had any contact with pcb's?

10 A. Well, I went to Mr. Potter and expressed
11 a desire to change assignments. I had been on
12 pcb's for seven years and was getting
13 intellectually fatigued, I guess is the word. And
14 he arranged for someone else to take over pcb's in
15 '76.

16 Q. Who was that?

17 A. J. C. Webber.

18 Q. And how long did Mr. Webber have
19 responsibility for pcb's?

20 A. A couple years. About two years.

21 Q. And then what was done with respect to
22 pcb control?

23 A. Then Mr. Wood.

24 Q. David Wood?

1 A. David Wood assumed that role.

2 Q. Environmental control of pcb's?

3 A. Yes. As well as the marketing and
4 anything else that was still needed.

5 Q. That was in 1978?

6 A. About '78. Yes.

7 Q. And how long did Mr. Wood keep those
8 responsibilities?

9 A. Another couple years.. About 1980. It
10 was assigned and is today with Dr. John Craddock.
11 C-r-a-d-d-o-c-k.

12 Q. And to whom did Mr. Webber report during
13 the time he was there?

14 A. Mr. Potter.

15 Q. To whom did Mr. Wood report?

16 A. That is the individual that I couldn't
17 recall earlier as to who was the functional fluids
18 business director. I don't remember.

19 Q. The individual who replaced Potter.

20 A. There was an individual. Yes. He would
21 have to replace Bob Potter. I don't know who that
22 is. I don't remember.

23 Q. But it is still in functional fluids?

24 A. I don't think I understand. You used the

1 present tense.

2 Q. I am sorry.

3 Mr. Webber reported to Mr. Potter. Then
4 you said Mr. Wood reported to an unidentified
5 individual. That was that individual in charge of
6 functional fluids?

7 A. It is now specialty chemicals.

8 Q. But was there a subcategory for
9 functional fluids under specialty chemicals?

10 A. I don't believe that word was officially
11 used at the time.

12 Q. So it was to the --

13 A. Industrial fluids group within the
14 specialty chemicals group.

15 Q. It might just save time.

16 Are you aware of any historical
17 organization chart or charts that would describe
18 where these people fit within the company?

19 A. I am aware that periodically charts were
20 published.

21 Q. Showing who was who?

22 A. Showing all the changes with each change.
23 Yes. That happens, as a routine business.

24 Q. Do you have any?

1 MR. FRUEHWALD: We collected those back in
2 '82. In response to your interrogatory, we
3 started to collect them. When the lawsuit closed
4 down, we never -- at least I think we maybe
5 offered them, but they never got around to being
6 seen.

7 We have a collection of them. They are
8 not complete, but for certain periods of time
9 throughout this period we have organizational
10 charts.

11 MR. KARAGANIS: I would request that those be
12 produced. Do you have them today?

13 MR. FRUEHWALD: Yes.

14 MR. KARAGANIS: May I have those?

15 MR. FRUEHWALD: Sure. I have them right here.
16 I figured this was going to come up.

17 But these are complicated. They are the
18 entire company type things. So in terms of what
19 you want to find or focus on, you have to figure
20 out which pages in them are related to what you
21 have.

22 But they are here for that period of
23 time.

24 MR. KARAGANIS: Okay.

1 We will look at them at a break and come
2 back to them.

3 Q. Mr. Papageorge, let's go back to 1970.

4 When in 1970 did you assume your
5 responsibilities?

6 A. The 1st of January.

7 Q. So you were plant manager at Anniston
8 from '65 to '70. Then on January 1 you returned
9 to St. Louis; is that right?

10 A. Yes.

11 Q. Would it be fair to say that from January
12 1, 1970 to sometime in 1976 you were responsible
13 for environmental control for pcb's at Monsanto;
14 is that right?

15 A. Yes.

16 Q. Would it be fair to say that you were
17 also responsible for pcb control in terms of
18 anything Monsanto did with its customers during
19 that period of time?

20 A. I am having some difficulty with your
21 understanding and my understanding of
22 environmental control.

23 I don't know that we both see it the same
24 way.

1 Q. We will go back and take it apart line by
2 line.

3 A. Okay.

4 Q. Would it be fair to say that as to the
5 activities of Monsanto's customer, regarding the
6 disposal of pcb's, that any role that Monsanto had
7 with regard to customer disposal of pcb's, you
8 were in charge of from January 1, 1970 to 1976?

9 A. I was not in charge of. I was advising.
10 My assignment was advisory, not --

11 Q. Who was responsible at Monsanto for
12 activities of customers regarding disposal of pcb
13 material from January 1, 1970 to '76?

14 A. I am not aware of anybody at Monsanto
15 being responsible for our customer's behavior. We
16 were responsible for communicating.

17 Q. Prior to 1970, you indicated that the
18 only materials that you took back to Monsanto were
19 those raw products which had not been used by the
20 customers which failed the specification test; is
21 that correct?

22 A. Yes.

23 Q. Now, did you begin a program for taking
24 back spent or other pcb materials other than

1 material that had not met the specification test?

2 Am I making myself clear?

3 A. Yes.

4 Q. Did you begin such a program?

5 A. Yes.

6 Q. Who devised the program and who was
7 responsible for it?

8 A. The ultimate responsibility would be the
9 business director, Mr. Bergen at that time. And
10 it was implemented by his staff.

11 Q. Let's talk specific individuals. You had
12 the ultimate responsibility.

13 Who had responsibility for or who was
14 involved, let's put it that way, as opposed to
15 responsibility, in setting up the program of
16 having customers check and return pcb material
17 other than that which had failed the
18 specifications?

19 A. Those involved included research people,
20 manufacturing people, and medical people.

21 Q. Let's be specific, when you say those
22 categories. Let's be specific.

23 A. Okay.

24 Dr. Richard, Elmer Wheeler. I was

1 involved. Public relations through Mr. Ed John,
2 J-o-h-n. And depending on the time period, either
3 Mr. Olson or Mr. Gossage, Mr. Savage. And, of
4 course, attorneys.

5 Q. Which attorneys?

6 A. Let's see, who would it be at that time.
7 Mr. Park, Phocian, P-h-o-c-i-a-n, Park.

8 Q. Was he with the corporate counsel's
9 office of Monsanto? .

10 A. Yes. Mr. Bergen.

11 Q. Anybody above Mr. Bergen?

12 A. Well, Mr. Bergen's superior would be
13 informed of the consensus opinion of this group
14 and he would approve the action.

15 Q. Who was that?

16 A. It would be Mr. Minckler again depending
17 on the point in time.

18 So this group would deliberate, discuss,
19 come up with a consensus. Really advising Mr.
20 Bergen what action should take place.

21 Mr. Bergen then would look to his
22 marketing staff, which is the primary contact with
23 the customers, to implement. To communicate to
24 customers, what our approaches were and how we

1 would label material and who they sent the
2 material to. And on and on.

3 Q. So let's just get this straight. Was
4 there a term used for the material, a term of art
5 used for the material other than pcb's that had
6 failed to meet customer specifications?

7 A. I think we called it scrap pcb's or scrap
8 askarel, scrap Araclor, the word scrap comes to
9 mind.

10 Q. Would it be fair to say that when the
11 word scrap is used, it does not describe
12 polychlorinated biphenyl product that had simply
13 failed customer specs?

14 A. That's correct.

15 Q. So scrap Aroclor would be Aroclor that
16 had not prior to 1970 been returned to Monsanto;
17 is that right?

18 A. That's correct.

19 Q. Now, where was that scrap Aroclor prior
20 to 1970 being disposed of?

21 A. I don't know.

22 Q. You had no idea?

23 A. I can only speculate.

24 Q. Please do.,

1 A. Some of it could have gone down sewer
2 systems. Some of it was buried in different kinds
3 of landfills. Some chemical landfills, some
4 sanitary landfills.

5 Some of it was probably sold into the
6 used oil market by dealers in this kind of
7 material. That is about it.

8 Q. Would it be fair to say that in 1970 this
9 group that you have described and the individuals
10 you described advised corporate leadership at
11 Monsanto that it was not a sound environmental
12 practice to dispose of scrap Aroclor in sewers and
13 landfills?

14 A. Yes.

15 Q. And would it be fair to say that that
16 group advised Monsanto corporate leadership to
17 have the scrap Aroclor returned to Monsanto for
18 processing or destruction?

19 A. Not for processing. Destruction.

20 Q. Who would have been responsible for
21 making the corporate decision to construct a
22 destruction device?

23 A. The approval to construct the device was
24 given by the corporate management committee, which

1 consisted of the chief executive officer and his
2 staff of vice presidents.

3 Q. And who was the staff of vice presidents,
4 how many are we talking about?

5 A. Yes.

6 There was Mr. Throdahl was there, of
7 course, Mr. Bok who was the chief executive. Mr.
8 Gilles, G-i-l-l-e-s, I believe is the way he
9 spelled his name. Mr. Bible.

10 Q. Gilles was vice president of what?

11 A. Marketing.

12 Q. Okay.

13 Throdahl was vice president of what?

14 A. I believe at that time he was vice
15 president of technology.

16 Q. Okay.

17 Who else?

18 A. And Mr. Harold Bible. B-i-b-l-e.

19 I believe he was vice president of
20 manufacturing.

21 Q. All right.

22 A. I don't recall the other members.

23 Q. How many members on the corporate
24 management committee?

1 A. I just don't remember.

2 Q. About six or eight. There was a room
3 full.

4 Q. We will go back and go into detail on
5 this.

6 Who within Monsanto within the corporate
7 leadership --first of all.

8 Who within Monsanto gave corporate
9 leadership the advice to restrict the sale of
10 pcb's to only certain applications in 1969 or '70?

11 A. This group of individuals I listed
12 previously.

13 Q. Richards, Wheeler, Olson, Savage, Bergen?

14 A. Right.

15 Q. Would Mr. Benignus have been involved in
16 that?

17 A. Yes.

18 So would Mr. Schalk, Mr. Springgate.

19 They, as a group --

20 Q. Would advise corporate manager?

21 A. On pcb matters.

22 Q. I am now talking about the specific
23 decision to withdraw pcb's from certain
24 applications and to limit its sale to certain

1 specified applications in 1969 or 1970.

2 A. That group advised Mr. Bergen. Mr.
3 Bergen advised Mr. Minckler.

4 Q. Minckler was the general manager?

5 A. General manager of the organic chemicals
6 division. And Mr. Minckler then advised the
7 corporate management committee.

8 Q. So the decision was made by the corporate
9 management committee; is that right?

10 A. Ultimately. Yes.

11 Q. Who made the decision I believe in 1971
12 to only continue to sell to customers such as
13 Westinghouse who would provide an indemnification
14 agreement?

15 Who recommended that? Let's go to
16 recommendation first.

17 A. I personally wasn't involved in that
18 particular activity. But I have an understanding
19 I will share with you.

20 It started with the marketing people
21 represented by Mr. Gossage. And the attorneys,
22 represented by John Stapleton, the attorney, who
23 advised Mr. Bergen, who in turn advised Mr.
24 Minckler, and as I understand it that is where the

1 decision was made.

2 Q. By Mr. Minckler?

3 A. Yes.

4 Q. Do you recall any discussions as to what
5 the reason for requesting the indemnification was?

6 A. No.

7 Q. Throughout the period of time that we are
8 talking about now, late sixties, early seventies,
9 who was responsible within Monsanto for
10 identifying, evaluating, analyzing, and
11 investigating effects of pcb's on human or animal
12 life?

13 A. It would be Dr. Kelly.

14 Q. Dr. Kelly still with the company?

15 A. No.

16 Q. Is he retired?

17 A. Yes.

18 Q. Where does he reside?

19 A. The last I knew in the St. Louis area.
20 But I don't know specifically.

21 Q. Did you have any communication or any
22 activities in the area I have just described,
23 investigations of pcb's as to their impact on
24 human or animal life?

1 A. I was kept informed, yes.

2 Q. Did you participate in the activities?

3 A. I need help on the word participate.

4 Q. Did you engage in supervision, direction,
5 communication of any research, or investigation
6 into impact on human and animal life from pcb's?

7 A. I participated in communication of the
8 status of the studies.

9 Q. Who was involved from Monsanto's end with
10 the studies?

11 A. Elmer Wheeler was the project manager and
12 represented Monsanto.

13 Q. Did anybody work with him?

14 A. He was assisted briefly by Dr. Hunt.

15 Q. Anybody else?

16 A. Not to my knowledge.

17 Q. Dr. Levinskis involved in that?

18 A. Not initially. Dr. Levinskis became
19 involved with pcb's about 1975 or so.

20 Q. '75?

21 A. Yes.

22 Q. A Mr. Paul Wright?

23 A. Yes.

24 Q. Where was he within the Monsanto

1 organization?

2 A. He was part of the medical department and
3 joined it in about '74. Somewhere in there.

4 Q. Is that the first time he became part of
5 Monsanto or became employed by Monsanto?

6 A. No. I understood, although I didn't know
7 the man, I understood that he was a part of
8 Monsanto's agricultural company prior to that or
9 at some time before that.

10 Q. He left Monsanto and then joined back
11 into the medical department; is that right?

12 A. That is my understanding. Yes.

13 Q. Do you have a scheduled retirement at all
14 at Monsanto, when are you scheduled to retire?

15 A. We can retire from 55 on.

16 Q. All right.

17 Is there any mandatory retirement plan?

18 A. It is the federal one, 70 for
19 nonexecutives.

20 Q. Do you have any anticipated retirement?

21 A. For me, personally?

22 Q. Yes.

23 A. Well, I haven't thought about it,
24 frankly.

1 Q. Mandatory date would be when?

2 A. 1970, for me -- not 70.

3 Q. Age 70?

4 A. It would be '92.

5 Q. So you have got some time.

6 Do you have any plans to retire now?

7 A. Yes. Probably in '88, when I'm 65.

8 Is that relevant?

9 Q. Well, it is in terms of where you will be
10 at the trial date, and under whose employment you
11 will be.

12 A. Oh, I am sorry.

13 Q. Mr. Papageorge, have you had occasion to
14 have your deposition taken in any other
15 litigation?

16 A. Yes.

17 Q. Could you describe what litigation that
18 has been?

19 A. I will try to remember them all.

20 There is a case in North Carolina, I am
21 going to refer to these by common terminology. I
22 don't know.

23 Q. All right.

24 A. The Holly Farms case, chicken and egg

1 case. There was up in New Hampshire, the
2 Bethlehem mink case. Up in Chicago, the Waukegan
3 harbor case. In Knoxville, Tennessee, there was a
4 transformer case. In South Carolina, there is
5 the -- I don't even know what the terminology is,
6 it has to do with with a capacitor plant and water
7 effluent in a creek or a river contaminated near
8 Greenville. Pickens. Pickens, South Carolina.

9 Q: Okay.

10 A. There is a case in Florida that had to do
11 with replacement of transformers in an insurance
12 building. Independent Live versus General
13 Electric.

14 There is a New Bedford , Massachusetts
15 harbor pollution case. A case in Montana. Pierce
16 Packing. P-i-e-r-c-e. I don't remember any
17 others. But I don't know that I got them all or
18 not.

19 Q. I would request for purposes of
20 inspection and possible copying, copies of Mr.
21 Papageorge's deposition transcripts in the cases
22 that he mentioned and any others that he may have
23 forgotten.

24 MR. FRUEHWALD: I will note your request. I

1 will reserve judgment on it.

2 A. I recall another. The Halley case, in
3 Michigan. Oh, yes. And there is a dairy case
4 here in Indianapolis.

5 BY MR. KARAGANIS:

6 Q. In preparation for your deposition, have
7 you had occasion to review any documents?

8 A. Yes.

9 Q. Can you tell me which documents you have
10 reviewed?

11 A. It was a collection of documents about
12 three inches thick that I was told were copies of
13 documents already submitted in this case.

14 Q. Can you tell me which ones you looked at?
15 I will ask, Mike, to disclose which documents the
16 witness looked at?

17 A. There were copies of Westinghouse
18 memoranda. Copies of Monsanto's letters to
19 customers. Copies of, as I remember, some
20 invoices.

21 MR. KARAGANIS: Again, I will request for
22 purposes of continuing this deposition to examine
23 the documents that the witness has looked at in
24 preparation for his deposition.

1 MR. FRUEHWALD: I will note your request.

2 At this time I am not inclined to produce
3 that.

4 MR. KARAGANIS: You have shown the witness
5 some documents to presumably refresh his
6 recollection. I am entitled to look at the
7 documents that he is seen.

8 MR. FRUEHWALD: State your position. I
9 disagree.

10 At least Mr. Papageorge has been shown a
11 selection of documents made by counsel from the
12 documents produced by Monsanto and Westinghouse in
13 this case, that are already available to you.

14 The selection of those documents I think
15 is attorney work product and is protected. I
16 don't think the foundation has been laid for your
17 need to see them.

18 MR. KARAGANIS: I think if it was attorney
19 work product perhaps, and I say perhaps, until you
20 showed them to Mr. Papageorge.

21 MR. FRUEHWALD: Mr. Papageorge is representing
22 Monsanto in this case. The advice to Mr.
23 Papageorge by Monsanto's counsel is advice to
24 Monsanto and is protected by privilege under the

1 law.

2 MR. KARAGANIS: Wait a minute. Let's get our
3 assertions of grounds for withholding clear.

4 Certainly, it is not work product if you
5 showed it to the witness. It can no longer be
6 encompassed within the work product exemption; or,
7 to the extent there is an exemption for work
8 product, to the extent that they are facts which
9 were not communicated to you in a lawyer-client
10 relationship, you cannot assert a lawyer-client
11 privilege with respect to those.

12 And again, I will reiterate my request to
13 see the documents for the purposes of taking Mr.
14 Papageorge's deposition.

15 Are you asserting a lawyer-client
16 privilege?

17 MR. FRUEHWALD: Yes, I am asserting work
18 product, I am asserting privilege.

19 MR. KARAGANIS: Which privilege?

20 MR. FRUEHWALD: Attorney-client privilege. I
21 am also asserting that you have not laid a
22 foundation for any evidentiary reason to discovery
23 them.

24 MR. KARAGANIS: Foundation is that I am

1 entitled to inquire into any material that is
2 relevant to a 30 (b) 6 notice or anything that is
3 relevant to the issues in this case.

4 MR. FRUEHWALD: You have made your speech. We
5 have made our record. Do you want to move on to
6 questions.

7 MR. KARAGANIS: Well, I will tell you that
8 asserting a lawyer-client privilege under these
9 circumstances without establishing the requisite
10 foundation facts for the assertion of such
11 privilege, we will probably seek costs.

12 MR. FRUEHWALD: We will see.

13 You have made -- we have both stated our
14 position. Now we are here to answer questions.

15 BY MR. KARAGANIS:

16 Q. These documents were presented to you by
17 Mr. Fruehwald?

18 A. Yes.

19 Q. Do you have them in your possession?

20 A. Right here?

21 Q. Yes.

22 A. No.

23 MR. FRUEHWALD: They are here in this office.

24 BY MR. KARAGANIS:

1 Q. Did you have occasion to have any
2 conversations with any attorneys and/or personnel
3 of Westinghouse prior to taking your deposition?

4 A. No.

5 Q. Did you have occasion to have any
6 conversations with Monsanto personnel or
7 ex-Monsanto employees or consultants prior to
8 taking your deposition?

9 A. I have talked with Monsanto personnel
10 regarding dates and schedules.

11 Q. To whom did you talk?

12 A. Attorney Thomas Bistline.
13 B-i-s-t-l-i-n-e.

14 Q. M-e-i-s?

15 A. I am sorry.

16 Q. How did you spell that?

17 A. B-i-s-t-l-i-n-e.

18 Q. Okay.

19 A. His secretary, Gale, I don't know her
20 last name. And a paralegal individual, Gale
21 Turner, regarding dates and schedules.

22 Q. By dates and schedules, you mean dates
23 and schedules relative to the area of inquiry that
24 we have set forth in our deposition notices or

1 dates and schedules with respect to when your
2 deposition is going to be taken?

3 A. With respect to the deposition, when can
4 I be available.

5 Q. Did you have any conversations with
6 respect to the historical material that is the
7 subject of deposition notices with any Monsanto
8 employees, either existing or ex-Monsanto
9 employees?

10 A. No.

11 Q. Did you have any occasion other than
12 the -- you indicated a stack, am I correct, about
13 three inches thick; is that correct?

14 A. That's correct.

15 Q. Other than the stack of documents three
16 inches thick provided to you by Mr. Fruehwald,
17 have you had occasion on your own to conduct any
18 investigation or request that any investigation as
19 to documents be done in response to the 30 (b) 6
20 request?

21 A. No.

22 Q. Have you had any occasion to review any
23 of the pleadings in this case prior to coming to
24 your deposition, by that I mean the complaint,

1 Monsanto's answer?

2 A. I have seen documents I think covering
3 the complaint, but I have not seen Monsanto
4 answers.

5 (Discussion had off the record.)

6 Q. Mr. Papageorge, do you recall the
7 specifications that Westinghouse used or Monsanto
8 used in specifying the pcb product used at the
9 Bloomington plant?

10 Did they use a number code or
11 specification?

12 A. If I understand you correctly, you are
13 asking me do I recall the specification for the
14 material Monsanto delivered to Westinghouse?

15 Q. Yes. To the Bloomington facility.

16 A. I don't recall the specifics of the
17 specification.

18 Q. Do you recall the type that was used, the
19 type of polychlorinated biphenyl or the
20 classification used?

21 A. Yes.

22 Pcb that we sold them was initially
23 Aroclor, the equivalent to our Aroclor, to
24 Monsanto's Aroclor 1242. Later it was replaced

1 with Monsanto's Aroclor 1016.

2 Q. Is there a difference between Aroclor and
3 askarel?

4 A. Yes.

5 Q. Would you describe what the difference
6 between Aroclor and askarel is?

7 A. Aroclor is Monsanto's trademark for
8 chlorinated aromatic chemicals. Askarel is the
9 electrical industry's generic term to describe
10 fluids used in electrical equipment that are fire
11 resistant.

12 Q. Would it be correct to say that there can
13 be askarels that do not contain pcb's?

14 A. That is possible. Yes.

15 Q. But all Aroclors contain pcb's; is that
16 right?

17 A. No.

18 Q. No?

19 A. That is not correct.

20 Q. Aroclor is a broader term than pcb's; is
21 that right?

22 A. Correct.

23 Q. And what other materials -- I am sorry.

24 What Aroclor products do not contain

1 pcb's?

2 A. Monsanto had a series of Aroclors that
3 were designated by four digit numbers in the 5,000
4 and 6,000 series that did not contain pcb's.

5 Q. Would it be correct to say that all of
6 the Aroclors sold to Westinghouse for use at its
7 Bloomington facility were Aroclors containing
8 pcb's?

9 A. I am not knowledgeable of everything that
10 Westinghouse at Bloomington purchased from
11 Monsanto. They could have purchased the other
12 Aroclors.

13 Q. Would it be fair to say that the
14 largest -- and we will get into the figures -- the
15 largest quantity of Aroclor sold to Westinghouse
16 between the opening of the plant in 1957 and the
17 cessation of the pcb manufacture --

18 When was that? Excuse me.

19 A. 1977.

20 Q. So between 1957 and 1977, that at a
21 minimum the large majority of Aroclors sold for
22 use at the Bloomington plant contained pcb's?

23 A. That would be very likely, yes.

24 Q. And with respect to those Aroclors, you

1 are saying that up until you switched to 1016, the
2 primary Aroclor sold to the Bloomington plant was
3 Aroclor 1242?

4 A. Yes.

5 Q. Was there an Aroclor 1232?

6 A. Yes.

7 Q. What was that; do you recall what 1232
8 was?

9 A. Yes. It was another mixture of pcb's
10 sold by Monsanto.

11 Q. Was it a blend of anything?

12 A. Yes. Aroclor 1232 was a blend of Aroclor
13 1221 and 1242.

14 Q. As sold to Westinghouse, did it have any
15 other major chemical component?

16 A. Not to my knowledge.

17 Q. Do you recall selling them an Aroclor
18 product containing chlorobenzene as a major
19 component?

20 A. To which site?

21 Q. To Bloomington.

22 A. Not to my knowledge.

23 Q. Did Monsanto to your knowledge produce
24 any publications, documents that would describe

1 how to handle the dielectric fluids?

2 Let me go back a step -- strike that
3 question.

4 Would it be fair to say that dielectric
5 fluids and askarel are synonymous?

6 A. No.

7 Q. No. Okay.

8 A. An askarel is a dielectric. All
9 dielectrics are not necessarily askarels.

10 Q. An askarel is the generic description in
11 the industry for heat-resistant fluids used for
12 insulating purposes; is that correct?

13 A. Fire resistance.

14 Q. Fire resistance?

15 A. Yes.

16 Q. And all askarels are dielectric fluids?

17 A. Yes.

18 Q. Would it be fair to say that when we are
19 dealing with fluids sold for manufacture of
20 capacitors, that those fluids are both askarels
21 and dielectric fluids?

22 A. It is my understanding there were some
23 fluids sold for capacitors that were not askarels.
24 They were not fire resistant.

1 Q. To your knowledge, were those materials
2 sold to the Bloomington Westinghouse facility?

3 A. No, not to my knowledge.

4 Q. Would it be fair to say that all the
5 materials sold to the Bloomington Westinghouse
6 facility for capacitor manufacture were both
7 askarels and dielectric fluids?

8 A. Those fluids that Monsanto sold them. I
9 can't speak for other.

10 Q. That Monsanto sold them.

11 A. Yes.

12 Q. Did you ever publish documents -- when I
13 say you, the company -- that relate to the
14 handling of Aroclors?

15 A. Yes.

16 Q. What documents were those?

17 A. Oh, I can recall a brochure designed for
18 the dielectric applications. And I forgot the
19 title of that brochure. But the word askarel
20 appears in it.

21 Q. Was that called askarel inspection and
22 maintenance guide?

23 A. Yes, that is it.

24 There is another brochure that was put

1 together for the plasticizer, primarily the
2 plasticizer applications.

3 And there was a third brochure, I recall,
4 that was a very general kind of document
5 describing Aroclors in general.

6 Q. Are you familiar with a document
7 entitled, "The proper handling of Aroclors and
8 their mixtures in the electrical industry"?

9 A. That title, I don't recall by that title.
10 No.

11 Q. Do you recall Mr. Benignus writing any
12 documents or publishing any documents with respect
13 to the proper handling of Aroclors?

14 A. Mr. Benignus' office was responsible for
15 preparing these booklets and brochures and
16 literature.

17 I don't recall any one document that went
18 out under -- with his name attached to it.

19 MR. KARAGANIS: I am going to request at this
20 time, we will go through some individual examples
21 of these documents as we go along, but
22 specifically, because we want them as trial
23 exhibits, that these titles may be slightly
24 incorrect or they may be exact, I don't want to be

1 held to my description. But, one is all editions
2 of the document entitled, "Proper handling of
3 Aroclors and their mixtures in the electrical
4 industry."

5 MR. FRUEHWALD: Is that supposedly a book by
6 Benignus, you understand to be?

7 MR. KARAGANIS: It is our understanding that
8 at least one version of it was dated in 1960 and
9 was authored by Paul Benignus.

10 MR. FRUEHWALD: I understand he wrote a book
11 and that may be the book, the name of the book
12 that he wrote.

13 MR. KARAGANIS: We would like that in its
14 original version and any editions thereof, as it
15 is our understanding that as the handling issue
16 became more to the forefront, there were changes
17 in that edition.

18 We have also asked for production, and we
19 would like them in original form so that they can
20 be -- by originals, I mean not xeroxes -- handed
21 to a jury as an exhibit.

22 We also would ask for production of a
23 booklet called, "The Aroclors physical properties
24 and suggested applications." We have a reference

1 as to a data bulletin P 115, which we would ask
2 for.

3 MR. FRUEHWALD: Instead of reading these
4 things into the record, Joe, and having me copy
5 them down by hand, why don't you write out a list
6 of those things that you want from me, and I will
7 deal with it rather than taking the reporter's
8 time.

9 MR. KARAGANIS: What I am trying to get at,
10 this is something that we have, we would like the
11 finished, published copies and the various
12 editions thereof of any application booklets or
13 bulletins regarding Aroclors, their physical
14 properties and appropriate handling
15 characteristics.

16 By giving the names of individual titles,
17 we were not trying to be limited in our request.

18 MR. FRUEHWALD: What I just requested is that
19 you go ahead and give me a generic description,
20 but list any of them that you are aware of that
21 you want to make sure are included.

22 We have, as I understand it, produced
23 many of these, maybe in xerox copy form, as a part
24 of our production. And I understand you are

1 looking for a printed form.

2 But if you can give me a handwritten list
3 of a generic description and the individual titles
4 you are aware of, I will respond to that. I don't
5 believe there is any problem from a legal point
6 of view. It is a matter the of identifying if
7 these things still exist in printed form and
8 identifying the various editions.

9 So if you can give me the list, I will
10 respond to it.

11 MR. KARAGANIS: Mr. Reporter, would you mark
12 this as Bloomington Deposition Exhibit 84.

13 For the record, it is a document
14 entitled, "The proper handling of Aroclors and
15 their mixtures in the electrical industry."

16 The logo on the cover is Monsanto
17 Chemical Company, the apparent author is P. G.
18 Benignus, revised January 1960.

19 And as I have indicated before, we would
20 want a finished copy, as well as any revisions in
21 finished form.

22 (The document above-referred to
23 was marked Bloomington Deposition
24 Exhibit No. 84 for identification.)

1 Q. Mr. Papageorge, I am showing you
2 Bloomington Deposition Exhibit No. 84 for
3 identification, have you seen that document
4 before?

5 A. No, sir.

6 Q. In the course of your work in
7 environmental control or environmental management
8 of pcb's and relationships with customers, did you
9 cause to be distributed any written material
10 relating to Inerteen or pcb disposal and control?

11 A. I personally did not cause that material
12 to be distributed. But I participated in
13 revisions or drafting.

14 Q. What material was that?

15 A. There was a brochure on Aroclors which
16 was revised and I think carried the number L 306.
17 Monsanto publication L 306. There was another
18 document that was a revision of the earlier
19 version on the proper handling of askarels. Those
20 are the only two.

21 MR. KARAGANIS: I would request Monsanto to
22 produce the various editions or versions of the
23 documents that have been referenced by Mr.
24 Papageorge.

1 MR. FRUEHWALD: I expect that we already have.

2 I do recall those type of documents being
3 in our production long ago. But we will note your
4 updated request.

5 While I am speaking, I notice that
6 Exhibit 84 is not -- does not appear to be a
7 complete copy of this document, in that there are
8 pages in the table of contents that go beyond the
9 40 pages that are attached to the exhibit.

10 MR. KARAGANIS: Believe me, I am not trying to
11 shorten the document.

12 Please, if you have a correct original of
13 Exhibit 84, we are making that request. That is
14 one of our difficulties.

15 MR. FRUEHWALD: For the record, so the record
16 will know there is not something lost later on,
17 that at the time of its admission or
18 identification today, it only had to page 40 and
19 didn't have the rest of it. So the reporter
20 didn't lose it, or it didn't get lost in the
21 mail.

22 MR. KARAGANIS: All right.

23 Q. Mr. Papageorge, are you aware of any
24 communications, I am asking you this personally

1 and as a witness designated by Monsanto as a 30
2 (b) 6.

3 Are you aware of any communications
4 between Monsanto and its customers as to the
5 proper methods for disposing of polychlorinated
6 biphenyls prior to your coming in as head of
7 environmental management in 1970?

8 A. No.

9 Q. Have you been shown any such
10 communications?

11 A. No.

12 Q. Would it be fair to say that your earlier
13 statements that this was how to dispose of them
14 properly was kind of a general knowledge within
15 the industry?

16 A. That is my understanding, yes.

17 Q. Is Mr. Wheeler still with the company?

18 A. No.

19 Q. Is he retired?

20 A. Yes.

21 Q. And Dr. Kelly is retired, you indicated?

22 A. Yes.

23 Q. Based on what you know, isn't it correct
24 that Monsanto would send tankcars of pcb product

1 to Westinghouse Bloomington in Monsanto tankcars;
2 is that correct?

3 A. To be technically correct, it is either a
4 Monsanto-owned car or a Monsanto-leased car.

5 Q. By Monsanto-leased car, Monsanto would
6 lease it from the railroad or the car owner?

7 A. Yes, and dedicate it to that service.

8 Q. So that Monsanto would either be the
9 owner or the lessee of the car; is that right?

10 A. Right.

11 Q. Did the cars come down labeled with
12 Monsanto's name on them?

13 A. Not always, no.

14 Q. Under some circumstances, did they come
15 down?

16 A. If it was a Monsanto-owned car, it would
17 have the Monsanto logo on it. If it were a leased
18 car, it would have the lessor's logo.

19 Q. Do you know if Monsanto had any role in
20 producing a document entitled, "Hygienic guide
21 series for the American Industrial Hygiene
22 Association on chlorobiphenyls"?

23 A. I am of the understanding that Monsanto's
24 role was the sharing of some test data they had

1 performed for Monsanto with the panel or committee
2 that put together this document.

3 Q. When you say you are informed, who
4 informed you of that?

5 A. Elmer Wheeler.

6 Q. So, you don't know of your own personal
7 knowledge, you are referring to what Wheeler told
8 you and you are here as the 30 (b) 6 witness; is
9 that correct?

10 A. That's correct.

11 Q. Did you inquire of Wheeler as part of
12 your preparation for this deposition?

13 A. Not for this deposition.

14 Q. You have inquired of him in other
15 circumstances?

16 A. In the past, yes.

17 MR. KARAGANIS: Mr. Reporter, would you mark
18 the following exhibit as Bloomington Deposition
19 Exhibit 85. I am just looking for a stapler.

20 MR. FRUEHWALD: I will go get one for you.

21 (The document above-referred to
22 was marked Bloomington Deposition
23 Exhibit No. 85 for identification.)

24 BY MR. KARAGANIS:

1 Q. Mr. Papageorge, I show you what has been
2 marked as Bloomington Deposition Exhibit 85 for
3 identification. For the record, it is a letter
4 dated January 11, 1966 from H. L. Gray of Monsanto
5 Company to Westinghouse Electric in Bloomington,
6 enclosing a tankcar lease dated January 11, 1966.

7 For the record references it is Monsanto
8 documents stamped 14 and 15.

9 Are you familiar with that document?

10 A. No.

11 Q. Are you familiar with the kind of car
12 leasing arrangement that is described in the
13 attached document?

14 A. Yes.

15 Q. Would it be fair to say based on using
16 Deposition Exhibit 85 as an example, that Monsanto
17 would use its cars for the transportation, cars
18 either owned or leased by it, for the
19 transportation of the product, the pcb product to
20 Bloomington, and that that would be done on a trip
21 lease with Monsanto as the lessor and Westinghouse
22 as the lessee?

23 A. Okay. Yes.

24 Q. And that basically the lessor had title

1 to and control of the car, but would lease it to
2 Westinghouse for the trip and Westinghouse agreed
3 to indemnify; is that right?

4 A. That's right.

5 (The document above-referred to
6 was marked Bloomington Deposition
7 Exhibit No. 86 for identification.)

8 Q. Mr. Papageorge, I show you what has been
9 marked for the record as Bloomington Exhibit 86.

10 For the record it purports to be a
11 memorandum to Mr. Gardener of Monsanto from Mr.
12 Williams of Monsanto, dated July 19, 1966. For
13 the record reference Monsanto production document
14 number 24.

15 Are you familiar with the incident
16 described in that memorandum? And I will let you
17 take your time.

18 MR. FRUEHWALD: Do you want to repeat the
19 question?

20 MR. KARAGANIS: Yes.

21 Q. Are you familiar with the incident
22 described in Bloomington Deposition Exhibit 86?

23 A. I recall the incident after reading the
24 document. Yes..

1 Q. Would you describe what it was?

2 A. It was an examination of pcb's with
3 mineral oil that occurred at the Bloomington
4 Westinghouse site. And Westinghouse was seeking
5 Monsanto's help in trying to recover if we could
6 the pcb's from this contaminated material.

7 Q. If you recall our earlier discussion --
8 this is not in lawyer's terms a trick question, in
9 our earlier discussions normally the only material
10 Westinghouse Bloomington would send back to you
11 was material that hadn't met specs, isn't that
12 correct?

13 A. That was the normal, yes.

14 Q. Prior to 1970?

15 A. Yes.

16 Q. And they did not use Monsanto as a method
17 of disposing what we defined as scrap Aroclor,
18 isn't that correct?

19 A. That is correct.

20 Q. Okay.

21 This was not what would be called a scrap
22 Aroclor situation, would it? It was a special
23 problem with contamination of a large batch; isn't
24 that right?

IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF INDIANA
INDIANAPOLIS DIVISION

THE CITY OF BLOOMINGTON, INDIANA;)
THE UTILITIES SERVICE BOARD OF)
BLOOMINGTON, INDIANA; and MONROE)
COUNTY, INDIANA,)

Plaintiffs,)

vs.)

Civ No.
IP 83-9-C

WESTINGHOUSE ELECTRIC CORPORATION,))
a Pennsylvania corporation; and)
MONSANTO COMPANY, a Delaware)
corporation,)

-----Defendants.-----)

The continued deposition of W. B. PAPAGEORGE,
called for examination by the Plaintiffs, pursuant
to notice and pursuant to the provisions of the
Federal Rules of Civil Procedure of the United
States District Courts, pertaining to the taking
of depositions for the purpose of discovery, taken
before Arnold N. Goldstine, a Notary Public and
Certified Shorthand Reporter within and for the
County of Cook and State of Illinois, at 1313
Merchants Bank Building, Indianapolis, Indiana,
commencing on June 25, 1986, at the hour of one
o'clock p.m.

1
2 APPEARANCES:

3 Mr. Joseph V. Karaganis and
4 Mr. James G. McConnell
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10 -and-

11 Mr. Geoffrey M. Grodner
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15 Bloomington, Indiana 47401

16 appeared on behalf of the Plaintiffs;

17
18 Mr. Michael R. Fruehwald
19 Barnes & Thornburg
20 1313 Merchants Bank Building
21 Indianapolis, Indiana 46204

22 appeared on behalf of Defendant
23 Monsanto Company.
24

1 meeting?

2 A. Well, as I remember, the Westinghouse
3 people at Bloomington were having some problems
4 with their employees and this was considered a
5 good opportunity to offer a visit to the plant
6 which was part of Monsanto's customer relations
7 program, anyway.

8 And this was an opportunity also to
9 address a specific problem that Westinghouse had
10 at that time.

11 Q. Was there any discussion at that time by
12 Monsanto, direction or instruction or advice to
13 Westinghouse as to how to handle Inerteen?

14 A. Yes.

15 Q. What was said with respect to Inerteen
16 handling?

17 A. The essence of the discussion is one of
18 don't be sloppy, treat it with respect. Don't
19 spill it all over. Don't get it on your clothes.
20 Change clothes when appropriate. Otherwise you
21 are going to see problems with dermatitis, or
22 respiratory irritation. The other effects that
23 they were told of before.

24 Q. Now, when you say they were told of

1 before, who told them of other effects before?

2 A. This is via the labels, primarily, and
3 the product literature.

4 Q. With respect to the agenda on Exhibit 87,
5 the discussion of Inerteen handling, are Haupt,
6 MacPherson and Ward people who worked for you?

7 A. Yes.

8 Q. When you said, described earlier that it
9 was generally known in the industry that you don't
10 spill this kind of material don't the drain; did
11 you have a drainage control program at the
12 Anniston plant or a spill control program to avoid
13 pcb's from getting in the drain?

14 A. Yes.

15 We had -- the primary feature of that
16 system that we had was two pits, depressions in
17 the ground, in which we had crushed limestone.
18 And any water, effluent from the pcb process, went
19 first to these pits, so that if there were a spill
20 it would have been trapped in the pits; it would
21 not have overflowed into the city sewer system.

22 Q. So you had a mechanism at your plant to
23 prevent the discharge of pcb's into the city sewer
24 system; is that right?

1 A. That's right.

2 Q. Then what would you do with the material
3 that was trapped in these pits?

4 A. The free pcb's would be stored in our
5 Anniston plant landfill, which was on plant
6 property. Eventually the sludge would be scooped
7 out from the pits and also be put in containers
8 and deposited in that landfill.

9 Q. That landfill on your Anniston facility,
10 did that involve a geologic situation where there
11 were sink holes or cracked rock strata or any
12 other mechanisms which could allow travel of pcb's
13 into the water?

14 A. No.

15 Q. Did you design the landfill or locate it
16 so as to avoid that kind of leak situation?

17 A. Yes.

18 Q. Would it be fair to say, then, that in
19 your plant practices at Anniston you designed the
20 situation whereby for waste pcb's, you prevented
21 them from getting down the sewer, and of the waste
22 that you did collect, you put them in a landfill
23 that was located in a geologic structure that
24 wouldn't leak or wouldn't allow leakage?

1 A. That is correct.

2 And the question, when you use the words
3 is it fair to say, I am assuming --

4 Q. Is it accurate?

5 A. Is it accurate. Very good.

6 Q. Is it accurate to say, then, based on
7 Papageorge Deposition Exhibit 87, that you were
8 aware as early as September of 1967 that the
9 Bloomington plant had problems with sloppy control
10 of pcb's or Inerteen in their operation of the
11 facility?

12 A. Yes. But not -- the sloppiness that
13 affected their people. We had no way of knowing
14 what it did to the sewers.

15 Q. Well, you knew it was sloppiness in the
16 sense that they were allowing it to spill?

17 A. Yes.

18 Q. You didn't know at the time whether they
19 allowed it to leak into the sewers; is that right?

20 A. Correct.

21 (The document above-referred to
22 was marked Bloomington Deposition
23 Exhibit No. 88 for identification.)

24 Q. The next document is a letter dated

1 November 1, 1967 from Garrett of Monsanto to
2 Spiecher, S-p-i-e-c-h-e-r, of Westinghouse,
3 purporting to enclose a copy of the Inerteen
4 label. The reference is Monsanto document 1136.

5 Mr. Papageorge, are you familiar with
6 that letter?

7 A. Yes.

8 MR. KARAGANIS: I will make a specific request
9 on this, that we do not appear to have a copy of
10 the label that is referenced in the letter and
11 purports to be enclosed in the letter, and we
12 would request a copy of that label.

13 MR. FRUEHWALD: I will note the request. We
14 produced a set of labels, I know. I am not sure
15 if we have not matched one up with this particular
16 letter. I will identify and see if I can find a
17 copy of the letter that goes with it.

18 It was not, for example, 1137 you are
19 telling me in the production?

20 MR. KARAGANIS: Not to my knowledge.

21 Q. Mr. Papageorge, directing your attention
22 to the period of 1967 to '68, were you aware of
23 governmental concern with respect to pcb's, were
24 you personally aware of governmental concern with

1 respect to pcb's?

2 A. No.

3 Q. Were you made aware of that by any
4 official within Monsanto?

5 A. No.

6 Q. When did you first become aware of the
7 concern about pcb's as a contaminant going out
8 into the environment?

9 A. I am confused by your questioning. You
10 mentioned the government's concern and now you are
11 asking for concerns in general or Monsanto's
12 concerns?

13 Q. Let's start from the general to the
14 specific.

15 When did you first become aware of
16 concern over release of pcb's into the
17 environment?

18 A. Whether it be the government's or
19 Monsanto's or anybody's? Middle of 1969.

20 Q. And how did you be could become aware of
21 it?

22 A. My supervisor informed me that he in turn
23 had been told about some studies and results of
24 these studies, the presence of pcb's in the

1 environment.

2 Q. Who was your supervisor?

3 A. Raymond J. Stratmeyer.

4 S-t-r-a-t-m-e-y-e-r.

5 Q. And where was he located?

6 A. He, in St. Louis.

7 Q. What division did he work for?

8 A. The organic chemicals division.

9 Q. What was his title?

10 A. Director manufacturing.

11 Q. I am going back to our hierarchy. To
12 whom did he report?

13 A. Mr. Minckler. M-i-n-c-k-l-e-r.

14 Q. Who was general manager?

15 A. Yes.

16 Q. He reported around Bergen, he didn't
17 report directly to Bergen, did he?

18 A. That is correct.

19 Q. And where did he say he had gotten the
20 information from?

21 A. I don't recall him mentioning any
22 specific names. So I don't know.

23 Q. What specifically did he say to you with
24 regard to the question of environmental

1 contamination by pcb's?

2 A. I don't recall the exact words. But the
3 essence of what he told me went something like
4 this.

5 I understand that there is some
6 laboratories that are analyzing for pesticides,
7 DDT particularly. And these laboratories keep
8 finding an interfering chemical, that looks like
9 that chemical may be our Aroclors. It looks like,
10 we are not sure just yet, but we are trying to get
11 the methodology and do our own studies and I'll
12 keep you posted as to what all this means.

13 In essence, that is what he told me.

14 Q. All right.

15 What was the next communication you had
16 from Mr. Stratmeyer or anybody else regarding
17 environmental contamination of pcb's, to the best
18 of your recollection?

19 A. In November, 1980, he, Mr. Stratmeyer,
20 was again at the Anniston plant.

21 MR. FRUEHWALD: You mean 1970?

22 A. I am sorry. 1970. November 1970.

23 He was again at the Anniston plant. He
24 reminded me of our earlier conversation. Then he

1 added that apparently the situation is becoming
2 more involved. We need someone in St. Louis to
3 coordinate Monsanto's efforts. Some of us think
4 that you are the guy for the job. Would you mind
5 interviewing for it? And I said well, if you
6 think I can help, I'll interview.

7 MR. FRUEHWALD: That appears to be November of
8 '69 then you came out?

9 A. I am sorry, November '69. I will get
10 that date right yet.

11 BY MR. KARAGANIS:

12 Q. So your first contact with Stratmeyer was
13 in mid-1969?

14 A. The first contact on the pcb issue?

15 Q. On the pcb issue.

16 A. Correct.

17 Q. When mid-1969?

18 A. About June, July of '69.

19 (The document above-referred to
20 was marked Bloomington Deposition
21 Exhibit No. 89 for identification.)

22 Q. I show you what has been marked for
23 identification as Bloomington Deposition Exhibit
24 No. 89, which is a letter dated January 16, 1968,

1 from Richard A. Wilson to Monsanto Company,
2 Richard A. Wilson being a research chemist with
3 the United States Department of Interior.

4 For record reference Monsanto document
5 3390.

6 Are you familiar with that document?

7 A. I don't recall seeing this one.

8 Q. So that there is correspondence at least
9 as early as 1968, January of 1968, by the
10 government making inquiry with respect to pcb
11 contamination; is that right?

12 A. That is what this would indicate. Yes.

13 Q. Would you mark this as Exhibit 90,
14 Bloomington Exhibit 90.

15 (The document above-referred to
16 was marked Bloomington Deposition
17 Exhibit No. 90 for identification.)

18 The next document is Bloomington
19 Deposition Exhibit 90 for identification, which is
20 a letter from Cumming Paton of Monsanto to W. R.
21 Richard of Monsanto.

22 Mr. Papageorge, are you familiar with
23 that document?

24 A. No. .

1 Q. Just so we have our material correctly
2 identified, Cumming Paton would be someone in
3 sales?

4 A. Yes. He was plasticizers marketing.

5 Q. All right.

6 And Richard would be head of the group,
7 the business group research department, right?

8 A. The functional fluids research.

9 Q. Functional fluids research department?

10 A. Not the plasticizers research.

11 Q. All right.

12 Mr. Papageorge, are you familiar during
13 the period from January of '68 to the time that
14 you came to St. Louis in 19 --

15 January 1 of '70?

16 A. Yes.

17 Q. Are you familiar with any communications
18 between Monsanto and Westinghouse regarding the
19 handling of pcb's; that is, from '68 until you
20 came back to St. Louis on January 1 of '70?

21 A. I seem to recall a memorandum that Elmer
22 Wheeler wrote.

23 In that memorandum Mr. Wheeler described
24 the Swedish pcb findings and mentioned the known

1 toxicity information. As I remember, cautioned
2 against discharge to the environment. I think
3 that was about that period of time. 1969 or
4 thereabouts.

5 Q. I would make a specific request for any
6 memorandum by Mr. Wheeler.

7 This is a communication to Westinghouse
8 or the customers?

9 A. To customers.

10 Q. To customers.

11 MR. FRUEHWALD: Who wrote the March '69
12 letter? Maybe that is the one he is referring to.

13 MR. KARAGANIS: We will get to it.

14 (The document above-referred to
15 was marked Bloomington Deposition
16 Exhibit No. 91 for identification.)

17 Q. Mr. Papageorge, I show you what is
18 identified as a Bloomington Deposition Exhibit 91,
19 which purports to be a contract between
20 Westinghouse and Monsanto for the sale of Aroclor
21 1242 electrical grade for the period January 2,
22 1967 through December 31, 1967.

23 Are you familiar with that document?

24 A. I don't recall this specific document.

1 Q. This for purposes of both clarification
2 and exhibits, we would like Monsanto's copies
3 specifically now of each contract; those contracts
4 are either on a yearly basis or on a multi-year
5 basis, of sale for pcb's to the Bloomington
6 facility.

7 MR. FRUEHWALD: I believe we have already
8 produced those.

9 MR. KARAGANIS: What I am asking for is a
10 specific set of the contracts.

11 Culling your documents to get each and
12 every contract, thus far we have not been able to
13 do it. We have got specific pieces of contracts.
14 I am talking now about going back to 1957, those
15 have not been produced.

16 MR. FRUEHWALD: I don't find any, Joe. We
17 have produced all we could find in your previous
18 request for such contracts. If they weren't
19 produced, we couldn't find them. You have got all
20 we can find. This is twenty years ago and some
21 documents don't stay that long.

22 MR. KARAGANIS: Let's get some dates down.
23
24

1 (The document above-referred to
2 was marked Bloomington Deposition
3 Exhibit No. 92 for identification.)

4 Q. I show you what as been marked as
5 Bloomington Deposition Exhibit 92 for
6 identification, which purports to be, it is
7 entitled, "A statement from Monsanto Company, St.
8 Louis Missouri. March 3, 1969." Purports to be
9 something like a press release, relating to pcb's.

10 Are you familiar with that press release?

11 A. I am familiar with the contents of this
12 document, but not in this press release form.

13 Q. How did you become familiar with the
14 contents of that document?

15 A. This reads to me very much like the
16 letter I had mentioned earlier that I recalled
17 Elmer Wheeler preparing and sending to customers.

18 Q. Now, with respect to the Bloomington
19 Deposition Exhibit No. 92, dated March 3, 1969,
20 were you aware of this in 1969?

21 A. No.

22 Q. Would it be fair to say that up until --
23 or accurate to say that up until you came on board
24 in January of 1970, that your only knowledge of

1 pcb's as an environmental problem came from your
2 two communications with -- Mr. Stratheimer was it?

3 A. Stratmeyer.

4 Q. Stratmeyer?

5 A. As well as the interviews I had with Mr.
6 Bergen and Mr. Springgate in December, when I
7 interviewed for that opening for that position.

8 Q. What did they tell you in those
9 interviews; that would be December of '69, is that
10 correct?

11 A. Yes.

12 Well, they repeated the information that
13 Mr. Stratmeyer had given to me, and added that --
14 from their perspective, they were getting more
15 questions from customers.

16 There were requests for samples, requests
17 for analytical methodology, much more interest.
18 This is one of the reasons they gave me for
19 needing someone to help coordinate the effort.

20 (The documents above-referred to
21 were marked Bloomington Deposition
22 Exhibit Nos. 93 and 94,
23 respectively, for identification.)

24 Q. I show you what have been marked as

1 Bloomington Deposition Exhibits 93 and 94; 93 is a
2 letter from a Mr. Meyer of Monsanto to Keith
3 Kelly, number 94 is a letter from Benignus of
4 Monsanto to Mr. Innis of Westinghouse. Exhibit 93
5 is dated November 5, 1968. Exhibit 94 is December
6 26, 1968.

7 Are you familiar with those documents?

8 A. No.

9 Q. Just for clarification of the record,
10 take your time in examining those documents, but
11 from our reading of the documents, it appears that
12 prior to that letter, or prior to those two
13 exhibits, that Monsanto was not shipping from
14 Sauget to Bloomington, but began shipping after
15 those letters.

16 Is that an accurate statement?

17 A. This statement is accurate.

18 Q. Just for record purposes for our
19 information, can you tell me where Kummrich,
20 K-u-m-m-r-i-c-h, is?

21 A. That is the name of the plant at Sauget,
22 Illinois.

23 Q. Where is Findett?

24 A. Findett is located in St. Charles County,

1 Missouri.

2 Q. And what does it do?

3 A. It is a small chemical company.

4 (The document above-referred to
5 was marked Bloomington Deposition
6 Exhibit No. 95 for identification.)

7 Q. I show you what has been marked as
8 Bloomington Deposition Exhibit 95, a letter from
9 W. Richard to Paul Benignus, dated 2/28/69.

10 Are you familiar with that letter?

11 A. No.

12 Q. Apparently, I say apparently, that is why
13 we have asked for a 30 (b) 6 witness, that
14 Westinghouse had begun to ship some form of
15 contaminated Aroclor back to Monsanto as early as
16 February 28, 1969.

17 Is that a correct statement based on your
18 interpretation of Exhibit 95?

19 A. Yes.

20 Q. Now, what were they sending back to
21 Findett and what was Findett doing with it?

22 A. From reading this document, I interpret
23 it as indicating that Aroclor --

24 Q. Was there a program in place at that time

1 for disposing of the Aroclor?

2 A. I'm not aware of any.

3 Q. That material would be as we described it
4 before, what you called scrap Aroclor, wouldn't
5 it?

6 A. I can only speculate. By scrap Aroclor,
7 I am talking about unusable liquid that results
8 routinely from an operation and is generated at a
9 predictable rate.

10 Q. Drips off the operation; is that right?

11 A. That kind of thing. I can't tell from
12 this letter whether this material occurred due to
13 some unforeseen incident that was different than
14 routine.

15 Q. Than routine waste?

16 A. Right. I can't tell that from this.

17 Q. I would simply ask, and we don't have
18 this, there is a reference in here to
19 correspondence by Mr. Benignus to Westinghouse,
20 relating to this scrap and to the procedures.

21 And we would ask for a copy of the
22 Benignus correspondence and related correspondence
23 to the drum shipments that are referenced in
24 Exhibit 95.

1 MR. FRUEHWALD: What reference are you talking
2 about here? I don't understand.

3 MR. KARAGANIS: There is reference to despite
4 your very fine letter to Westinghouse on
5 procedures, some of the materials are being
6 returned in contaminated old ball drums. We don't
7 have whatever correspondence took place.

8 MR. FRUEHWALD: We may not either, but I will
9 take another look.

10 (The document above-referred to
11 was marked Bloomington Deposition
12 Exhibit No. 96 for identification.)

13 BY MR. KARAGANIS:

14 Q. Directing your attention to Bloomington
15 Exhibit No. 96, which is a letter dated March 3,
16 1969, without addressee, but indicates that one of
17 the addressees was Robert T. Innis of Westinghouse
18 Electric.

19 Are you familiar with that document?

20 A. Yes, sir.

21 Q. Now, did you have anything to do with the
22 deliberations that went into the drafting of this
23 letter?

24 A. No.

1 Q. Or to the policies developed?

2 A. No.

3 Q. Who did?

4 A. There was the group consisting of Mr.
5 Wheeler, Dr. Richard, Bill Kuhn, Ed John, the
6 public relations man, Dr. Keller.

7 Q. Keller was research, right?

8 A. Medical research.

9 Q. All right.

10 A. And Mr. Park, the attorney. That was
11 meeting informally, that participated in, as I
12 understand, the development of this document.

13 Q. When you say as you understand, who told
14 you of this?

15 A. Mr. Wheeler told me when I arrived on the
16 the job in January, following that.

17 Q. Now, I want to direct your attention to
18 the exhibit.

19 Who told you, directing your attention to
20 page 2, of the work of the Swedish scientists
21 Wiedmark and Jensen?

22 A. Well, I first heard it from Mr.
23 Stratmeyer. It was retold to me by both Mr.
24 Bergen and Mr. Springgate. And when I was finally

1 assigned the job on January 1st, a few weeks later
2 when I sat down with Mr. Wheeler for a tutorial or
3 status report, he repeated it to me.

4 Q. Directing your attention to page 3 of the
5 letter, it says additionally Monsanto will
6 continue to exercise the highest degree of control
7 in its manufacturing, shipping and storage of
8 pcb's. Then the letter mentions that we have
9 carried out a program for several years for the
10 reclamation of used pcb's to avoid disposal of
11 these various materials.

12 What program was that?

13 A. This was a program that was associated
14 with hydraulic fluids and heat transfer business,
15 where the material would be, if possible, cleaned
16 up and reused for the customer.

17 Q. So the heat transfer customer would send
18 it back, it would be cleaned up and sent back to
19 the heat transfer customer; is that right?

20 A. It wouldn't come back to Monsanto. It
21 would go to the service companies, like the
22 Findett Company, we mentioned earlier.

23 Q. Findett was not a Monsanto Company?

24 A. No.

1 Q. I am sorry. I was not clear on that.

2 A. That is an independent little company
3 that does chemical work for anybody. And he was
4 trying to recover not only pcb's, but other
5 chemicals.

6 Q. So Monsanto, let me go back to that
7 exhibit, if I may.

8 Directing your attention to Exhibit 95,
9 Exhibit 95 reflects a relationship between
10 Monsanto and Westinghouse, to ship materials to a
11 third party, Findett, is that right?

12 A. I don't know what role Monsanto played in
13 this arrangement.

14 Q. But the materials were -- the materials
15 originally came from Monsanto?

16 A. Correct.

17 Q. Went to Westinghouse and now are being
18 shipped to a third party; is that right?

19 A. Correct.

20 Q. Okay. Just so I have it clear.

21 Now, when you say that in the heat
22 transfer field you had a program where the heat
23 transfer fluids, the used heat transfer fluids,
24 would be sent to a third party reclaimer and then

1 back to the heat transfer customer; is that right?

2 A. There was an attempt to get such a
3 program going and parts of it were in place then,
4 yes.

5 Q. Would it be correct to say for clarity
6 purposes that you did not have a program in place
7 as of at the time of Exhibit 96 with regard to
8 taking used capacitor dielectric fluid back either
9 to Monsanto or to a third party processor?

10 A. For recovery as a capacitor fluid?

11 Q. For recovery as a capacitor fluid or for
12 disposal.

13 A. That is correct.

14 Q. Okay.

15 As we went over this this morning so we
16 are clear on this in the record.

17 A. Right.

18 Q. Prior to your coming on in January of
19 1970, the only material that Monsanto would take
20 back would be raw product from the capacitor
21 customer that failed to meet specification; isn't
22 that right?

23 A. Right. That is one example.

24 Q. Was there any other product that they

1 took back?

2 A. Of all the thousands of products that are
3 sold?

4 Q. No. I am talk about pcb products.

5 A. I'm not aware of any pcb product that
6 came back to a Monsanto plant on a routine basis
7 as a result of customers' operations.

8 Q. As part of a disposal program?

9 A. As part of a disposal or recycle program.

10 Q. Would it be correct then that the -- or
11 to a third party, such as Findett?

12 A. For dielectrics?

13 Q. Yes.

14 A. That's right.

15 Q. A possible exception to that is Exhibit
16 95, but you don't know the details of that?

17 A. That is correct.

18 Q. All right.

19 A. I am talking about a program. This might
20 be a specific incident.

21 Q. So that for the layman reading this
22 document just so we have it clear, I am now
23 referring to document 96, where it says in the
24 functional fluids market we have carried out a

1 program for several years for the reclamation of
2 used pcb's to avoid disposal of these valuable
3 materials.

4 That doesn't apply to Bloomington or to
5 the capacitor manufacturing industry, does it?

6 A. That is my understanding, yes.

7 Q. So my statement is correct?

8 A. That's correct.

9 (A short recess was taken.)

10 Q. Going back on the record.

11 Mr. Papageorge, you had earlier
12 referenced in the period from '68 to '70 that you
13 recall a memorandum being written by Elmer
14 Wheeler, regarding what to do about pcb's.

15 I direct your attention to Bloomington
16 Deposition Exhibit 9, which is the March 3, 1969
17 letter by Mr. Wheeler to various customers.

18 Is that the memorandum you are referring
19 to?

20 A. Yes.

21 Q. Okay.

22 When you came back to St. Louis, were you
23 given a file on what was being done with respect
24 to the scrap Aroclor or what was being done with

1 respect to environmental containment of pcb's?

2 A. No.

3 Q. So you didn't have access or did you ever
4 investigate anybody else's files -- let me
5 withdraw that question.

6 Who was in charge of the program prior to
7 you coming?

8 A. No one in particular.

9 Q. Who had been working on it?

10 A. A group of people.

11 Q. Who were they?

12 A. Dr. Richard and his subordinates, Mr.
13 John, Mr. Park, Mr. Bergen, Mr. Schalk, Paul
14 Benignus, Jim Bryant, Bill Kuhn.

15 (The document above-referred to
16 was marked Bloomington Deposition
17 Exhibit No. 97 for identification.)

18 Q. I show you what has been marked as
19 Bloomington Deposition Exhibit No. 97 for
20 identification, which is a memorandum dated July
21 24, 1969, from -- can you tell me who that is
22 from, or is it from Bryant to a list?

23 A. Yes.

24 Q. So it is from J. G. Bryant to a list of

1 people, is that correct?

2 A. Yes.

3 Q. All right.

4 Now, take your time and examine the
5 document. But then see if you can tell me what
6 the scrap Aroclor program was and when it began?

7 Are you familiar with that document?

8 A. No.

9 Q. Having had a chance to examine it, can
10 you tell me what the scrap Aroclor program was,
11 prior to your arrival?

12 A. It appears from reading this document,
13 that an opportunity was given to some dielectric
14 pcb customers for returning their scrap material
15 to the Findett Company, who would attempt to
16 recover the material and produce a pcb of a
17 quality that was acceptable for use other than
18 dielectric uses, primarily in the hydraulic fluids
19 application.

20 Q. Okay.

21 Tell me this in simple terms, in layman's
22 terms, who was paying what to whom?

23 A. I'm not qualified to explain the
24 accounting.

1 Q. Let's see if I can summarize it, because
2 it appears, I will ask you if this statement is
3 accurate, for the basis of Exhibit 97.

4 A customer would be allowed to return
5 scrap Aroclor for which the customer would be
6 paid, or, alternatively, a credit against the
7 customer's bill would be issued for the value of
8 the scrap Aroclor?

9 A. For the acceptable scrap.

10 Q. For the acceptable scrap. Is that
11 correct?

12 A. That is my understanding.

13 Q. So Westinghouse was in effect buying
14 scrap back from the customer, isn't that right,
15 acceptable scrap -- I am sorry.

16 Monsanto in effect was buying scrap back
17 from the customer, isn't that correct?

18 A. Right.

19 Q. Now, what was acceptable Aroclor,
20 acceptable scrap?

21 A. Acceptable in that Findett had the
22 facilities and capabilities technically to improve
23 the quality of that scrap to a usable form.

24 Q. What would Findett do?

1 A. The best I can tell here is that they
2 were able to separate free water and they were
3 also able to filter and remove particle matter,
4 particulate matter, and that is about the extent
5 of it.

6 Q. What would they filter with?

7 A. Generally with a clay.

8 Q. They would ship the acceptable finished
9 Aroclor over to the Monsanto plant, right?

10 A. Yes.

11 Q. And where would the material that
12 couldn't be reclaimed go?

13 A. It looks like it went to this disposal
14 company that is mentioned by name. Where did I
15 see that?

16 They paid a company for disposing of the
17 unrecyclable material, they are on page with the
18 stamped number in the lower righthand corner of
19 2555.

20 Q. Reference to scientific chemical
21 treatment?

22 A. Yes.

23 Q. Based on this memorandum, was
24 Westinghouse charged back with the cost of the

1 disposal?

2 A. That would be my interpretation of that,
3 yes.

4 Q. Let's just talk about the timing.

5 Directing your attention to the first
6 page of Exhibit 97. Is it a fair conclusion from
7 reading this first sentence that the scrap Aroclor
8 recycle program started up in 1969?

9 A. That is what it says.

10 Q. Now, it essentially was a recycle program
11 where Monsanto sent product down to Bloomington
12 Westinghouse, and Westinghouse sent scrap Aroclor
13 back to Monsanto for further processing and
14 disposal of the material that wasn't capable of
15 processing; isn't that correct?

16 A. That is what it says.

17 Q. And let me just see if I get this
18 straight. Did anyone tell you when you signed on
19 for the job or were interviewed for the job that
20 this program was underway?

21 A. This is my first awareness of it.

22 Q. The memo I am just showing you --

23 A. That's right.

24 MR. KARAGANIS: Mr. Fruehwald, maybe you can

1 get me a 30 (b) 6 witness who is aware of the
2 program.

3 And I am not in any sense, Mr.
4 Papageorge, who has been very forthright --

5 MR. FRUEHWALD: Can you tell me what more you
6 need to know more than what the memo states
7 describing the program?

8 MR. KARAGANIS: The memo obviously exists and
9 does describe the program that was underway. But
10 I need to know more about the program.

11 MR. FRUEHWALD: It is a problem in finding
12 somebody from that far in the history, to find out
13 what details you want to know that are not covered
14 by the memo.

15 Can you clue me in on that? What
16 precisely do you want to know?

17 MR. KARAGANIS: I want to know the date it
18 began, the exact date it began. I am assuming, so
19 there is no hidden agenda here, that the reference
20 to the 20 drums at Findett that we saw in the
21 earlier exhibit is part of that program. But I
22 don't know.

23 MR. FRUEHWALD: It appears to be.

24 But again we are talking about things

1 that are over fifteen years old and it is hard to
2 find a current employee who was involved at that
3 period of time.

4 So we will see what we can do.

5 BY MR. KARAGANIS:

6 Q. Mr. Papageorge, just so we have it clear.
7 Prior to this program, prior to this scrap Arcclor
8 program described in Exhibit 97, to your
9 knowledge, obviously, Westinghouse Bloomington
10 wasn't sending it back to Monsanto prior to this
11 program, were they?

12 A. Not to my knowledge.

13 Q. And based on this memorandum, they
14 weren't sending it back prior to the institution
15 in 1969 of the program; isn't that right?

16 A. That's the way it reads.

17 Q. Now, with regard to that, the memorandum
18 indicates that they were generating 15,000 -- I am
19 now directing your attention to this is
20 unnumbered, but it is the stamp number 2556; stamp
21 number 2556 indicates that Bloomington was
22 generating 15,000 pounds of this material a month.
23 Isn't that right?

24 A. That's right.

1 Q. So prior to coming to you it had to be
2 going out somewhere, right, either down the drain
3 or out to a landfill; isn't that right?

4 A. Assuming their operations were at that
5 rate, and they hadn't changed anything, either
6 their process or their fluids or the amounts of
7 capacitors produced and the types and so forth.

8 Q. Assuming they were at the same rough
9 level of production, they had been disposing of
10 prior to your recycle program about 15,000 pounds
11 a month; isn't that right?

12 A. I would assume that, yes.

13 Q. That is 15,000 pounds a month of liquid,
14 isn't it?

15 That is 15,000 pounds a month of liquid,
16 isn't it?

17 A. Yes.

18 Q. After the institution of this program,
19 you essentially had a recycle program underway,
20 isn't that right, of the scrap Aroclor program;
21 you had a recycle program underway, did you not?

22 A. This implies that, yes.

23 Q. Now, just as a follow-up, you came aboard
24 within six months of this program. Did the

1 program continue under your supervision or
2 participation?

3 A. No.

4 Q. Was it ongoing when you came aboard?

5 A. No not to my knowledge. We were talking
6 about incinerating when I arrived.

7 Q. You didn't have an incinerator in place
8 when you arrived?

9 A. No. But we were actively pursuing a
10 design of one.

11 Q. What was happening in the meantime, where
12 was this stuff going?

13 A. My visits to the plants indicated to me
14 that they were sending it to landfills.

15 Q. You didn't know whether they were
16 participating in this program to Findett?

17 A. No one mentioned this program in the
18 middle of 1970.

19 Q. So either this program came to an abrupt
20 halt or it was ongoing without your knowledge;
21 isn't that right?

22 A. That's right.

23 Q. But at least for a period of time in 1969
24 Monsanto was in a recycle program, were they not?

1 A. It appears to be, yes.

2 Q. When did you come aboard, January 1,
3 1970?

4 A. Yes.

5 (The document above-referred to
6 was marked Bloomington Deposition
7 Exhibit No. 98 for identification.)

8 Q. Directing your attention to what has been
9 identified as Bloomington 98, which is a
10 memorandum dated January 12, 1970 from P. G.
11 Benignus to H. S. Bergen. Take your time and see
12 if that refreshes your recollection.

13 Are you familiar with the document
14 identified as Bloomington Exhibit 98?

15 A. I have not seen it before.

16 Q. Directing your attention particularly to
17 paragraph 2.

18 A. I see that.

19 Q. Okay.

20 That paragraph indicates again that
21 throughout 1969 Monsanto took back 130,000 pounds
22 of liquid scrap pcb, did they not?

23 A. Yes.

24 Q. And paid Westinghouse for that material,

1 did they not?

2 A. Yes.

3 Q. Now, that material prior to that recovery
4 program as we have indicated had to either be
5 going down the sewer or into a landfill; isn't
6 that right?

7 A. One can speculate so, yes.

8 Q. It had to be going somewhere, did it not?

9 A. Unless they stored it somewhere.

10 Q. But if they didn't store it, it was down
11 the sewer or into a landfill, was it not, isn't
12 that correct?

13 MR. FRUEHWALD: I am going to object to the
14 question. This is asking for speculation on
15 behalf of any witness as to what was actually
16 happening to the stuff. The possibilities have
17 been discussed, and speculation is all that is
18 left.

19 BY MR. KARAGANIS:

20 Q. Let's go back.

21 Short of sending it back for this kind of
22 reclamation and reuse in industrial fluids or heat
23 transfer fluids, isn't that what the recycle
24 program was all about?

1 A. All right.

2 Q. Short of doing that, short of sending it
3 back for reprocessing through Monsanto, the only
4 place to dispose of it for Westinghouse was either
5 down the sewer or into a landfill of some kind?

6 A. Or to a scrap dealer.

7 Q. Or to a scrap dealer who might dispose of
8 it; is that right?

9 A. I don't know where it would go to.

10 Q. But it wasn't coming back to Monsanto;
11 isn't that right?

12 A. That I am sure of.

13 Q. Prior to 1969, isn't that right?

14 A. That is my understanding.

15 MR. KARAGANIS: I would ask for and there
16 appear to be not only deletions as to names, I am
17 willing to go along with the protective order, but
18 also deletions to numbered paragraphs.

19 If you look at the page you just got,
20 that's in Exhibit 97, I believe, it goes B, C, D
21 blank and then starts over G.

22 MR. FRUEHWALD: These documents were produced
23 with the deletion of other customer's names and it
24 obviously refers to some other customer. All the

1 Westinghouse customers are listed and the
2 remaining non-Westinghouse customers are deleted.

3 We deleted from these documents, under
4 our objection, information about other customers
5 that was not we felt then and believe now relevant
6 to the issues.

7 The deletions you are pointing out are
8 references to other customers and we are going to
9 stand by that deletion.

10 We did not delete as far as I can recall
11 and can see from the document anything other than
12 details about other customers.

13 BY MR. KARAGANIS:

14 Q. Directing your attention to, I am sorry,
15 mark this as 99.

16 (The document above-referred to
17 was marked Bloomington Deposition
18 Exhibit No. 99 for identification.)

19 I am sorry, Mr. Papageorge, is there
20 something with respect to 98 that explains some
21 kind of procedure?

22 MR. FRUEHWALD: We were just discussing the
23 absence of his name on the route list as of
24 January of 1970. He did not appear to get a copy

1 of this one at this stage of the game.

2 BY MR. KARAGANIS:

3 Q. Direct your attention to Bloomington
4 Exhibit No. 99. You did get a copy of that, but
5 you are still listed as being in Anniston.

6 Were you physically up in St. Louis at
7 that time?

8 A. Yes.

9 Q. Now, just tell me this.

10 Exhibit No. 99 is from Bryant to a list,
11 again re the scrap Aroclor program. It references
12 a letter dated 12/8/69.

13 We would make a specific request for
14 that. From RMK. Is that R. M. Kountz?

15 A. I would guess so.

16 Q. Who is R. M. Kountz?

17 A. He is the -- I forgot his official title.
18 But he was the engineer from Monsanto's corporate
19 engineering department assigned to do engineering
20 for this business group.

21 Q. And the definition is "RKOUN," it says R.
22 M. Kountz, "RKOUN," what does that mean?

23 First of all, how do you spell it, and
24 what does it stand for?

1 MR. FRUEHWALD: That is R-K-O-U-N.

2 A. That is the initial of his first name
3 plus the first four letters of his last name.

4 BY MR. KARAGANIS:

5 Q. I see.

6 It doesn't indicate his location?

7 A. No, no. You will notice under Mr. Kountz
8 it is the same kind of arrangement as for Mr.
9 Richard.

10 Q. If I am reading this memorandum
11 correctly, Bryant is talking about a recycle
12 program for approximately a million pounds a year
13 of scrap Aroclor, is that right, with 200,000
14 pounds coming from Bloomington?

15 A. That is what it talks about.

16 Q. Now, who had made the arrangements with
17 Findett?

18 A. That I don't know.

19 Q. Well, was it Westinghouse or Monsanto?

20 A. I don't know.

21 Q. Let me see if we have got this straight.

22 On the second page of this memorandum,
23 the reference here is to 85,000 pounds of
24 Westinghouse Bloomington that Findett services

1 needing distillation.

2 Again, the information is that it is
3 accumulating from Bloomington at 15,000 pounds a
4 month.

5 Do you know what they mean by needing
6 distillation or cutting with no distillation
7 facilities?

8 A. Well, to me that says that unless he
9 installs another piece of equipment to distill
10 this material and get a purified product, he would
11 be forced then to mix it with good product to
12 dilute the contamination that may be present and
13 get it down to an acceptable level.

14 That is what he means by cutting.

15 Q. This would again be for reuse; is that
16 right?

17 A. For reuse, yes.

18 Q. Now, then, 15,000 pounds of what is
19 called junk, this is liquid junk, is it not?

20 A. I would expect it to be liquid. Yes.

21 Q. Of liquid junk at Findett from
22 Westinghouse Bloomington has been dumped in a
23 landfill; is that right?

24 A. That is what he says.

1 Q. You were in a process where you would
2 either recycle what you could, and then dispose of
3 the remainder in a landfill of your choice and
4 selection; is that right?

5 A. Yes.

6 Q. I am sorry?

7 A. Yes.

8 Q. Now, it also mentions that samples have
9 been sent to Mr. Pete Miller for evaluation of
10 their incineration process. What incineration
11 process?

12 A. I don't know.

13 Q. Who is Bryant addressing this memorandum
14 to, Kountz?

15 A. Yes.

16 Q. Mark this as 100.

17 (The document above-referred to
18 was marked Bloomington Deposition
19 Exhibit No. 100 for identification.)

20 For the record Exhibit No. 100 is a letter
21 dated January 29, 1970 from J. G. Bryant of
22 Monsanto to the C. L. Cough of the State of
23 Indiana.

24 We would ask for, to the extent Monsanto

1 has it, a copy of the original of this document.

2 MR. FRUEHWALD: I can tell you we have looked
3 for this one and cannot find it in Monsanto's
4 records.

5 BY MR. KARAGANIS:

6 Q. Mr. Papageorge, are you familiar with
7 Exhibit 100?

8 A. No.

9 Q. Was Bryant working under your direction
10 and control at the time?

11 A. No.

12 Q. Who was he working for?

13 A. Mr. Benignus.

14 Q. Let me get this straight.

15 You were in charge of the environmental
16 control program with respect to pcb's and this
17 letter refers to a waste recovery program aimed at
18 pollution abatement.

19 Now, who was in charge?

20 A. I was the advisory, in an advisory
21 capacity.

22 Q. To whom?

23 A. To Mr. Bergen.

24 Q. Okay. .

1 A. I had no authority over Mr. Bryant and
2 his actions.

3 Q. Who had authority over Bryant and the
4 whole scrap Aroclor recycle program that we have
5 just described?

6 A. Mr. Bergen.

7 Q. And he is where now?

8 A. The last I heard, he is with the Georgia
9 Pacific Company.

10 Q. Based on the recycle program we have just
11 described in the last exhibit and in this letter,
12 Monsanto had an active pollution control program
13 going with Bloomington, did they not, for the
14 control of pcb releases in the Bloomington plant?

15 A. It appears so, yes.

16 Q. I would like, I can't find it, if you
17 can't find the letter, maybe to the extent that
18 there are enclosures referenced, this goes to my
19 earlier request, the fact that the Monsanto
20 askarel inspection and maintenance guide was being
21 rewritten.

22 I want the earlier version and the
23 current version, that is why I asked about the
24 different versions before.

1 Can we have a stipulation which would
2 speed things up, that the booklet Monsanto askarel
3 inspection and maintenance guide, that the
4 guidance contained therein or the directions
5 contained therein also apply to capacitor
6 manufacture, per the first paragraph of Bryant's
7 letter?

8 MR. FRUEHWALD: Well, I haven't looked at the
9 book recently to see what it says. So, I will
10 consider that stipulation after having viewed the
11 document.

12 But based upon just the title of the
13 thing, I can't at the present enter into such
14 stipulation. But it it could very well be and
15 after I a take a look at the document, we will see
16 if I can stipulate to that.

17 It is probable, but I can't do that
18 without looking at the document, Joe.

19 BY MR. KARAGANIS:

20 Q. All right. The attachments therein are
21 what we want.

22 (The document above-referred to
23 was marked Bloomington Deposition
24 Exhibit No. 101 for identification.)

1 Q. Directing your attention to Exhibit No.
2 101. Are you familiar with that document?

3 A. Yes.

4 Q. Now, that again refers to the scrap
5 Aroclor program, does it not?

6 A. Yes, it does.

7 Q. Now, so at least by March 16, 1970 you
8 were aware of the existence of a scrap Aroclor
9 recycle program, were you not, now that your
10 recollection has been refreshed?

11 A. Yes.

12 Q. I am sorry?

13 A. Yes.

14 Q. Directing your attention to the
15 memorandum on the first page, the lease number 2,
16 the customer is unidentified; is that right? I am
17 sorry, item number 2, the customer is
18 unidentified; is that right?

19 A. Yes.

20 MR. FRUEHWALD: That is what has been deleted
21 from the document, customer.

22 BY MR. KARAGANIS:

23 Q. As to that particular customer, you were
24 taking the material that couldn't be processed

1 back and you were paying half the cost of
2 disposal, were you not?

3 A. The top line. That is what it says, yes.

4 Q. You were treating the disposal of that
5 material as not only your customer's
6 responsibility, but your responsibility as well,
7 is that right?

8 A. Yes.

9 Q. Directing your attention to the second
10 paragraph, paragraph 3, Westinghouse Bloomington,
11 it indicates that you have got a 75,000 gallon
12 tank at Findett. You had a total of 31 drums
13 which you land filled, did you not?

14 A. That is what it says.

15 Q. And that you have got 141 drums sitting
16 of questionable material; isn't that right?

17 A. Right.

18 Q. This again relates -- and, again, the
19 correspondence between Benignus and the company
20 with respect to how to maintain their scrap in
21 clean drums or otherwise is missing and we would
22 like that, we are requesting it.

23 The reference on quality control on scrap
24 goes back to the earlier letter reference from

1 Bryant, in which he referenced a letter by
2 Benignus to the company.

3 There is a reference here to the effect
4 that you had to -- let's go back a step.

5 See the reference there to your letter,
6 or the letter of 2/2/70 to you?

7 A. Yes.

8 (The document above-referred to
9 was marked Bloomington Deposition
10 Exhibit No. 102 for identification.)

11 Q. Having examined Exhibit 102, does that
12 refresh your recollection or do you need more
13 time?

14 A. I need more time.

15 Q. Are you familiar with Exhibit 102?

16 A. Yes. As I read it, I recall receiving
17 it.

18 Q. 102 for the record is a memorandum dated
19 February 2, 1970 from Bryant to you. Is it not?

20 A. Yes.

21 Q. Now, let's just follow this through.

22 Do you recall a request for Howard Bergen
23 to get all the customers on a paying basis for
24 disposal of the scrap Aroclor?

1 A. Not until I reread it.

2 Q. Now having refreshed your recollection,
3 what was Bergen saying to you?

4 A. He was trying to minimize his costs.

5 Q. In what way?

6 A. By reducing the cost of this disposal
7 program.

8 Q. All right.

9 You were conducting a disposal program of
10 actually not totally disposal, it was also recycle
11 as well, where you would recycle what you could
12 and dispose of the rest; isn't that right?

13 A. Yes.

14 Q. All right.

15 And this opening line of Exhibit No. 102
16 is to get the costs of that program down; isn't
17 that right?

18 A. That is my understanding.

19 Q. All right.

20 Now, what they are saying here is that,
21 this is Bryant's memo, that there are two kinds of
22 scrap Aroclor that come back; isn't that right?

23 A. Yes.

24 Q. And that the Aroclor that you are getting

1 back from the capacitor manufacturer, such as
2 Bloomington, is usually pretty good; isn't that
3 right?

4 A. Yes.

5 Q. In terms of good being available for much
6 of it to recycle; isn't that right?

7 A. Yes.

8 Q. Now, it talks about Westinghouse shipping
9 again 200,000 pounds of liquid scrap Arcclor a
10 year to you, is that right?

11 A. Yes.

12 Q. What do you understand this memorandum to
13 be saying, Exhibit 102?

14 MR. FRUEHWALD: I am going to object to the
15 form of the question. The memorandum is a
16 multi-page document. It says what it says. I
17 don't understand what the question is.

18 BY MR. KARAGANIS:

19 Q. From a sequential business
20 decision-making perspective, that is, you got the
21 scrap Aroclor program going along as you
22 described; you are getting, among other things,
23 200,000 pounds a year from Bloomington,
24 Westinghouse Bloomington.

1 MR. FRUEHWALD: I think the memo describes it
2 as what was expected from Bloomington as opposed
3 to what has arrived.

4 MR. KARAGANIS: If we need to go back we will
5 go back.

6 The other memos give the explicit amounts
7 that have come in from Bloomington, do they not,
8 Mr. Papageorge?

9 MR. FRUEHWALD: They are less than 200,000
10 pounds a year.

11 BY MR. KARAGANIS:

12 Q. Do they not, Mr. Papageorge, they give
13 the amounts?

14 A. There are two sets of numbers. One is
15 actual receipts, the other is predictions for the
16 future. Are you asking me what this memo says?

17 Q. What 102 says from the standpoint of
18 company decision making on the handling of waste
19 pcb's from its customers.

20 A. To me this memo is summarized in the last
21 sentence where it says can you please help us
22 obtain the items listed and the additional systems
23 used to meet future needs, which is on the top of
24 page 3. And there are four items that I vividly

1 recall addressing.

2 Q. All right.

3 What are they?

4 A. We need a location to ship all the wastes
5 which is set up to accommodate the various
6 containers.

7 Q. Should that be containers or customers?

8 A. I read it as containers.

9 Q. To accommodate the various containers,
10 what do you mean?

11 A. Drums, as well as tankcars.

12 Q. Okay. All right.

13 A. Trucks, whatever. We need processes to
14 recover the various scrap materials.

15 Q. All right.

16 A. He is talking here about recycling
17 process.

18 And the last two refer to incineration,
19 one of waste solids the other of solid waste, the
20 waste fluids and the other of solid wastes.

21 Q. Now, from the standpoint of the material
22 that was coming in in drums, that was liquids, was
23 it not?

24 A. Yes. It was intended to be liquids.

1 Some of them had rags and old shoes and matter,
2 all kinds of things. But it was intended to be
3 liquid.

4 Q. You were talking about liquid control,
5 were you not?

6 A. Yes.

7 MR. KARAGANIS: 103 and 104.

8 (The documents above-referred to
9 were marked Bloomington Deposition
10 Exhibit Nos. 103 and 104,
11 respectively, for identification.)

12 Q. Directing your attention to documents
13 which have been marked Bloomington Exhibit 103 and
14 Bloomington Exhibit 104. Bloomington Exhibit 103
15 being a memorandum from R. M. Kountz dated
16 December 8, 1969, and a memorandum from R. M.
17 Kountz dated December 8, 1969 to Vodden, which is
18 Exhibit 104. Exhibit 103 is from Kountz to
19 Johnson.

20 Are you familiar with those documents?

21 A. I do not recall either of these
22 documents.

23 MR. FRUEHWALD: Let me indicate that this
24 document appears to be the one you asked me for

1 earlier, reference to a 12/8/69 letter that Mr.
2 Bryant was responding to.

3 MR. KARAGANIS: Which one, Bloomington
4 Exhibit?

5 MR. FRUEHWALD: Exhibits 99 refers to a 12/9
6 letter to Johnson and others, and this appears to
7 be the document referred to. So that has been
8 produced.

9 MR. KARAGANIS: Fine.

10 Q. Now, Mr. Papageorge, why was there a
11 desire to get into incineration, why not just
12 landfill the stuff?

13 A. Well, it was the considered opinion
14 amongst those that were trying to manage the pcb
15 issue that landfilling at best would, not only for
16 pcb's for all chemicals, would be temporary, short
17 lived.

18 Q. Why?

19 A. Because even under the best of
20 conditions, and that means the best technology
21 available today, may in the future appear to be
22 improper, just as many of the actions that we took
23 in the thirties were considered improper in the
24 seventies.

1 Q. What was there about landfilling that you
2 didn't want to put liquid pcb wastes into
3 landfills?

4 A. The geologists could not assure us that
5 the material would never, underlined never,
6 migrate.

7 Q. The geologists couldn't assure you that
8 landfills wouldn't leak; isn't that right?

9 A. That's right.

10 Q. All right.

11 So from the standpoint of a risk of
12 leakage, landfills were not a good alternative;
13 isn't that right?

14 A. Correct. And we --

15 Q. You wanted to incinerate?

16 A. We to this day believe incineration is
17 the ultimate, the best known technology.

18 Q. Okay.

19 I want to show you what has been marked
20 as Bloomington Deposition Exhibit 11, which is a
21 letter dated February 18, 1970 from Olson to
22 various Monsanto customers. Are you familiar with
23 that?

24 A. Yes.

1 Q. Can you tell us what the purpose of that
2 letter was?

3 A. This letter was intended to make certain
4 that the customers on record with Monsanto of
5 pcb's were aware of the discovery of pcb's in the
6 environment; that Monsanto was aware of it, and to
7 let them know that we were going to pursue the
8 issue.

9 Q. Did you have a hand in drafting it?

10 A. Yes.

11 Q. So you believed at the time, I take it
12 you still believe, that the statement on page
13 1140, page 2 of the letter, is correct; i.e., I
14 quote:

15 "We feel that all
16 possible care should be taken
17 in the application, processing
18 and effluent disposing of
19 these products to prevent them
20 from becoming environmental
21 contaminants."

22 A. Oh, yes.

23 Q. You also believe, I quote:

24 "This article

1 "reflects that good
2 manufacturing practice in the
3 future may require that no
4 product used by any company
5 should find their way into
6 waterways."

7 Is that correct?

8 A. Yes.

9 Q. Now, mark this as the next one.

10 (The document above-referred to
11 was marked Bloomington Deposition
12 Exhibit No. 105 for identification.)
13 directing your attention to Bloomington
14 Deposition Exhibit, what has been marked as
15 Bloomington Deposition Exhibit 105, which is
16 entitled, "A brief summary of pcb meeting, March
17 17, 1970."

18 Are you familiar with that?

19 A. I believe I recognize the document.

20 Q. All right.

21 It indicates that you attended a meeting
22 at I believe this was up at the FWPCA lab in
23 Deluth on March 17, 1970; that one of the
24 attendees was William B. Papageorge?

1 A. Yes.

2 Q. Do you recall attending that meeting?

3 A. Yes.

4 Q. It indicates Mr. Jack Garrett discussed
5 the toxicity of pcb's with respect to rats and
6 beagles.

7 Who was Mr. Garrett, did we describe him
8 before?

9 A. Yes, he was Monsanto's manager of
10 industrial hygiene. A part of Dr. Kelly's medical
11 department.

12 (The document above-referred to
13 was marked Bloomington Deposition
14 Exhibit No. 106 for identification.)

15 Q. Let the record show that Bloomington
16 Exhibit No. 106 is a memorandum dated April 1,
17 1970 from D.A. Olson to W. B. Papageorge, re pcb
18 electrical customers.

19 Mr. Papageorge I show you that document
20 and ask you whether you are familiar with it?

21 Are you familiar with Exhibit 106?

22 A. Yes.

23 Q. Were you consulted in describing or
24 establishing what was described as the following

1 policy in the memorandum. In other words, the
2 policy articulated in the memorandum?

3 A. No. You mean points 1, 2 and 3 in the
4 memorandum?

5 Q. Yes.

6 A. No, those were Mr. Olson.

7 Q. Mr. Olson one was in charge of sales, is
8 that right?

9 A. Yes.

10 Q. So he was above you; is that right?

11 You weren't at the same lateral level,
12 were you, or were you?

13 A. We were both reporting to Mr. Bergen.

14 Q. All right.

15 A. We could both appeal to Mr. Bergen.

16 Q. Well, up until this time, as we described
17 it, Monsanto was taking the scrap Aroclor, based
18 on the scrap Aroclor recycle program described and
19 actually crediting Westinghouse, was it not, for
20 the material, isn't that right?

21 A. That is what the documents reflect. Yes.

22 Q. All right.

23 And Monsanto officials such as Mr. Olson,
24 and such as we have described in the previous

1 memoranda, wanted to reverse that process if they
2 could and get it on at lowest, a zero-cost basis
3 or reduce the cost; isn't that right?

4 A. Right.

5 Q. To get them, in effect, on a paying
6 basis, if you could?

7 A. Right.

8 Q. Instead, you were paying them for the
9 material at that point, were you not?

10 A. That is correct.

11 Q. Is it correct that the policy described
12 in 106 was that in dealing with incineration --
13 which you have previously described as being the
14 optimum method of disposal, is that right?

15 A. Yes.

16 Q. That Monsanto would take the lead in
17 investigating incineration, is that correct?

18 A. That's correct.

19 Q. That was going to be taking the lead in
20 the investigation on behalf of Monsanto and
21 Westinghouse, is that right, to take the lead,
22 taking the industry lead or whatever lead you
23 wanted to talk about in pursuing incineration,
24 isn't that right?

1 A. That's right.

2 Q. And, did you agree, were you in agreement
3 with Mr. Olson that the two alternatives were
4 either incineration or recovery of the product;
5 isn't that right?

6 A. Right.

7 Q. That landfill was not going to be a
8 viable alternative in the long-term, is that
9 right?

10 A. Right.

11 Q. For the reasons we discussed previously,
12 isn't that correct?

13 A. Yes.

14 Q. Now, I don't want to, I am not being
15 flattering, I am just referring to the language in
16 the memorandum, what was it about your background
17 that Mr. Olson was saying that you would be
18 Bloomington's savior or Westinghouse's savior?

19 A. Well, of course, I can't speak directly
20 for what Mr. Olson was thinking. But, I can only
21 look back on my education, my industrial design
22 experience, my maintenance experience, my
23 operating experience, my knowledge of the
24 chemical, pulling that all together, he felt that

1 I was in a good position to be able to help.

2 Q. In this memorandum in the last paragraph,
3 he specifically asks you to visit the three major
4 Westinghouse locations; that is, Sharon, South
5 Boston and Bloomington, and to investigate how
6 they handled pcb's, how they collected them and to
7 give them suggestions as to clean up. Is that
8 right?

9 A. Yes.

10 Q. The next document.

11 (The document above-referred to
12 was marked Bloomington Deposition
13 Exhibit No. 107 for identification.)

14 Directing your attention to what has been
15 marked as Bloomington Exhibit 107, which is dated
16 April 6, 1970, entitled, "Scrap Aroclor disposal
17 status," from Bryant to Papageorge.

18 Are you familiar with that document?

19 A. I recall it. Yes.

20 Q. Now, if you look at Westinghouse, it
21 says, the disposal for the last two weeks has been
22 as follows: Number 1 is 102,000 pounds was
23 disposed of at Queeny.

24 What does that mean?

1 A. To me that says that 102,000 pounds which
2 came from Westinghouse was located at the Queeny
3 plant in St. Louis, Missouri.

4 Q. Does that mean that this had gone through
5 Findett and was ready for use at the Queeny plant
6 or was it being disposed of at the Queeny plant or
7 in storage or what?

8 A. I interpret that as it is located at the
9 Queeny plant for further action.

10 Q. All right.

11 Now you notice that item 3, is that the
12 New Jersey dump, right?

13 A. Right.

14 Q. And item 6 was at Kummrich?

15 A. That is the plant at Sauget, Illinois.

16 Q. Sauget, for incineration?

17 A. Yes.

18 Q. By that time was the incinerator in
19 place?

20 A. No.

21 Q. When did the incinerator finally go on
22 line?

23 A. 1971.

24 Q. At the bottom it says research has a

1 target date, this is as to transformer scrap of
2 6/1/70 to set up an except or reject policy for
3 scrap returns.

4 Do you know what that means?

5 A. I don't know what they specifically were
6 looking for. But it has to deal with the
7 degree of contamination of the material. And some
8 criteria which would determine whether it is
9 recyclable, salvageable or can only be discarded.

10 Q. Directing your attention to -- I am
11 sorry. Would you mark this.

12 (The document above-referred to
13 was marked Bloomington Deposition
14 Exhibit No. 108 for identification.)

15 Directing your attention to what has been
16 marked as Bloomington Exhibit 103, which is a
17 letter from Congressman Ryan dated April 9, 1970
18 to Edward J. Bok of Monsanto.

19 Are you familiar with that document?

20 A. Yes.

21 Q. And -- I withdraw the question.

22 (The document above-referred to
23 was marked Bloomington Deposition
24 Exhibit No. 109 for identification.)

1 Next document is Exhibit, Bloomington
2 Exhibit 109, which is an April 7 letter from
3 Benignus to Olson, April 7, '70.

4 Are you familiar with that document?

5 A. I recall it. Yes.

6 Q. That letter was setting up or discussing
7 a proposed meeting in St. Louis set for April 21,
8 was it not?

9 A. Yes.

10 (The document above-referred to
11 was marked Bloomington Deposition
12 Exhibit No. 110 for identification.)

13 Q. Directing your attention to what has been
14 marked as --

15 MR. FRUEHWALD: Excuse me.

16 MR. KARAGANIS: Excuse me. That is a blank
17 page that should just be pulled out.

18 Q. Directing your attention to what has been
19 marked as Bloomington Exhibit 110, it is a letter
20 of April 7, '70 from Mr. Olson of Monsanto to
21 Kelly of Westinghouse.

22 Are you familiar with that letter?

23 A. I believe I recall this. Yes.

24 Q. You were raising your prices for pcb's to

1 Westinghouse Bloomington in part because of the
2 costs of responding to environmental control;
3 isn't that right?

4 A. Yes.

5 Q. That included the whole program or much
6 of the program that we have been describing up to
7 this point; isn't that right?

8 A. Yes.

9 (The document above-referred to
10 was marked Bloomington Deposition
11 Exhibit No. 111 for identification.)

12 Q. Directing your attention to what has been
13 marked as Bloomington Exhibit No. 111. Are you
14 familiar with that document?

15 A. Yes.

16 Q. Did you have a hand in its preparation?

17 A. I was one of several reviewers.

18 Q. All right.

19 Who prepared this document and who
20 reviewed it?

21 A. Mr. E. B. John was the person who
22 prepared the various drafts. And it was reviewed
23 by Mr. Bergen and me, Dr. Richard, Mr. Wheeler,
24 Mr. Springgate, Mr. Park. That is all I can

1 remember at the moment.

2 Q. Now, is the element of your program in
3 which you were taking back and actually paying for
4 the customer's scrap Aroclor, is that referred to
5 in that press release?

6 A. I can't find it.

7 Q. So you didn't describe to the press in
8 response to Congressman Ryan's letter the recycle
9 program and your disposal of that which couldn't
10 be recycled in landfills of your selection; is
11 that correct?

12 A. That's correct.

13 Q. I won't take the time with making this an
14 exhibit, but I just want to confirm.

15 As the 30 (b) 6 witness of Monsanto, is
16 it correct that Monsanto was the sole producer of
17 polychlorinated biphenyl in the United States?

18 A. I had a difficult time establishing that.
19 I had some information at one point in time that
20 there were others. Coastal Chemical Company, and
21 at least one more company was mentioned.

22 Monsanto nor the government was able to
23 demonstrate one way or the other that that
24 information was factual.

1 Q. So to the best of your knowledge, in
2 terms of confirmed fact, Monsanto is the sole
3 producer of pcb's in the United States, isn't that
4 correct?

5 A. Pcb's in the United States or the
6 manufacturing units in the United States?

7 Q. The manufacturing units in the United
8 States.

9 A. Yes.

10 (The document above-referred to
11 was marked Bloomington Deposition
12 Exhibit No. 112 for identification.)

13 Q. Mr. Papageorge, I show you what has been
14 marked as Bloomington Exhibit 112, which is a
15 February 1970 issue of Environment, I am not going
16 to ask you to strain your eyes trying to read that
17 copy. If Monsanto has a clean copy of that, we
18 would appreciate a copy.

19 But directing your attention to page 26
20 of the article, there is a section which says,
21 "Monsanto's statement on pcb."

22 Did you have a hand in developing that
23 statement?

24 A. No. This was -- you had previously

1 submitted as an exhibit a Monsanto statement.

2 Q. Yes.

3 A. This is the statement.

4 Q. All right.

5 Who prepared it?

6 A. Elmer Wheeler was the author, assisted by
7 Richard, Keller, Olson, Park, Schalk.

8 (The document above-referred to
9 was marked Bloomington Deposition
10 Exhibit No. 113 for identification.)

11 Q. I show you what has been marked as
12 Bloomington Deposition Exhibit 113, which is a
13 letter of 4/27/1970 from Papageorge. And I would
14 ask that the enclosures to that letter be
15 supplied.

16 Would it be fair to say that what you are
17 sending --

18 MR. FRUEHWALD: I think one enclosure appears
19 to be Monsanto's press release, which has already
20 been marked as Exhibit 111.

21 MR. KARAGANIS: All right. Just so we have it
22 clear for the record which one it is. It just
23 says press releases. It could be any number of
24 press releases. If it is agreed that the Monsanto

1 press release referred to in 113 is the press
2 release referred to in 111, I have no problem.

3 Q. Is that correct?

4 A. Correct.

5 MR. FRUEHWALD: As far as Congressman Ryan's
6 press release, I will see if we have a copy of it.
7 I don't know.

8 BY MR. KARAGANIS:

9 Q. Now, directing your attention, Mr.
10 Papageorge, to what has been marked as Exhibit 10,
11 Bloomington Exhibit 10. It is an agenda of a
12 meeting of April 21, 1970. If your counsel can
13 show you his copy.

14 Does looking at Exhibit 10 refresh your
15 recollection as to what occurred at that meeting?

16 A. Yes.

17 Q. And do you recall what you said, what
18 what Dr. Wheeler said and then what you said with
19 regard to -- I am sorry, it is Mr. Wheeler, and
20 what you said regarding both the overall pcb
21 pollution problem and current foreseeable, future
22 status of the pollution problem?

23 A. Do I recall what I said then?

24 Q. Yes. .

1 A. Not specifically. Other than Mr. Wheeler
2 covered the activities prior to my arrival in my
3 new assignment then. And later I got up and
4 talked, and this covered the Swedish work, the Dr.
5 Risebrough's report out of California and the
6 like.

7 And I got up then later in the day that
8 morning and spoke on, as I remember, our plans to
9 pursue this information personally by going to
10 Europe, and also our plans in visiting our
11 customer sites and our review of Monsanto's
12 marketing policies, as to which of the Aroclors to
13 sell and to whom.

14 So I was kind of forecasting what we knew
15 then as to what we might be doing.

16 Q. Let me see if I can have a summary of the
17 status at that time. You had this program
18 underway where you were taking back scrap liquid
19 Aroclor, sending it to Findett for reprocessing.
20 Any material that couldn't be reprocessed was
21 being disposed of in landfills by Monsanto, isn't
22 that correct?

23 A. Yes.

24 Q. And because you were paying for that,

1 Monsanto was paying for that, you didn't like that
2 program and wanted to go to a program where your
3 costs would either get reduced or get down to
4 zero, is that right?

5 A. That was an objective.

6 Q. And your ultimate goal, recognizing that
7 landfills were not a long-term solution, was to
8 either recycle it or incinerate it; is that right?

9 A. That's right.

10 Q. Was that sequence of reasoning and what
11 you had done and where you were going explained to
12 Westinghouse at that time?

13 A. Let me think. That was assigned to Dr.
14 Richard on the agenda.

15 Q. Okay.

16 A. And he did touch on that.

17 Q. Did he touch on --

18 A. Yes.

19 Q. -- the whole idea of trying to keep as
20 much out of the environment as possible?

21 A. Yes.

22 Q. So he was saying to Westinghouse, try and
23 keep it from being discharged into the
24 environment; is that right?

1 A. Yes.

2 Q. Did he do that relatively strongly?

3 A. Yes. Dr. Richard is good at that.

4 Q. Is he still with Monsanto?

5 A. No.

6 Q. Is he retired?

7 A. He retired.

8 (The document above-referred to
9 was marked Bloomington Deposition
10 Exhibit No. 114 for identification.)

11 Q. Directing your attention to what has been
12 marked as Bloomington Exhibit 114, memorandum
13 dated 4/29/70 from Graham to Olson and Benignus,
14 with copies to Olson and Papageorge.

15 Do you recall seeing this memorandum?

16 A. Yes.

17 Q. Again, have you had a chance to look at
18 it?

19 Am I correct that the memorandum again
20 reflects the program of sending the scrap Aroclor
21 to Monsanto or Findett for reprocessing and/or
22 disposal of the scrap that couldn't be
23 reprocessed?

24 A. It does reflect that, yes.

1 Q. I would make an information request at
2 this time.

3 I am directing your attention to Exhibit
4 10, reflecting the minutes of the April 21st
5 meeting. Indicating that Mr. Wheeler gave out a
6 booklet 8 inches by 11 inches and about two inches
7 thick. That there were other booklets given to
8 Westinghouse covering the studies on rats and
9 dogs.

10 We would like all the material
11 distributed at the April 21, 1970 meeting.

12 MR. FRUEHWALD: Okay.

13 I believe this was one of the numerous
14 request of this nature that you served on us
15 several years ago and that we looked for.

16 I believe our conclusion was we could not
17 identify what those materials were, but I will
18 make a note to recheck that. But this type of
19 request was made in a multi-page, numerous
20 requests for reference documents and I believe we
21 responded to that request back then. But I will
22 check again.

1 (The document above-referred to
2 was marked Bloomington Deposition
3 Exhibit No. 115 for identification.)

4 BY MR. KARAGANIS:

5 Q. Directing your attention to what has been
6 marked as Bloomington Exhibit 115. It is dated
7 May 26, 1970. It is Monsanto reference document
8 341. A letter from Mr. Papageorge to Mr.
9 Gelberman.

10 Are you familiar with that letter?

11 A. I recall it. Yes.

12 Q. Take your time to read it, because I want
13 to ask about it.

14 Directing your attention to Exhibit 115,
15 as we have described, you did have a method, did
16 you not, of the waste Aroclor or waste pcb
17 returned to your manufacturing plants for
18 attempted reuse?

19 A. That was the intent. Yes.

20 Q. And you state that, "where recovery," by
21 "recovery" you mean bringing it back up to product
22 grade, do you not?

23 A. That was the intent. Yes.

24 Q. Okay.

1 So that then selling it again as a
2 product; isn't that right?

3 A. Yes.

4 Q. You say here in those instances where
5 recovery, i.e., bringing it up to product grade,
6 is impractical, you are storing the material until
7 you can install an incinerator; isn't that right?

8 A. Right.

9 Q. In fact, you weren't storing the
10 material, you were sending it off to landfills,
11 were you not?

12 A. No. Not this program.

13 Q. Which program is this?

14 A. This program was the inventorying of
15 scrap material for incineration.

16 Q. All right.

17 You were getting scrap from the capacitor
18 manufacturers?

19 A. Yes.

20 Q. Okay.

21 You were setting that up for incineration
22 if you could, is that right?

23 A. Yes.

24 Q. Why weren't you storing the material for

1 the scrap manufacturers -- I am sorry, from the
2 capacitor manufacturers?

3 A. We were.

4 Q. You weren't landfilling at that time; is
5 that right?

6 A. Starting in about this time in 1970, our
7 program was to receive the material, store it in
8 storage tanks or in sound drums, until the
9 incinerator could be installed and we can burn it.

10 Q. So you stopped landfilling; isn't that
11 right?

12 A. To my knowledge, yes. In fact, it is
13 only recently I was tuned into this landfilling
14 bit. I had missed that somehow.

15 Q. So you stopped landfilling because you
16 didn't think it was a good practice; isn't that
17 right?

18 A. That is true.

19 MR. FRUEHWALD: You are talking about liquids
20 here?

21 A. Yes, liquids.

22 MR. KARAGANIS: Yes.

23 Q. As a matter of fact, if you could
24 incinerate solids, you would have incinerated the

1 solids; isn't that right?

2 A. Yes.

3 Q. Your main reason for not pushing for
4 landfilling or not pushing for incineration of
5 solids was a question of what was then perceived
6 to be feasibility. Isn't that right?

7 A. Correct.

8 Q. If you could have incinerated the solids,
9 you would have wanted to incinerate them as well;
10 is that right?

11 A. Yes.

12 Q. And not put them in landfills, isn't that
13 correct?

14 A. Yes.

15 (Whereupon a short recess was had.)

16 (The documents above-referred to
17 were marked Bloomington Deposition
18 Exhibit Nos. 116 and 117,
19 respectively, for identification.)

20 Q. Directing your attention to what has been
21 marked as Bloomington Deposition Exhibit 116,
22 which is a letter dated April 8, 1970 from Emmett
23 Kelly to Herbert Bloomenthal of the Food and Drug
24 Administration.. Are you familiar with that

1 document?

2 A. I have not seen it before that I recall.

3 Q. Okay.

4 Do you agree, as we described the
5 program, that as of April 8, 1970 Monsanto, quote,
6 "was committed to a program which would allow the
7 future use of our Aroclors only in those
8 applications where escape to the environment can
9 be prevented"?

10 A. Yes.

11 Q. Directing your attention to what has been
12 marked as Exhibit 117, which is a June 5, 1970
13 letter from Papageorge to Wilburn of Westinghouse,
14 are you familiar with that document?

15 A. Yes.

16 Q. Am I correct, that the first paragraph of
17 this letter is dealing with the proper disposal
18 standards for -- I am sorry, the proper standard
19 for incineration of pcb's?

20 A. It deals with only one standard, that is
21 the temperature --

22 Q. I am sorry.

23 A. -- required.

24 Q. The minimum temperature?

1 A. Correct.

2 Q. And with respect to the minimum
3 temperatures, where did you get this information?

4 A. We had within Monsanto conducted some
5 studies to determine the minimum temperatures for
6 destruction, and we arrived at 900 degrees
7 centigrade, which equates roughly to the 1600
8 Fahrenheit. And to build in a little bit of a
9 safety factor, we were recommending 2,000 degrees
10 Fahrenheit.

11 Q. Okay.

12 Would it be correct that in the second
13 paragraph, one of your other programs was to
14 recognize that from the standpoint of disposal
15 that incineration of solid waste was also
16 desirable, isn't that correct?

17 A. Yes.

18 Q. And pending construction of a solid waste
19 incinerator, you were either storing it or using
20 authorized landfills; is that correct?

21 A. Yes.

22 Q. By authorized landfills, you meant a
23 landfill that had some protection from leakage
24 into the environment; isn't that right?

1 A. It is presumed that that protection was
2 considered when the authorities granted the
3 permits for landfills to operate at that site.

4 Q. Well, now, you know that the authority
5 grants permits for municipal refuse, for example?

6 A. Yes, but these are chemical landfills.

7 Q. You were talking only about authorized
8 toxic chemical landfills, is that right?

9 A. I hesitate using the word toxic, because
10 I don't believe it was common in those days. It
11 was authorized chemical landfills.

12 Q. So you were only talking about use of
13 those relatively limited number of landfills where
14 authorities had authorized them for disposal of
15 industrial chemical wastes; is that correct?

16 A. Correct.

17 Q. But not simply the typical landfill?

18 A. That is correct.

19 Q. You didn't want them going to the typical
20 landfill; isn't that right?

21 A. That is correct.

22 Q. That again is because of our concern
23 about leakage into the environment; isn't that
24 right?

1 A. Correct.

2 Q. Even as to the so-called authorized
3 industrial chemical landfill, you only wanted
4 those until you could develop incineration; isn't
5 that right?

6 A. That is the target yes. That was and is
7 the target.

8 (The document above-referred to
9 was marked Bloomington Deposition
10 Exhibit No. 118 for identification.)

11 Q. Mr. Papageorge, I show you what has been
12 marked as Bloomington Deposition Exhibit 118 which
13 is from Keller of Monsanto to Mr. Tabri of the
14 Federal Water Pollution Control Administration,
15 dated June 4, 1970.

16 Are you familiar with that document?

17 A. Yes.

18 Q. Now, attached to it is the letter that
19 Mr. Tabri sent requesting information. It says in
20 the letter from Keller of Monsanto --

21 Mr. Keller was who again, just for the
22 record, what was his post?

23 A. Dr. Keller was in charge of the
24 analytical chemistry group that did research on

1 analytical methods.

2 Q. It mentions, Dr. Keller's letter mentions
3 that questions of the toxicity of pcb's had been
4 referred to Dr. Kelly and yourself, isn't that
5 correct?

6 A. That's right.

7 Q. Do you have any knowledge or expertise or
8 did you work with the development of toxicity
9 information on pcb's?

10 A. No. I was in the possession of summaries
11 prepared by Mr. Wheeler. Therefore, I could mail
12 them to individuals requesting that information.

13 Q. Do you have any knowledge of the data
14 that is contained in those studies and their
15 interpretation?

16 A. I have an understanding of what that data
17 is indicating, yes.

18 Q. All right.

19 We will get to that, thank you.

20 (The document above-referred to
21 was marked Bloomington Deposition
22 Exhibit No. 119 for identification.)

23 Directing your attention to what has been
24 marked as Bloomington Exhibit 119, memorandum

1 dated 6/5/70 from Benignus to Mr. Day.

2 Can you tell me who Mr. Day was?

3 A. Mr. Day was a member of the organic
4 chemicals division, responsible for production
5 planning of the group of products, amongst which
6 were the pcb's.

7 Q. Exhibit 119 lists the amount of pcb's
8 sold to the various Westinghouse facilities, does
9 it not, in 1970?

10 A. As I read this, this is the predicted
11 needs for 1970 for that site.

12 Q. I see. Okay.

13 A. In drums and tankcars of the different
14 Aroclors.

15 (The document above-referred to
16 was marked Bloomington Deposition
17 Exhibit No. 120 for identification.)

18 Q. Directing your attention to Exhibit 120,
19 Bloomington Exhibit 120, did you have a hand in
20 drafting this letter?

21 A. Yes.

22 Q. Now, directing your attention, first of
23 all, could you describe, directing your attention
24 to 120, could you describe what your role was?

1 A. I was asked to comment on a draft
2 prepared by Mr. Mason, which I did.

3 Q. Who is Mr. Mason?

4 A. He was an assistant general manager
5 reporting to Mr. Minckler.

6 Q. Assistant general manager of what group?

7 A. The organic chemicals division.

8 Q. Okay.

9 How did he relate to the functional
10 fluids products group?

11 A. I don't recall at the moment whether the
12 functional fluids group reported directly to Mr.
13 Mason or in this instance Mr. Minckler asked Mr.
14 Mason to respond to the congressman on this
15 matter, in Mr. Minckler's behalf.

16 I believe this was a special assignment
17 to Mr. Mason.

18 Q. Mr. Mason's normal duties were what, how
19 did he relate to pcb manufacture and control?

20 A. I don't think he had any relationship.

21 Q. So, other than drafting a letter for Mr.
22 Minckler, he really didn't have any active role of
23 any kind in the pcb manufacture and control, did
24 he?

1 A. True. The role Mr. Mason played was
2 limited to --

3 Q. Writing the letter?

4 A. Communication with Mr. Ryan. He wrote
5 this letter and visited Mr. Ryan.

6 (The document above-referred to
7 was marked Bloomington Deposition
8 Exhibit No. 121 for identification.)

9 Q. Directing your attention to what has been
10 marked as Bloomington Exhibit No. 121, which is a
11 letter dated July 6, 1970 from Papageorge to
12 Wilbur, are you familiar with that document?

13 A. Yes.

14 Q. Now, regarding this Exhibit 121, you
15 first describe -- in the first paragraph you have
16 reviewed their process specification for the South
17 Boston plant, have you not, for disposal?

18 A. Yes.

19 Q. And you are basically saying that it is a
20 good document and it meets with your approval;
21 isn't that right?

22 A. Yes.

23 Q. Now, the second paragraph, the discussion
24 with respect to incineration, your concern is that

1 if the temperature is not high enough, you could
2 generate dioxins or furans; isn't that right?

3 A. Yes.

4 Q. Would it be based on your experience an
5 acceptable procedure to engage in open burning of
6 liquid and solid pcb contaminated materials?

7 A. I need help with your definition of open
8 burning.

9 Q. Okay.

10 Stacking a bunch of capacitors, capacitor
11 parts and capacitor innards, on a pile, pouring
12 liquid pcb's over them and lighting them up?

13 A. Yes, I would be concerned.

14 Q. Would you consider that an acceptable
15 practice?

16 A. No.

17 Q. And that could result in the generation
18 of dioxins and furans; isn't that right?

19 A. My understanding, yes.

20 Q. Now, you also went through the plant, did
21 you not, the South Boston plant?

22 A. Yes.

23 Q. Essentially check on their various
24 measures for controlling the discharge and

1 spillage and leakage of pcb's; isn't that right?

2 A. Yes.

3 Q. And your basic response was that you
4 believe that they could achieve a bone-dry plant;
5 isn't that right?

6 A. Yes.

7 Q. And was that the goal that you were
8 espousing?

9 A. Yes.

10 Q. Now, if you recall, we talked about a
11 letter that I believe Mr. Gossage or one of the
12 salespeople wrote, in which you were described as
13 the potential savior, in which he asked you to
14 visit three plants?

15 A. Yes.

16 Q. Was the visit mentioned in Exhibit 121
17 one of those visits?

18 A. Yes.

19 (The document above-referred to
20 was marked Bloomington Deposition
21 Exhibit No. 122 for identification.)

22 Q. Directing your attention to what has been
23 marked as Bloomington Deposition Exhibit 122, a
24 letter dated July 8, 1970 from yourself to Mr. B.

1 Pool. Are you familiar with that letter?

2 A. Yes.

3 (The documents above-referred to
4 were marked Bloomington Deposition
5 Exhibit Nos. 123 and 124,
6 respectively, for identification.)

7 Q. Mr. Papageorge, I show you what have been
8 marked as Bloomington Deposition Exhibits 123,
9 which is a letter dated 6/18/1970 from Ryan to
10 Mason, Congressman Ryan to Mason, and 124 which is
11 a letter dated 6/30/70 from I believe Mr. Mason
12 again.

13 A. Yes.

14 Q. To Congressman Ryan.

15 Are you familiar with those?

16 A. Yes.

17 Q. Can you tell me, would you describe to me
18 what program Monsanto was describing in its June
19 30 letter?

20 A. This was the program approved by the
21 corporate management committee in early May, which
22 had several points to it. I will try to recall
23 what they were.

24 One was that the sale of pcb's to those

1 uses that led to easy entry into the environment
2 would be terminated, beginning August 30, 1970.

3 And as quickly as feasible, they would
4 be -- that program would be completed.

5 Q. All right.

6 A. The sale to closed, sealed systems would
7 continue.

8 We would pursue the studies of pcb's,
9 both as to their toxicity and improving the
10 analytical methodologies.

11 We would make certain that our operations
12 are run as tightly controlled as we can, to
13 prevent escape of pcb's into the air or into the
14 water effluent.

15 We would share all information we had
16 with our customers. This program would be
17 world-wide as far as Monsanto was concerned.

18 I believe those are the key points.

19 Q. Now, was this policy, what did you call
20 it the management committee?

21 A. The corporate management committee.

22 Q. Was that submitted to the management
23 committee by any group within Westinghouse, or was
24 there a written proposal to the management

1 committee or presentation?

2 A. This was a presentation to the management
3 committee.

4 Q. By whom?

5 A. I made one in late April that covered all
6 of those points.

7 Management committee was dissatisfied
8 with some of the dates that I had proposed and
9 asked that we review the situation and accelerate
10 the program.

11 So the second presentation was made by
12 Mr. Mason in my absence. Mr. Minckler asked Mr.
13 Mason to make it. And this was done in early May.
14 And received approval from that corporate
15 committee at that time.

16 Q. You presented it initially what, in
17 April?

18 A. I presented it in late April.

19 Q. Who developed the proposal?

20 A. I worked on the initial draft and with
21 the assistance of this, I am going to call it ad
22 hoc committee, consisting of Dr. Richard and Mr.
23 Olson and Bergen and Springgate and Schalk and Mr.
24 John, Mr. Park, Mr. Wheeler, Dr. Kelly, Dr.

1 Keller. They all had a role.

2 Q. So you drafted a document which was the
3 basis of your presentation to the management
4 committee; is that right?

5 A. Correct.

6 Q. We would like all copies of all drafts of
7 that document.

8 MR. FRUEHWALD: I will note your request.

9 MR. KARAGANIS: Note it and I must say to you
10 that in going through the Monsanto documents that
11 have been produced, I don't note any documentation
12 with respect to the presentation to the management
13 committee.

14 MR. FRUEHWALD: I do not believe that has been
15 produced and I believe the reason is because it
16 wasn't requested, but it has now been requested so
17 I will note it.

18 MR. KARAGANIS: I thought I requested and,
19 indeed, the subsequent 30 (b) 6 notice covered all
20 aspects of control of pcb's and their release to
21 the environment.

22 MR. FRUEHWALD: Well, I disagree on your
23 initial request way back when. If the new request
24 has come in, we objected to further production so

1 that is where that stands.

2 I will inquire about whether this exists
3 and respond to it. But as far as I know, it was
4 not produced back in '82 because it was not
5 requested.

6 MR. KARAGANIS: I don't want to launch into
7 any strong language at this point. But we believe
8 that there was a comprehensive request back in
9 '82.

10 We think that a document as critical as
11 the proposal to the management committee, we want
12 all documents reflecting communications and
13 deliberations, communications to and deliberation
14 by their management committee. This is one
15 specific example.

16 And I am more than a little bit amassed
17 that Monsanto has not produced these prior to this
18 time.

19 MR. FRUEHWALD: I am more than a little bit
20 amazed that you didn't request them prior to this
21 time. You have made requests now that you didn't
22 make originally, Joe.

23 MR. KARAGANIS: You go back at look at the 30
24 (b) 6 notices that are outstanding just in the

1 last eight months.

2 MR. FRUEHWALD: I understand. I have noted
3 your request, we will respond to it.

4 BY MR. KARAGANIS:

5 Q. Mr. Papageorge, just so I can refer to
6 the program which is reflected in the letter to
7 Ryan of June 30, 1970, is that right?

8 A. What about the program?

9 Q. The program that you were proposing.

10 A. Yes.

11 Q. Okay.

12 I am directing your attention now, let's
13 see if I have this sequence down right.

14 In the plasticizer application you just
15 essentially cancelled sales of plasticizers. In
16 those plasticizer applications "where disposal of
17 the end products cannot be controlled;" is that
18 right?

19 A. Right.

20 Q. So you didn't close off all sales of
21 pcb's to the plasticizer market, only those where
22 the end product could not be controlled, is that
23 right, in terms of disposal?

24 A. Well, by Monsanto's definition, the

1 plasticizer applications were perceived to be the
2 kind that eventually that material is going to end
3 up in the environment. That plastic article or
4 that floor tile or that coating, that paint,
5 eventually gets into the environment.

6 Therefore, by our definition, those were
7 the uses we were discontinuing.

8 Q. Were there other uses of the plasticizer
9 applications which continued?

10 A. The only one that continued for a brief
11 spell because we could not find a suitable
12 alternative quickly enough was the carbonless copy
13 paper application, which eventually was terminated
14 in early '71.

15 Q. So basically you thought that the
16 products containing the pcb's would get out into
17 the environment and, therefore, that your sale of
18 the pcb's for such applications had to be stopped;
19 is that right?

20 A. Correct.

21 Q. Now, with respect to the second part, the
22 second part of your program where applications of
23 chlorinated biphenyls were used as hydraulic
24 fluids, you say, and I quote:

1 "We are not satisfied
2 that it is possible to control
3 their usage and eventual
4 disposal to insure that there
5 is no possibility of escape to
6 the environment. We have
7 therefore have taken the
8 decision to reformulate such
9 fluids and we are currently
10 working with our customers to
11 change over to these new
12 formulations."

13 MR. FRUEHWALD: You are reading from Mr.
14 Mason's letter.

15 A. Yes.

16 BY MR. KARAGANIS:

17 Q. That was the program that you had
18 recommended, is it not?

19 A. Yes.

20 Q. Would it be fair to say, then, that you
21 were cutting off sales of chlorinated biphenyls in
22 the hydraulic market, because you could not be
23 satisfied that it was possible to control usage
24 and eventual disposal to insure that there is no

1 possibility of escape to the environment?

2 A. Correct.

3 Q. Now, in the area of transformers,
4 capacitors and heat transfer fluids, I take it you
5 felt that it was possible to control their usage
6 and eventual disposal to insure that there is no
7 possibility of escape to the environment; is that
8 correct?

9 A. Yes..

10 Q. That's the distinction between the two
11 areas, is it not?

12 A. Yes.

13 Q. I am sorry?

14 A. That's correct.

15 Q. And I take it the way you were saying
16 that you control it was by collecting the scrap
17 Aroclor and either reprocessing it or incinerating
18 it; isn't that right?

19 A. That is one facet.

20 Q. Okay.

21 A. The other is maintenance of equipment
22 using the material.

23 Q. All right.

24 A. And it was perceived by Monsanto with our

1 knowledge of the uses, that control of the
2 hydraulic fluids, and by control now I hope we
3 have the same definition here. Let me give you
4 Monsanto's.

5 Control is very much the way the
6 government regulatory people control discharges
7 into the environment. It is not intended to be
8 zero. It is a feasible control.

9 Q. It is that which you could do?

10 A. What is technically and economically
11 feasible to control.

12 Q. You knew that you could prevent it
13 from -- as you described your Anniston facility,
14 you could prevent this stuff from running down
15 sewer drains by collecting it; isn't that right?

16 A. True. But this does not mean that a
17 molecule of pcb didn't get away from us.

18 Q. But it does mean that you had control
19 devices in place, did you not?

20 A. True.

21 Q. Okay.

22 That you just didn't let it run down the
23 sewer; isn't that right?

24 A. That's right.

1 Q. And, indeed, one of the principal control
2 devices used for, first of all, the physical
3 collection of the pcb's and any material that
4 might actually get into the sewer would be
5 subjected to a treatment device; isn't that right?

6 A. Yes.

7 Q. And that treatment device typically
8 included carbon filtration, didn't it?

9 A. Not necessarily.

10 Q. Some kind of filtration to catch the
11 pcb's; isn't that right?

12 A. The treatment device in a municipal
13 treatment system was really the bacterial action,
14 activated sludge system, and that is what --

15 Q. Which winds up contaminating the sludge;
16 isn't that right?

17 A. Well, there are two things which happen.
18 Some of the pcb's are destroyed by these bacteria.

19 Q. And the rest are?

20 A. And the rest are entrapped in the sludge.

21 Q. Which then becomes?

22 A. And the proper disposal of the sludge
23 becomes the next step.

24 Q. Which becomes a major problem, does it

1 not?

2 A. It is a challenge. I don't know, it is
3 major only if it is mishandled.

4 Q. Would you say that disposal of PCB sludge
5 containing several hundred parts per million is a
6 problem in the sense that it creates a cost and a
7 problem for the person having to dispose of the
8 sludge?

9 A. It is an economic challenge. Cost, yes.

10 Q. And an environmental cost, is it not?

11 A. And environmental if it is put in the
12 wrong place.

13 Q. It can be a major environmental problem
14 if put in the wrong place; isn't that right?

15 A. Correct.

16 Q. So would it be fair to say, then, that if
17 you had the plasticizer industry, you felt you
18 couldn't control the end product disposal, you
19 cancelled sales to the plasticizer industry, if
20 not immediately, with the carbon paper within a
21 year; isn't that right?

22 A. Yes.

23 Q. Okay.

24 With respect to the hydraulic fluids

1 industry, you told them to switch over and you
2 essentially cancelled sales to the hydraulic
3 fluids industry because, in your words, you could
4 not control the usage of the pcb fluids and
5 eventual disposal to insure that there was no
6 possibility of the escape to the environment;
7 isn't that right?

8 A. That is true. Coupled with the
9 availability of a fire resistant replacement.

10 Q. Now, with respect to the transformer
11 capacitor industry, we have already described that
12 you had a basic program which said instead of
13 dumping your liquid Aroclor into the sewer or out
14 into a landfill, we want it collected, and we want
15 it brought back to Monsanto for either recycling
16 or destruction; isn't that right?

17 A. That's right.

18 Q. And that was a major requirement of your
19 program; isn't that right?

20 A. Yes.

21 MR. FRUEHWALD: It would be helpful if this
22 got slowed down a little bit so there was an
23 exchange rather than you jumping on the last
24 answer, Joe.

1 BY MR. KARAGANIS:

2 Q. With respect to the solids, you
3 previously agreed that with respect to the solids
4 the ideal goal was to incinerate the solids, but
5 in the meantime the solids should not go to any
6 landfill, but should only go to landfills that
7 were licensed for taking chemical industrial
8 wastes; isn't that right?

9 A. That's right.

10 Q. So your program essentially was to
11 continue sales if you could capture, recycle or
12 destroy the liquids and ultimately destroy the
13 solids, solid waste products, but in the meantime
14 store them at best in a chemical waste landfill;
15 isn't that right?

16 A. And no acceptable alternative was
17 available. That is important.

18 Q. But even though there was no acceptable
19 alternative available, you would only continue
20 sales in those situations where you could recover
21 the liquid, either recover it and process it or
22 destroy it, and as to solids ultimately to destroy
23 it; but in the meantime to licensed chemical waste
24 landfills; isn't that right?

1 A. That's right.

2 Q. You didn't want it going down sewers;
3 isn't that right?

4 A. That's right.

5 Q. And just so I have this clear.

6 From a technological standpoint, in 1970
7 or any other time, it was possible, was it not, to
8 prevent the material from going down sewers,
9 recovering the liquids and putting the solids at a
10 minimum in a licensed chemical waste landfill;
11 isn't that right?

12 A. It was technically feasible. Yes.

13 Q. And the whole idea, if we go through each
14 of those terms, the idea of the continued sales
15 was with this program of capturing the liquids,
16 recycle or destruction of the liquids, preventing
17 discharge down to the sewers, and only temporarily
18 in chemical waste landfills, the whole goal was to
19 prevent the release of this material into the
20 environment; isn't that right?

21 A. That's right.

22 (The document above-referred to
23 was marked Bloomington Deposition
24 Exhibit No. 125 for identification.)

1 Q. Directing your attention back to 122. Do
2 you recall writing to Mr. Pool and asking for
3 information regarding requirements as to
4 landfills?

5 A. Yes.

6 Q. Mr. Papageorge, I don't have, I am in
7 possession of the document from one source or
8 another, but I don't have it with me, but my
9 records show that on July 16, 1970 the State of
10 Indiana responded to you. If you have a copy of
11 that, Mike, I would appreciate a copy.

12 MR. FRUEHWALD: I have one, I don't know if it
13 is in the room.

14 MR. KARAGANIS: But I am requesting it.

15 Q. Which basically stated that in response
16 to your letter, that liquid or hazardous wastes
17 are not acceptable for disposal by the landfill
18 method.

19 Do you recall getting that response?

20 A. Yes.

21 Q. Now, directing your attention to what has
22 been marked as Bloomington Deposition Exhibit 125,
23 dated 7/22/70. Is that a memo from Randall
24 Graham?

1 A. Yes.

2 Q. And it indicates that Mr. Graham and
3 yourself visited the Bloomington plant on 7/22/70.
4 Is that right?

5 A. Yes.

6 Q. And would this be correct, that this was
7 a visit like the visit you made to South Boston,
8 that you had promised to come out and look at the
9 plant and recommend clean-up procedures?

10 A. Yes.

11 Q. The memorandum, Exhibit 125, indicates
12 that you would follow up with correspondence
13 concerning that matter.

14 Did you follow up with correspondence?

15 A. I don't recall. In some instances I was
16 able to. In every case I intended to. In some
17 instances I was able to. I don't recall this
18 specific one.

19 Q. It is correct, is it not, that you did
20 tour the plant and make recommendations regarding
21 clean up?

22 A. Yes.

23 Q. Now, I want you to the best of your
24 recollection, did you have occasion to review

1 documents prior to your deposition or do you
2 recall documents reflecting what you saw and what
3 recommendations you made?

4 A. I don't recall documents that help me
5 recall. But I do remember some of the points that
6 I made to those.

7 Q. All right.

8 What do you recall seeing when you went
9 through the plant?

10 A. Well, I saw the unique use, unique in
11 terms of comparing to other similar plants of saw
12 dust on the floor.

13 Q. Unique use.

14 Let's describe, when you say unique use
15 of saw dust, what was happening in the
16 impregnation facilities, in the cleaning
17 facilities from the impregnation facilities? What
18 was happening with regard to release of pcb's and
19 waters, for example, in the rooms themselves, in
20 the F 30 room?

21 A. I don't quite know how to answer that.

22 There was a loss of pcb fluid from the
23 conveying system, where the basket in which the
24 filled capacitors were conveyed to the point in

1 the process, where they are sealed.

2 It was apparent to me that at one time
3 their every intention was that the drip pans
4 underneath the conveyors was to collect the
5 material. And these drip pans in some places were
6 missing. In others they were shifted just enough
7 so that all of the oil wasn't trapped.

8 And even at the very end of this
9 collection system, the oil would just deliver the
10 trapped liquid on to the floor.

11 The entire area under the conveyors had
12 several inches of saw dust to help absorb the free
13 liquid. Their washing step, anything that stands
14 out there in my mind is -- my great concern in
15 mixing water, pcb's, further complicated by the
16 use of detergent, which would make recovery of
17 pcb's extremely difficult, if not impossible.

18 Q. Well, as a matter of fact, they had no
19 recovery system, did they, in the washing system?

20 A. I wasn't shown any recovery system. I
21 was shown where it entered a sewer inlet. I was
22 not told where that sewer went.

23 Q. But the pcb's in the washing water in the
24 waste went directly down into a sewer, did they

1 not?

2 A. Into a sewer.

3 Q. There was no treatment or capture
4 procedure at all, was there?

5 A. Not that I saw or was told.

6 Q. Now, did you make any recommendation?

7 A. Yes.

8 My recommendation was to conduct their
9 operations in such a way that their concrete floor
10 appeared to the everyday observer as bone dry.
11 And I knew it would take some doing, but I was
12 confident it can be done and, if necessary, revise
13 your drip systems in such a way that none of it
14 escapes onto that concrete floor.

15 Q. It wasn't bone dry when you visited, was
16 it?

17 A. All I saw was soggy saw dust.

18 Q. And to get soggy, there had to be pcb's
19 on the floor to get the saw dust liquid, right?

20 A. Some liquid.

21 Q. There was clearly liquid dropping over
22 the capacitors over the conveyor belt on to the
23 floor; isn't that right?

24 A. That's right.

1 And outside they had boxcars of saw dust
2 ready. So that is why I call it unique.

3 I have never seen that. I hadn't seen it
4 before. I hadn't seen it since. So it is from my
5 vantage point unique.

6 Q. Now, just from your vantage point being
7 unique, that is a nice euphemism.

8 A. That is a euphemism?

9 Q. Let's put it this way.

10 Do you find it to be acceptable
11 environmental practice to soak up pcb's with saw
12 dust that you drop on the floors and then take
13 that saw dust out to an unlicensed chemical waste
14 landfill, a landfill that isn't licensed for
15 chemical waste?

16 A. No. I cannot support that.

17 Q. Do you find that acceptable to take out,
18 to soak it up with saw dust and to take it out to
19 a landfill that is built on sink holes and
20 fractured limestone?

21 A. No.

22 Q. Isn't it a fact that that is the practice
23 that had been followed by Westinghouse?

24 A. I hadn't heard the reference to sink

1 holes. I recall some reference to fractures.

2 Q. The problem with sink holes and fractured
3 limestone is it allows water to leak, does it?

4 A. Most likely, yes.

5 Q. So it is bad environmental practice to do
6 that; isn't that right?

7 A. That's right.

8 Q. Did you inquire where they were taking
9 the material?

10 A. We had discussions.

11 In fact, I recall some correspondence
12 regarding one of the landfills where I expressed
13 my concern. I don't recall the specific location.

14 Q. The landfill that they were using?

15 A. It was referring to a quarry.

16 Q. If you have such correspondence, we would
17 ask for copies of it.

18 MR. FRUEHWALD: I don't know what that is. I
19 have no --

20 I have never seen what that describes, at
21 least as far as Westinghouse plant. Maybe some
22 other plant, we have not focus on. But I have
23 seen nothing of that nature.

24 A. I may have confused my --

1 BY MR. KARAGANIS:

2 Q. It is very possible you didn't confuse
3 it. That is why I would like you to go back and
4 check your records.

5 A. All right. I am a little fuzzy on that.
6 But I remember a discussion about the kinds of
7 landfills to look for, and I personally relied an
8 awful lot on the local authorities who issued
9 permits to establish the proper geological
10 environment.

11 Q. If there wasn't a proper geologic
12 environment, by that you meant a proper geological
13 environment for a chemical waste landfill; is that
14 right?

15 A. Yes. A chemical waste landfill. Not a
16 municipal sanitary landfill.

17 Q. That would be unacceptable for these
18 materials, isn't that correct?

19 A. That is correct.

20 (The document above-referred to
21 was marked Bloomington Deposition
22 Exhibit No. 126 for identification.)

23 Q. Directing your attention to a document
24 which has been marked as Bloomington Exhibit No.

1 126, dated July 27, 1970.

2 Are you familiar with that document?

3 A. Yes.

4 Q. Now, when you are talking about landfills
5 here, you would agree, would you not, that if
6 solids incineration were technically feasible, it
7 would be preferable to incinerate as opposed to
8 putting in the landfills; isn't that right?

9 A. Yes.

10 Q. I am sorry?

11 A. Yes.

12 Q. And with respect to landfills, even as a
13 temporary solution, those would have to be
14 landfills that were geologically designed chemical
15 waste landfills; isn't that right?

16 A. That's right.

17 Q. Now, in the trade sometimes the word
18 sanitary landfills is used synonymously with
19 municipal landfills.

20 A. That's right.

21 Q. Are you referring to municipal-type
22 landfills or are you talking specifically licensed
23 chemical waste landfills?

24 A. In my mind it is licensed industrial

1 waste landfills.

2 Q. Industrial for chemical wastes; is that
3 right?

4 A. Yes.

5 Q. So when somebody in the trade might say a
6 sanitary landfill, a local municipal landfill, you
7 would not be talking about that, would you, as
8 being acceptable?

9 A. No.

10 It is not the landfill to which household
11 garage is taken.

12 Q. It is a special landfill, is that right?

13 A. Yes.

14 Q. And you agree that these chemical waste
15 landfills should not be near water systems, near
16 any groundwater situation where there could be
17 leakage into the groundwater; is that right?

18 A. That is true and that is what I intended
19 with the first paragraph.

20 Q. Let me just ask you something.

21 I know some people will take this
22 perspective. Why couldn't you just find a local
23 sandy stretch of land and take liquid pcb's and
24 just pour it on to the sand and hope that, in your

1 words, the pcb's will cling to the solids
2 tenaciously?

3 A. I want to be assured that sand won't
4 move, taking the pcb with it. It will cling
5 tenaciously. But there is nothing to keep that
6 sand particle from being moved by wind or water or
7 excavation.

8 Q. Indeed, in fractured subsurface material
9 that sand particle could moved in fractured
10 subservice cavities, could it not?

11 A. Water could come along, pick up that
12 grain of sand with pcb and move it somewhere.

13 Q. And the fact is also that pcb's will also
14 release as a soluble component, will they not,
15 from the soil?

16 A. I don't understand.

17 Q. If I have a grain of sand sitting in
18 water and it has a molecule of pcb adsorbed onto
19 that grain of sand, is there any potential for
20 release or resolubilization of that pcb?

21 A. The potential is there, but unlikely.

22 Q. Well, then, if your theory is correct,
23 and if if you poured pcb's on top of a mound of
24 soil, you shouldn't find pcb's in solution below

1 the mound; isn't that right?

2 A. I would have to know more about that
3 whole system. Pcb's will dissolve in water up to
4 a given point.

5 Q. Do you recall that 1242 has a solubility
6 limit of 200 parts per billion?

7 A. About that. Yes.

8 So if I had sand with pcb's attached to
9 it, then ran water through it, I could, under the
10 right conditions of time and temperature and all,
11 some of that pcb will find its way into that
12 water.

13 And if the water moves on and, of course,
14 it will go with it. The chances, however, are
15 that if the water moves, it will more likely take
16 that sand particle with it, with the higher
17 concentration of pcb.

18 Q. So it can take the contaminated solid
19 particle as well as the soluble fraction, isn't
20 that right?

21 A. That's correct.

22 And find its way in the environment,
23 where some creature, fish or what have you, might
24 live in it and digest it.

1 Q. Or into a public water supply or a well
2 water supply or whatever, is that right?

3 A. Whatever.

4 Q. So for those reasons it was important to
5 prevent the liquid from getting out into the
6 environment and put the solids on a temporary
7 basis in well designed industrial chemical waste
8 landfills; isn't that right?

9 A. That's right.

10 Q. Let me show you what has previously been
11 marked as I believe Exhibit 77, Bloomington
12 Exhibit 77, which is a sales contract dated June
13 22, 1970. Signed by Donald Olson of Monsanto and
14 Kenneth Tyson of Westinghouse.

15 Did you have any hand in drafting the
16 language or coming up with the concepts involved
17 in this contract?

18 A. No.

19 Q. Are you familiar with contract clause
20 that was added in this contract?

21 A. No. I first saw this document recently,
22 in preparation for this deposition.

23 Q. Consistent with the policy that was
24 announced in or adopted in May of 1970, by the

1 management committee, did the staff recommend that
2 you limit your future sales in these systems where
3 you could control release to a contractual basis
4 where you could terminate the contract if you
5 found that you couldn't control the release?

6 A. No.

7 Q. What would you do about what I will call
8 the bad actor? Let's assume that there was
9 someone who was continuing to release, this is a
10 capacitor manufacturer or transformer
11 manufacturer, that had very sloppy plant practices
12 and was continuing the release in the environment.

13 Isn't this what Exhibit 77 was intended
14 to protect against?

15 A. That is what it indicates, yes. Yes.
16 You asked me what I would do.

17 Q. You being Monsanto.

18 A. Monsanto.

19 Q. So Exhibit 77, based on your knowledge,
20 is a mechanism to control the situation, if the
21 customer did not clean up its act, was operating
22 using sloppy practices and you observed this, you
23 could pull the product; isn't that right?

24 A. That is what it does, yes.

1 Q. Now, you indicated that you made certain
2 recommendations to the Bloomington plant with
3 respect to getting the drips taken care of.

4 Did you make any recommendation with
5 respect to the washer system?

6 A. Yes.

7 The recommendations there were to avoid
8 any contact with water, to seriously consider
9 using an organic solvent, which can be incinerated
10 along with any pcb's that it extracts or washes
11 off of the units as it degreases.

12 Q. Did you talk about any program for --

13 Did you talk about any program that would
14 involve filtration of the wash water?

15 A. We had a discussion as I remember on
16 possible techniques that could be tested to see if
17 their wash water could be treated adequately.

18 We discussed the possibility of
19 considering carbon bed treatment. The thought
20 that perhaps using mechanical means like
21 centrifuges might help. But we could not, of
22 course, in one day's time come up with solutions.
23 These were some thoughts that we left with them to
24 pursue.

1 Q. Was there to be follow up on this as to
2 what they did?

3 A. Yes. We both offered to continue the
4 dialogue.

5 Q. And to your knowledge, when did you
6 follow up?

7 A. Oh, I don't know that there is any
8 specific date. Randy Graham had the assignment
9 for the primary contact.

10 There were some discussions between our
11 analytical people and the Westinghouse people
12 regarding the effectiveness of centrifuging, where
13 our laboratories analyzed some of their samples.

14 We indicated to them that we didn't think
15 it was good enough. I remember that kind of
16 dialogue occurring.

17 I believe we sent them copies of a
18 Monsanto report on how effective carbon beds might
19 be in treating water. And, as I remember, at one
20 time they changed their way of charging the liquid
21 into their units.

22 Q. Did you ever go back and see whether they
23 used a different method of charging on a permanent
24 basis?

1 A. I didn't personally see it. No.

2 Q. Did you ever go back to see whatever they
3 installed at the plant?

4 A. No. I didn't get the chance. I had
5 every intention to, but --

6 Q. You never got back?

7 A. I never got back.

8 Q. So you wanted to go back and see whether
9 or not they had followed your recommendations, but
10 you never had a chance to get back there, is that
11 right?

12 A. That is true.

13 Q. Did you know that they never did anything
14 with the washer system?

15 MR. FRUEHWALD: I am going to object to that.

16 That question is assuming a fact not in
17 evidence.

18 MR. KARAGANIS: Sure. It is discovery. I am
19 going to put that fact in evidence.

20 MR. FRUEHWALD: I don't believe it is a fact.
21 I believe it is as contested fact. So you are
22 assuming a fact.

23 MR. KARAGANIS: So let's find out.

24 Q. Is there any evidence that they ever did

1 anything with the washer system?

2 MR. FRUEHWALD: I believe there is.

3 MR. KARAGANIS: What? There would be a
4 revelation to me.

5 MR. FRUEHWALD: I am not going to go through
6 this at this time. But the documents indicate
7 that there were things done. We don't have to
8 argue this on the record. I am just objecting to
9 your assuming, telling the witness that nothing
10 was done as if it were a fact.

11 MR. KARAGANIS: I asked about a specific
12 facility. The washer system. Are you saying for
13 the record that they did something with the washer
14 system?

15 MR. FRUEHWALD: The documents indicate they
16 did.

17 MR. KARAGANIS: I must confess --

18 MR. FRUEHWALD: If you haven't read. If you
19 can't see it in the documents, then I am not going
20 to try to convince you about it. I am stating my
21 objection.

22 BY MR. KARAGANIS:

23 Q. Mr. Papageorge, when you talked to them,
24 you talked about a program that would take them

1 down to low levels with carbon filtration, did you
2 not, in the washer system?

3 A. Low levels of what?

4 Q. Low levels of pcb emissions with respect
5 to carbon filtration?

6 A. That was the intent. Yes.

7 Q. Do you know if they ever installed carbon
8 filtration?

9 A. I was not told that they had.

10 Q. I would like to make a request for a
11 document relating to this time period which
12 relates to a press release that would have been on
13 or about July 15, 1970 by Monsanto describing the
14 program that was announced to Mr. Ryan.

15 MR. FRUEHWALD: I will note your request. I
16 will check.

17 BY MR. KARAGANIS:

18 Q. I am sorry.

19 Mr. Papageorge, you indicated earlier
20 when the incinerator finally got into operation.
21 Do you recall when that was? This is at the
22 Kummrich plant.

23 A. Yes. 1971.

24 (The document above-referred to

1 was marked Bloomington Deposition

2 Exhibit No. 127 for identification.)

3 Q. Directing your attention to what has been
4 marked as Exhibit 127, do you recall writing that
5 document?

6 A. Yes.

7 Q. Would I be correct in saying that your
8 advice then and today would be, "dumping into
9 sewers or in the waste water systems must be
10 avoided"?

11 A. Yes.

12 Q. And that turning to page 2, would it be
13 correct that you did have an incineration program
14 underway for the destruction of solid materials,
15 you had a research program?

16 A. Research program. Yes.

17 Q. And indeed research, and let's take it
18 further, you had an engineering program underway,
19 did you not?

20 A. Well, I don't know how, what you mean by
21 engineering.

22 Q. It says a research and engineering
23 program underway. But a solution is not
24 anticipated for a year.

1 A. All right. Yes.

2 Q. Did you ever develop a solid waste
3 destruction system?

4 A. Yes.

5 Q. Is it in operation now?

6 A. No.

7 Q. Why not?

8 A. We could not find enough support for the
9 use of that unit to justify building it.

10 Q. Not enough customer base?

11 A. Correct.

12 Q. But it is technically feasible, is it
13 not?

14 A. We demonstrated it. Yes.

15 Q. So that the goal of destroying solid
16 wastes through -- pcb contaminated solid wastes
17 through incineration, has been demonstrated to be
18 technically feasible, isn't that correct?

19 A. Yes.

20 (The document above-referred to
21 was marked Bloomington Deposition
22 Exhibit No. 128 for identification.)

23 Q. Directing your attention to what has been
24 marked as Exhibit 128, which is a trip report

1 regarding a meeting in Washington of September 15,
2 1970. Memorandum being of September 22, 1970.

3 Do you recall attending that meeting?

4 A. Yes.

5 Q. This was a discussion with the FDA with
6 regard to the health studies; isn't that right?

7 A. Correct.

8 Q. Would it be fair to say that one of the
9 purposes of the studies of the rats and the dogs
10 was to decide whether or not if they had adverse
11 effects, that that would be an indicator of
12 adverse effects on humans; isn't that right?

13 A. Yes.

14 (The documents above-referred to
15 were marked Bloomington Deposition
16 Exhibit Nos. 129 and 130,
17 respectively, for identification.)

18 Q. Directing your attention to what has been
19 marked as Exhibit 129, Deposition Exhibit No. 129,
20 which is a letter from Randall Graham to Hanson of
21 Westinghouse, dated October 12, 1970.

22 Are you familiar with that document?

23 A. I don't recall seeing this document.

24 Q. Do you recall, was there a switch at

1 which point you stopped paying Westinghouse but
2 continued to accept their wastes but now charged
3 them for it?

4 We had described a program up through '60
5 and part of '70, where Westinghouse was shipping
6 its recoverable Aroclor, scrap Aroclor; you would
7 pay them for the scrap Aroclor?

8 A. I recall that, yes.

9 Q. Did that program ever shift into a
10 program where Westinghouse had to pay you?

11 A. Yes.

12 About mid-1970, when the plans for
13 building an incinerator were approved and final,
14 firm, we informed all customers, including
15 Westinghouse, that the fee would be the 3 cents a
16 pound mentioned in this memo.

17 Q. Okay.

18 So up until this time you had been using
19 the Findett mechanism to control the pcb's through
20 partial recovery, and then you indicated you were
21 storing material that couldn't be recovered?

22 A. That is true. And the Findett
23 application was not used by all customers. It was
24 limited to a few.

1 Q. Monsanto was using or, I am sorry,
2 Westinghouse Bloomington was using the Findett
3 application, wasn't it?

4 A. From the letters we saw, yes.

5 Q. So with regard to the -- as of the
6 October 12, '70 date, was the Findett mechanism
7 still in operation?

8 A. I don't think so. No.

9 Q. Directing your attention to the next
10 exhibit, Exhibit No. 130, which is also dated
11 October 12, 1970, from Papageorge to Stalling.

12 Did you write that letter?

13 A. Yes.

14 Q. Again, we are talking about the control
15 program you previously described, which is to get
16 all the liquids back, and the only way that the
17 solids should be taken care of is temporarily
18 through industrial chemical waste landfill and
19 ultimately with incineration, isn't that correct?

20 A. That's right.

21 Q. You didn't want it being released into
22 the environment; isn't that right?

23 A. That is correct.

24 (The document above-referred to

1 was marked Bloomington Deposition
2 Exhibit No. 131 for identification.)

3 Q. Directing your attention to what has been
4 marked as Exhibit 131, Bloomington Exhibit No.
5 131, dated October 16, 1970 from Randall Graham
6 enclosing a letter sent to Monsanto customers.

7 Are you familiar with that document?

8 A. I recall this document. Yes.

9 Q. Directing your attention to the first
10 letter, that is attached to the Graham cover
11 memorandum. The first letter reflects the fact
12 that Monsanto will deal with the disposal problem
13 by means of an incinerator at a charge per pound;
14 isn't that right?

15 A. That's right.

16 Q. The second letter is a letter saying that
17 no longer can you dump scrap or spent transformer
18 askarel down the sewer. For this reason, Monsanto
19 is building an incinerator; is that right?

20 A. Yes.

21 Q. All right.

22 The fact is, is it not, this whole
23 program that you developed of collection and of
24 the liquids, storing them until the incinerator

1 could be ready, sending the solids to a chemical
2 waste landfill as a prelude to having an
3 incinerator ready, there was nothing that
4 prevented that from being installed earlier, isn't
5 that right?

6 There was no technical limitation to
7 having done that several years earlier, is that
8 right?

9 A. To prevent installation of what?

10 Q. Of either the incinerator of the liquids
11 or the incinerator for the solids. There is no
12 technical problem with that, is there?

13 A. No. But --

14 Q. Nobody did it, isn't that right?

15 A. Well, first of all, no one perceived the
16 need for it.

17 And, secondly, until we conducted the
18 tests, we didn't -- we weren't sure that it was
19 technically feasible.

20 Q. The fact is that had you gone out and
21 tested, you proved that it was technically
22 feasible; isn't that right?

23 A. That is true.

24 Q. You could have gone out and done the

1 tests earlier; isn't that right?

2 A. That is hindsight. Yes.

3 Q. But in hindsight, you could have done it
4 earlier, isn't that correct?

5 A. Yes.

6 Q. There was no technical burden or
7 impossibility or hurdle that prevented you from
8 either conducting the tests or demonstrating the
9 feasibility; isn't that right?

10 A. In hindsight, there was none, yes.

11 Q. Again, as I would say to you, let's take
12 liquids alone, liquids at a minimum could have
13 been stored and solids could have gone to licensed
14 chemical waste landfills, isn't that correct?

15 A. As a minimum?

16 Q. Yes.

17 A. Yes.

18 Q. Even without incineration, isn't that
19 right?

20 A. Yes.

21 Q. Had that program been installed earlier,
22 either storage of the solids or storage of the
23 liquids or sending the solids to chemical waste
24 landfills, that material would not have been

1 poured down sewers and disposed of in municipal
2 landfills, isn't that correct?

3 A. That is true. Once the need to prevent
4 that from happening was understood. Yes.

5 Q. Well, let me ask you something from the
6 standpoint of Monsanto's policy.

7 Did you ever recommend or allow people to
8 dump either liquid or solid pcb contaminated
9 material in local municipal landfills, was that an
10 accepted practice at any time by Monsanto?

11 A. No. But then it was never discussed.

12 Q. Wait a minute.

13 Let's go back a minute to discussion in
14 terms of the general industry or specific guidance
15 by Monsanto in terms of the disposal of Aroclors
16 or askarels.

17 Did Monsanto ever give advice with
18 respect to disposal?

19 A. At what point in time?

20 Q. At any time. I mean prior to the 1968
21 period.

22 A. No.

23 Q. Never gave advice?

24 A. No.

1 Q. To your knowledge?

2 A. That's right.

3 Q. Okay.

4 And had it given advice, based on what
5 you have known after thirty years or forty years
6 in this business, would it have been in sound
7 practice at any time, even what was known at that
8 time, to pour pcb's down the drain?

9 A. No. It would not have been sound
10 practice.

11 Q. All right.

12 Would it have been sound practice to
13 contain those liquids; isn't that right?

14 A. Just like all industrial chemicals, yes.

15 Q. And it would not have been sound practice
16 to send industrial chemicals such as pcb's over to
17 the local municipal landfill; isn't that right?

18 A. That is true.

19 Q. That was true at any state of knowledge
20 with respect to pcb's at any point in time in its
21 manufacture; isn't that right?

22 A. That is true.

23 Q. Let me direct your attention to Exhibit

24 No. 58. Do you recall attending a meeting -- I am

1 sorry. 61.

2 Do you recall attending a meeting with
3 Westinghouse personnel in St. Louis on October
4 29th and 30th of 1970?

5 A. Yes.

6 Q. And do you recall the discussions that
7 took place at that meeting?

8 A. In a general way. Yes.

9 Q. What was discussed?

10 A. Oh, pcb's and pollution problems and the
11 need to control and the new pcb 1016 that was
12 going to be introduced.

13 And, of course, the technical people
14 talked about other scientific matters relating to
15 capacitors.

16 Q. Did you discuss the need to control and
17 the fact that Monsanto could pull the product if
18 there wasn't adequate control under the contract
19 that came in in June of 70?

20 A. That did not come up at this meeting.

21 Q. The contract didn't come up or the need
22 to control didn't come up?

23 A. No. The contract wording that says if
24 you don't control we will stop selling. That was

1 not raised.

2 Q. You did discuss the fact that you had
3 initiated a program among other things of plant
4 visitations to initiate control procedures, did
5 you not?

6 A. Yes, sir. These folks knew it. They
7 were part of that.

8 Q. Directing your attention to Exhibit 44.

9 Now, the existing contract, are you
10 familiar with Exhibit 44, which is a letter dated
11 November 9, 1970 from Gossage to Kelly?

12 A. I saw it here recently in preparation for
13 this deposition.

14 Q. Do you recall that the contract, the then
15 existing contract, was expanded from 1242 to
16 include 1232?

17 A. That is what it says and this confirms it
18 it, yes.

19 Q. This letter indicates there was
20 discussion of the contract at the meeting in St.
21 Louis on October 30, is that right?

22 MR. FRUEHWALD: That is Mr. Gossage's meeting
23 with Mr. Kelly.

24 BY MR. KARAGANIS:

1 Q. Was there a meeting on October the 30th
2 with a number of individuals which included
3 Gossage and Kelly?

4 A. We can speculate.

5 I would submit to you this topic, if it
6 did come up, as indicated by this letter, probably
7 came up at the dinner the night before the
8 meeting, which would have been the more
9 appropriate audience.

10 Q. Now, is it correct, would this be
11 Monsanto policy as to 1232, that Westinghouse was
12 required to, quote, "prevent the product from
13 entering into the environment through spills,
14 leakage, disposal, vaporization or otherwise,"
15 directing your attention to the second paragraph?

16 A. Yes.

17 You say is it Monsanto's policy.

18 Q. Was it Monsanto's policy at the time?

19 A. I personally can't speak to that.

20 Q. Was it your policy at the time?

21 A. No.

22 Q. But it was Monsanto's policy in the
23 November 9, 1970 letter, was it not?

24 A. That is Mr. Gossage's policy. I don't

1 know that I can call it Monsanto's. I have no
2 information to tell me that.

3 Q. Well, this was an official document by
4 Monsanto with respect to the conditions under
5 which they would sell the product; isn't that
6 right?

7 A. Yes.

8 Q. This is corporate policy as to the sale
9 of the product, is it not from the seller to the
10 customer; isn't that right?

11 A. I don't know that it is corporate policy.

12 Q. It is the company position, is it not?

13 A. Yes.

14 Q. Thank you.

15 By it, I mean the correspondence from
16 Gossage to Kelly. By it I mean the Exhibit 44.

17 A. Yes.

18 Q. Okay.

19 We talked about you visiting the
20 Bloomington plant in I believe it was July of
21 1970. Isn't that correct?

22 A. Yes.

23 Q. Do you recall visiting again?

24 A. No. I did not go back.

1 (The document above-referred to
2 was marked Bloomington Deposition
3 Exhibit No. 132 for identification.)

4 Q. Directing to your attention to what has
5 been marked as Exhibit 132, which is dated 11/4/70
6 and is a handwritten memorandum from Pickett to
7 Rissinger. I am now reading the first paragraph.
8 I quote:

9 "Monsanto personnel
10 associated with Inerteen
11 control are visiting
12 Westinghouse on Tuesday,
13 November 10. They wish to
14 "tour the F 30 area and see
15 control conditions at
16 Bloomington."

17 Do you recall seeing the memorandum, not
18 the memorandum, do you recall the visit?

19 A. I believe I know which visit they are
20 referring to, yes.

21 Q. Did you participate in that visit?

22 A. No.

23 Q. Who attended that visit?

24 A. Randall Graham, I believe Paul Benignus.

1 MR. FRUEHWALD: I think you have a report on
2 that visit.

3 I think it is Mr. Graham and Mr. Gossage,
4 instead of Mr. Benignus.

5 MR. KARAGANIS: It indicates that Mr. Benignus
6 was there as well.

7 Q. To your knowledge the attendees were whom
8 again?

9 A. Randall Graham for sure, and he had I
10 thought Mr. Benignus with him. But it could have
11 been Mr. Gossage, who had just recently been given
12 that assignment and was making visits to many
13 customers to become acquainted with them.

14 Mr. Gossage could well have been there
15 also.

16 Q. Do you recall what the recommendations
17 that were made were with respect to the Inertcon
18 control?

19 A. As I recall, the report came back to me
20 that improvement had been made since the July
21 visit, and that the plant still had a way to go
22 and was actively working on better control of
23 escaped pcb's into the environment.

24 Q. You used some terms that I would like to

1 ask about.

2 Improvement from what? What was better
3 in November of '70 than had existed in July? What
4 was wrong in July that had been improved upon in
5 November?

6 A. Well, the saw dust was no longer being
7 used, was not visible.

8 Q. You didn't consider the saw dust a good
9 practice, did you?

10 A. That is correct.

11 Q. Okay.

12 A. The drip pans were maintained better,
13 such that they performed the function they were
14 intended to perform.

15 Q. Anything else?

16 A. I can't recall a specific.

17 They still had a way to go regarding
18 their wash water system. And there was still some
19 questions regarding the land disposal sites.

20 Q. Was that reflected at all in a memoranda
21 or was that in an oral report to you?

22 A. I certainly got a telephone report from
23 Mr. Graham. I think I recall a call report. If
24 not a call report, it was a letter from a Monsanto

1 person back to the plant. It is one of the two.

2 My mind is too fuzzy on just which one.

3 Q. Do you recall any recommendations by
4 Monsanto with respect to a carbon system for the
5 wash water?

6 A. The only recommendations I recall are
7 suggestions.

8 Q. Suggestions by Monsanto to?

9 A. By Monsanto, to Westinghouse people to
10 consider the possible use of carbon beds.

11 And we were willing, if we hadn't already
12 shared with them, to share with them some test
13 results we were getting at the Anniston plant
14 regarding carbon beds.

15 Q. Had you installed carbon beds at
16 Anniston?

17 A. No. We had a test unit in the
18 laboratory, testing feasibility.

19 Q. Do you recall any subsequent visits by
20 Monsanto personnel to check on pollution-control?

21 A. I don't recall specific dates.

22 Q. But there were further visits you say?

23 A. As best I recall, there was continuing
24 contact, yes.

1 Q. Were there continuing inspections to see
2 whether there was progress on their goal or a way
3 to go?

4 A. I believe so, yes.

5 Q. And were there reports on that progress
6 written up?

7 A. I do not remember the specific reports.

8 (The document above-referred to
9 was marked Bloomington Deposition
10 Exhibit No. 133 for identification.)

11 Q. Directing your attention to Exhibit 133,
12 which is a memorandum from Seifert to Kountz and
13 Papageorge.

14 Can you tell me who Seifert was?

15 A. Robert Seifert was a Monsanto engineer
16 working in Monsanto's corporate engineering
17 department, reporting to Robert Kountz, his
18 supervisor.

19 Q. And is it correct that this memo
20 basically concludes with successful incineration
21 of solid wastes?

22 A. Yes.

23 Q. By solid wastes, I mean solid wastes
24 contaminated with pcb's?

1 A. That's right.

2 Q. So that's consistent again with your
3 earlier testimony that solid waste incineration of
4 pcb contaminated materials was feasible or is
5 feasible?

6 A. That's right.

7 Q. Are you familiar with a paper by Ligett
8 and Vadden of Monsanto entitled "Askarels,
9 environmental pollution"?

10 A. Yes. We had a copy of it this morning.
11 It is one of the exhibits, I believe.

12 Q. I don't think so.

13 MR. FRUEHWALD: There is something in here,
14 but I don't think it was that. We have looked
15 through the statement of documents. That paper is
16 not amongst them.

17 MR. KARAGANIS: Our copy of the Ligett and
18 Vadden paper comes from Westinghouse and it is a
19 bad film copy. If you have a good copy, I would
20 appreciate a copy of it.

21 MR. FRUEHWALD: I have a good copy. I think
22 Mr. Papageorge was remembering that in this room
23 yesterday I showed him that document, so I think
24 that is maybe the connection he is making.

1 MR. KARAGANIS: Again I would reiterate my
2 request that the documents that Mr. Papageorge has
3 seen in preparation for a 30 (b) 6 deposition be
4 shown to us.

5 MR. FRUEHWALD: I hear you and my response is
6 the same.

7 MR. KARAGANIS: What is your response? You
8 said you would consider it or you are denying it
9 or refusing?

10 MR. FRUEHWALD: I am refusing at this time.

11 BY MR. KARAGANIS:

12 Q. Mr. Papageorge, directing your attention
13 to what has been marked as Exhibit 134, which is a
14 memorandum dated January 26, '71 from Randall
15 Graham to Papageorge, are you familiar with that
16 document?

17 A. Yes.

18 (The document above-referred to
19 was marked Bloomington Deposition
20 Exhibit No. 134 for identification.)

21 Q. And directing your attention to page 2,
22 with respect to the scrap, would you describe what
23 it says with respect to the Bloomington scrap?

24 A. Scrap?.

1 A. Underneath the designation Westinghouse,
2 Bloomington, there are six categories of scrap
3 listed. Number 1 is reclaimable, high purity,
4 shown as 9,900 gallons as liquid.

5 Under 2 is nonreclaimable, 3,300 gallons.
6 Number 3, Fuller's earth, listed under solids,
7 42,000 pounds.

8 Mr. Papageorge, my question is in terms
9 of available disposal techniques, this is a list
10 here with respect to Bloomington; does the
11 reclaimable mean that it can go through something
12 like the Findett process to be used again?

13 A. That is the way I would interpret that.
14 Yes.

15 Q. Nonreclaimable would be liquid for
16 storage and ultimate incineration, right?

17 A. Correct.

18 Q. And then as to the solids, you would
19 agree that on all of these solids you had
20 demonstrated the feasibility of solid incineration
21 technology, is that correct?

22 A. That's right.

23 Q. That even if you didn't incinerate, it
24 was improper to send solids, contaminated solids

1 to a typical municipal landfill, but should
2 instead go to a licensed industrial waste
3 landfill?

4 A. Yes.

5 Q. Were you ever informed prior to this
6 deposition today or prior to preparing for this
7 deposition today, that you, as the person in
8 charge of environmental control, pcb
9 contamination, had the authority or that the
10 company had the authority to cease supplying
11 product to Westinghouse, if they continued to leak
12 into the environment?

13 A. No.

14 Q. But you do acknowledge, having seen the
15 contract, that you did have such authority?

16 MR. FRUEHWALD: Let me interpose, that is a
17 legal question which I think even a 30 (b) 6
18 witness does not have to answer.

19 So I am going to impose an objection and
20 instruct the witness to not answer that question.

21 Whether the company had authority
22 pursuant to a contract is a legal matter.

23 MR. KARAGANIS: Forget what the legal
24 implications are.

1 Q. In layman's terms, were you ever told
2 that the company, Monsanto, had the authority to
3 cancel sales of pcb's if you, as head of pcb
4 environmental management, determined that
5 Westinghouse was not preventing the release into
6 the environment?

7 A. I was never told that. No.

8 Q. As a layman, having seen the document,
9 would it be your interpretation as a layman, not
10 as a lawyer, that that document, the contract,
11 gave you the authority to cease selling pcb's?

12 MR. FRUEHWALD: Okay.

13 I am going to interpose the objection.
14 His layman's opinion about a document of that
15 nature is irrelevant. It can only have legal
16 significance and as a result the question does not
17 need to be answered.

18 I will instruct him not to answer, a
19 layman's opinion as to that document.

20 MR. KARAGANIS: I would suggest to you that as
21 Texaco recently found out, and as this jury is
22 going to find out, that document is going to go to
23 the jury as to whether or not Monsanto had the
24 ability.

1 MR. FRUEHWALD: Indiana questions of contract
2 interpretation are for the court. We will see.

3 But at any rate, this witness is not
4 qualified to state opinions on that.

5 MR. KARAGANIS: Give me a 30 (b) 6 who is.

6 MR. FRUEHWALD: I am not going to give you any
7 witness who is going to testify about the legal
8 authorization of a document.

9 MR. KARAGANIS: You developed a contract
10 clause and you said you are the one who required
11 it to be in the contract. And we have sent you a
12 30 (b) 6 notice to tell us whose was there.

13 MR. FRUEHWALD: Tell us what?

14 MR. KARAGANIS: Who was there, who controlled,
15 had knowledge of, the sales practices, the
16 distribution practices, the disposal practices,
17 the pollution control practices.

18 That contract happens to be one of your
19 key pollution control practices. It is the heart
20 of your program.

21 MR. FRUEHWALD: In your opinion.

22 MR. KARAGANIS: Well --

23 MR. FRUEHWALD: That's not Mr. Papageorge's
24 opinion or necessarily the company's opinion.

1 MR. KARAGANIS: Okay.

2 It just happened to be and accidental
3 afterthought that somebody scribbled on a piece of
4 paper.

5 MR. FRUEHWALD: I am not here to argue about
6 these things, Joe. Mr. Papageorge is doing what
7 he can to do.

8 MR. KARAGANIS: I agree.

9 MR. FRUEHWALD: We can't bring witnesses in
10 minute by minute.

11 Cover what you you can with him. We will
12 see what is left. That was Monsanto, remember.
13 Don't get mad at me or Mr. Papageorge because he
14 doesn't know everything.

15 MR. KARAGANIS: I am not getting mad at Mr.
16 Papageorge. I will say I am more than a bit
17 surprised at the company's position that that
18 contract was not a significant part of its
19 program.

20 MR. FRUEHWALD: That may not be the company's
21 position. But it is not this witness' capability
22 to tell you that.

23 (A short recess was taken.)

24 BY MR. KARAGANIS:

1 Q. Mr. Papageorge, directing your attention
2 to what has been marked as Exhibit 63, Bloomington
3 Exhibit 63, are you familiar with that document?
4 This is the letter of April 5, 71 from Bergen to
5 Kelly.

6 A. I don't recall it.

7 Q. Directing your attention to the reference
8 in the second paragraph, "Enclosed for your
9 confidential information is an internal draft of
10 policies and procedures for environmental
11 compatibility."

12 Do you recall what those were?

13 A. No, I don't. I don't know what he is
14 referring to there.

15 MR. KARAGANIS: Again, I believe we have
16 requested these before, Mike.

17 MR. FRUEHWALD: I believe we looked and could
18 not determine what they were, or locate anything
19 that would fit that description. So I will make a
20 note that you have renewed the request, but I
21 believe we have looked and can't find anything
22 that fits that description, or that we can
23 identify to be the document referred to.

24 Your request is forever memorialized on

1 the exhibit.

2 MR. KARAGANIS: Yes.

3 (The document above-referred to
4 was marked Bloomington Deposition
5 Exhibit No. 135 for identification.)

6 Q. Directing you are the attention to what
7 has been marked as Exhibit No. 135. I would ask
8 if you have in your files a clean copy of the
9 Chemical Week, Exhibit 135, which is a Chemical
10 Week article from April 21, 1971?

11 Would it be fair to characterize your
12 work as that have a pollution cop?

13 A. Not if it means I had authority to arrest
14 anyone.

15 Q. Your job was to check on the Monsanto
16 customers to whom you were still selling pcb's to
17 make sure that their environmental control
18 practices were consistent with your policies;
19 isn't that right?

20 A. My job was to advise other Monsanto
21 people on how they in turn could relate to their
22 customers.

23 Q. And to see whether or not they were
24 releasing pcb's into the environment; isn't that

1 right?

2 A. I did not personally have to see it. I
3 worked through a team of people.

4 Q. All right.

5 But you were in charge of a team that was
6 checking to see whether the customers to whom you
7 continued to sell pcb's were releasing into the
8 environment, is that right?

9 A. I was not in charge of that team.

10 Q. You were part of the team; is that
11 correct?

12 A. Yes.

13 Q. Would it be fair to say that you were
14 part of a team at Monsanto whose job it was to see
15 whether or not the customers to whom you were
16 still selling pcb's were releasing pcb's into the
17 environment?

18 A. At unacceptable levels.

19 Q. And you have already agreed, have you
20 not, that pouring pcb's or allowing PCB's to leak
21 down the sewer was not an acceptable practice;
22 isn't that right?

23 A. That's right.

24 Q. You have already agreed that sending

1 liquid and/or solid pcb's to municipal landfills
2 or landfills that were based on sink holes or
3 fractured rock strata were not acceptable
4 practices; isn't that right?

5 A. That's right.

6 Q. Mr. Papageorge, do you have any knowledge
7 that the City of Bloomington allowed Westinghouse
8 and/or Monsanto to contaminate the Lemon Lane
9 landfill and/or the Winston Thomas sewage
10 treatment plant with pcb's?

11 A. I don't have personal knowledge, no.

12 Q. Do you have any knowledge that they so
13 allowed?

14 A. Knowledge of any facts that demonstrate
15 that the City of Bloomington allowed Monsanto
16 and/or Westinghouse to contaminate the Lemon Lane
17 landfill with pcb's.

18 I don't have any knowledge of that.

19 Q. Do you have any knowledge that the City
20 of Bloomington allowed Westinghouse and/or
21 Monsanto to contaminate the Winston Thomas sewage
22 treatment plant?

23 A. No.

24 Q. Do you have any knowledge that the City

1 of Bloomington was informed by Monsanto or
2 Westinghouse that the Lemon Lane landfill was
3 being contaminated with pcb's?

4 A. No.

5 Q. Do you have any knowledge that the City
6 of Bloomington was informed by Westinghouse prior
7 to late 1975 that it was contaminating the Winston
8 Thomas sewage treatment plant with pcb's?

9 A. No.

10 Q. Do you have any knowledge that any lack
11 of care by the City of Bloomington or its
12 employees contributed to or caused the
13 contamination of the Lemon Lane landfill?

14 A. No.

15 Q. Do you have any knowledge that lack of
16 care by the City of Bloomington or its employees
17 contributed in any way to the contamination of the
18 Winston Thomas sewage treatment plant?

19 A. No.

20 Q. Would it be fair to say that the control
21 program that has been described in your testimony
22 today was the control program you used from 1970
23 through the cessation of pcb manufacture in 1977?

24 A. Would you repeat the question?

1 Q. I will rephrase it.

2 We have described the control program
3 where you stopped selling pcb's to some
4 applications, and continued selling pcb's to
5 certain applications where you could control the
6 release of pcb's into the environment, through
7 collecting the liquids, preventing the liquids
8 from being released and making sure that the
9 solids were sent to licensed chemical waste
10 landfills; isn't that correct?

11 A. Right.

12 Q. Now, did that control program stay in
13 place from when it was announced in 1970 through
14 the cessation of pcb manufacture in 1977?

15 A. Yes.

16 Q. So basically you were requiring your
17 customers to follow this kind of procedure if they
18 wanted to continue to get pcb's; is that right?

19 A. I'm not aware of a requirement that they
20 met any kind of standards to continue getting
21 pcb's.

22 Q. I am talking about the procedures that we
23 have outlined. If they didn't follow those
24 procedures, you had announced a policy to the

1 nation that you weren't going to sell pcb's; isn't
2 that right?

3 A. No. We didn't announce that policy.

4 Q. Didn't you have a press release and a
5 letter to Congressman Ryan?

6 A. You show me a press release where it says
7 we won't sell unless they control. It says we
8 will sell where it is possible to control and
9 where we have evidence that efforts are being made
10 to control.

11 Q. So you are saying that the policy instead
12 of saying we won't sell unless there is control,
13 is we will sell if they can control and we will
14 continue to sell even if they don't control, is
15 that right? Was that Monsanto's policy?

16 A. No. We didn't say that either.

17 Q. Did you say that you wouldn't sell if
18 they failed to control?

19 A. We never said that.

20 Q. So did you say that you would sell even
21 though they didn't control?

22 A. No. That was left silent.

23 Q. It was left silent?

24 A. Yes, sir.

1 Q. So that as far as you were concerned, you
2 were announcing a policy to the Congressman Ryan
3 and the nation and the press release for the New
4 York Times that left silent the question if your
5 applications to which you were continuing to sell
6 continued releases to the environment, that they
7 could have eliminated, could have controlled, that
8 you were not announcing any policy with respect to
9 your sales?

10 A. We were not in the regulatory business.

11 Q. You don't know of the formation of the
12 contract or the discussions of the contract with
13 Westinghouse?

14 A. That is true.

15 Q. Would it be fair to say that -- strike
16 that.

17 Mr. Papageorge, do you have any knowledge
18 or information that pcb's do not cause cancer or
19 cannot cause it?

20 A. It is hard to prove the negatives.

21 Q. I asked the question to you.

22 Do you have any knowledge or information
23 that pcb's cannot cause cancer?

24 A. No one has. I don't have.

1 Q. All right.

2 Are you aware of any knowledge or
3 information that they do indeed or can cause
4 cancer?

5 A. I am aware of one study in which the
6 investigators reported they saw evidence of
7 cancer.

8 Q. What study is that?

9 A. It is the study conducted by Dr. Ranata
10 Kimbrough, who at that time was with the center
11 for disease control in Atlanta, Georgia.

12 Q. And was the finding of that study, that
13 the test with pcb's did show the potential for
14 causing cancer?

15 A. Yes.

16 Q. Would it be correct to say that in
17 studies of cancer, the potential cancer-causing
18 capabilities of chemicals, that animal studies are
19 regularly used because it is not proper to test
20 cancer-causing agents on humans?

21 A. That's right.

22 Q. So would it be fair to say that as a
23 basic scientific practice, we inject animals, test
24 animals, with suspected cancer-causing agents as a

1 proxy for injecting it into humans?

2 A. I don't know about the usefulness of the
3 word proxy. It is an indicator of potential.

4 Q. It is an indicator of cancer risk to
5 humans, is it not?

6 A. Of possible human cancer, yes.

7 Q. All right.

8 And we base our decisions as to whether
9 or not we allow a food product to go out and be
10 sold, whether we allow a drug to be sold, whether
11 we allow a chemical to be released into the
12 environment, based on animal studies, do we not?

13 MR. FRUEHWALD: Let me interpose an objection,
14 Who is the "we" you were referring to there? This
15 is no longer Monsanto.

16 BY MR. KARAGANIS:

17 Q. Are you aware when Monsanto puts a
18 chemical out into the environment, a new product,
19 it has to go through various product
20 registrations, does it not, whether it be a drug
21 or a new industrial chemical?

22 A. Yes.

23 Q. Is it correct that such chemicals are
24 tested on animals for their potential to cause

1 cancer in animals?

2 A. Yes.

3 Q. And is it correct that based on the
4 results of those animal tests, a decision is made
5 as to whether or not to allow human exposure to
6 those chemicals?

7 A. Yes.

8 Q. And is it not correct that one of the
9 reasons we do it with animals, is because we don't
10 want to test it with humans; isn't that right?

11 A. That's right.

12 Q. And that the animals are the best
13 alternative given the fact that the other
14 alternative is to test the chemical on a human
15 subject; isn't that right?

16 A. That is correct.

17 Q. Are you familiar with the indemnification
18 policy of Monsanto?

19 A. Yes.

20 Q. Can you describe the events that led to
21 that?

22 A. I am not familiar with the events that
23 led to it.

24 I am aware that beginning in 1972,

1 continued sale to the dielectric industry was
2 contingent upon the purchaser signing an
3 agreement, which was referred to as a special
4 undertaking.

5 I was not part of that group that
6 developed that.

7 Q. Who was part of the group that developed
8 that?

9 A. As best I can tell, it was Mr. Bergen,
10 Mr. Gossage, and several attorneys.

11 Q. The attorneys within Monsanto?

12 A. Monsanto.

13 Q. Who were they, to the best of your
14 knowledge?

15 A. I only know of one, John Stapleton. But
16 I understand others were involved.

17 (The document above-referred to
18 was marked Bloomington Deposition
19 Exhibit No. 136 for identification.)

20 Q. Directing your attention to what has been
21 marked as Exhibit No. 136, which is a memorandum
22 dated I believe July 22, 1971 from Benignus to
23 Curtis, that relates to a change in the askarel
24 inspection and maintenance guide, does it not?

1 A. Yes.

2 MR. KARAGANIS: Again, I have an outstanding
3 request for all versions of that guide.

4 MR. FRUEHWALD: As far as I know, you have
5 already got them, but I will check to see if there
6 are any more.

7 MR. KARAGANIS: I am specifically looking for
8 publication quality, so we can put them in as
9 exhibits. We would ask similarly for those listed
10 as warning labels, because we are going to be
11 putting in exhibits to the jury and we want them
12 to see what it looks like instead of a xerox.

13 Q. The group that you were a part of who
14 examined whether customers were controlling the
15 release of pcb's into the environment, did that
16 group ever compile any kind of an evaluation, good
17 plants versus bad plants?

18 A. No. There was no standard. Couldn't get
19 any.

20 Q. The question is, you can walk into a
21 plant and, as you say, a plant had a way to
22 demonstrate that it was releasing more than it
23 should; isn't that right?

24 A. No. It was releasing more than it had

1 to. It could control the rest.

2 Q. And isn't it correct that if it was
3 technically feasible to contain it, as opposed to
4 release it, it was your engineering and technical
5 position that it should be contained rather than
6 released?

7 A. Yes. But don't misunderstand. It was
8 never intended that there would be zero release.

9 Q. I didn't ask you that.

10 I asked you whether or not if it was
11 capable of being contained, that which could be
12 contained should be contained; is that correct?

13 A. That's correct.

14 Q. You walked in that plant in July of 1970
15 and saw material that could have been contained
16 going down the sewer; isn't that right?

17 A. Yes.

18 Q. From your engineering position and from
19 your official position with Monsanto, in terms of
20 this group, allowing that material to go down to
21 the sewer as opposed to containing that which
22 could be contained was against Monsanto policy,
23 isn't that correct?

24 A. It was against our recommendations.

1 Q. And, therefore, against your policy with
2 regard to sales; isn't that right?

3 A. You misunderstand, sir.

4 The policy says we will sell pcb's to
5 those applications that are controllable. It says
6 nothing about a specific plant or a specific
7 customer.

8 Q. Did you not have a program where you were
9 going to make specific customer inspections and
10 plant inspections and did you not, indeed, do so
11 with respect to Westinghouse?

12 A. No. Those were not inspections in the
13 light that I think you are thinking of. These
14 were inspections as an aid to a good customer, to
15 share with them what we had gone through and
16 perhaps they could use it. That was the intent.

17 Q. Just think carefully of this as your 30
18 (b) 6 answer.

19 If you had walked in and made a
20 determination on your first visit and your second
21 visit and your subsequent visits that Westinghouse
22 was not controlling pcb releases to the
23 environment to the extent they were capable of,
24 would that have been a satisfactory action by

1 Westinghouse?

2 A. No.

3 Q. Would you have reported that with
4 recommendations to your superiors?

5 A. Yes.

6 Q. Did you ever do so?

7 A. Yes.

8 Q. In what form and to whom?

9 A. It would go to Gossage, to the director
10 of marketing, or to Mr. Bergen, whoever happens to
11 be available.

12 Q. What exactly did you say to either of
13 those gentlemen?

14 A. I will try to remember a specific.

15 It was along the lines of this customer
16 is not doing all he can and appears to be
17 disinterested. We suggest that you take action.

18 Q. Did you do so with respect to the
19 Bloomington plant?

20 A. No.

21 Q. So you felt the Bloomington plant was
22 doing what it should be doing?

23 A. It was making progress.

24 Q. I didn't ask you that.

1 Did you feel the Bloomington plant was
2 doing what it should be doing with respect to
3 controlling that which it could control?

4 A. Yes.

5 Q. You did.

6 A. Because I don't know what technical
7 challenges they were facing. I don't know the
8 details of that operation.

9 All I got was reports that things were
10 improving, the attitude was good.

11 Q. Mr. Papageorge, you have said you went
12 through the plant once in July of 1970.

13 A. Right.

14 Q. You never came back?

15 A. That's right.

16 Q. So you knew what the plant did, the plant
17 dripped onto floors?

18 A. Yes.

19 Q. And it poured contaminated wash water
20 down the sewer, is that right?

21 A. Yes.

22 Q. Did you ever check as to whether or not
23 it reduced by putting treatment controls in of any
24 kind, reduced the amount of contamination it was

1 sending down the sewer?

2 A. Yes.

3 Q. Or controlled the amount of
4 contamination?

5 A. Yes, I had some numbers I could look at,
6 analytical results that were reported to me. And
7 I had frequent telephone calls from Randall
8 Graham. I had --

9 Q. I see.
10 Go ahead.

11 A. I had other indicators that that
12 particular site was improving. I heard nothing
13 that said they will not try.

14 Q. What specific indications did you have
15 that the site was reducing the amount of pcb's it
16 was putting down the sewer?

17 A. I remember, I don't remember the exact
18 dates, but I remember a report out of Monsanto's
19 laboratory that had analyzed some water samples.
20 And the amounts of pcb's reported were to me
21 acceptable.

22 They were in the parts per billion range,
23 as I remember.

24 Q. The parts per billion range.

1 What would be an acceptable level of
2 pcb's to you going down the sewer?

3 A. I don't know of an acceptable level.

4 Q. You said that they were to you
5 acceptable.

6 A. Parts per billion.

7 Q. Below the parts per million range?

8 A. Parts per billion.

9 Q. So they would be acceptable in parts per
10 billion but not in parts per million, is that
11 correct?

12 A. I would go along with that. Even though
13 the low parts per million would concern me.

14 Q. The low parts per million are several
15 thousand parts per billion, are they not?

16 A. Yes.

17 Q. We are talking, are we not, of a stream
18 standard that was ultimately adopted of .1 parts
19 per billion, are we not?

20 A. No.

21 Q. Discharge standard?

22 A. I am not aware of that.

23 Q. Are you familiar with the discharge
24 standard on the City of Bloomington's treatment

1 plant?

2 A. No, I am not.

3 Q. Established by state and federal
4 authority.

5 MR. FRUEHWALD: In what year, Joe, '78, '77,
6 after Mr. Papageorge has left this area; is that
7 what you are asking?

8 BY MR. KARAGANIS:

9 Q. Are you familiar with the fact that they
10 imposed a .1 parts per billion range?

11 A. No, in fact that is the first I have
12 heard of it.

13 That is an emotional number. It is not
14 based on facts.

15 Q. Are you familiar with the fact that you
16 could have put in a control system that would have
17 achieved 10 parts per billion?

18 MR. FRUEHWALD: At Westinghouse?

19 MR. KARAGANIS: At Westinghouse.

20 MR. FRUEHWALD: Do you represent that as a
21 fact? I am not familiar with that.

22 BY MR. KARAGANIS:

23 Q. Did you not discuss or did not Monsanto
24 representatives discuss putting in a control

1 system, a carbon system that would have resulted
2 in 10 parts per billion?

3 MR. FRUEHWALD: At what location.

4 MR. KARAGANIS: For the washing water on the
5 Westinghouse washing systems.

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

7 Q. Do you recall any Monsanto
8 representatives saying that?

9 A. No. I do not.

10 Q. Would you consider that to be a
11 reasonable number to expect off of a carbon filter
12 system?

13 A. Yes. But I don't remember that the
14 effluent from that plant could be treated with
15 carbon to that low a level. Because of the
16 presence of detergent in it. I don't know that it
17 could reach 10 parts per billion.

18 Q. Was it ever tested, the carbon?

19 A. I don't recall. I just don't remember.
20 I remember some centrifuge tests, but I don't
21 remember any carbon results.

22 Q. Who did the analysis as to what
23 Bloomington could achieve?

24 A. Could achieve?

1 Q. Yes.

2 A. I don't know that anybody analyzed
3 anything to determine what the plant could
4 achieve.

5 We analyzed samples sent to us and
6 reported back some numbers. I don't know where
7 those samples came from or whether they
8 represented a typical outfall or whether it was
9 treated or came from a laboratory experiment.

10 Q. But you considered, let me just say this,
11 you considered that what Bloomington achieved at
12 some point was acceptable to you; is that right?

13 A. I was not in the job at a point where
14 Bloomington said we are there or indicated that
15 they had finished. So I don't know what they
16 finally achieved.

17 All I know is that while I was involved,
18 they were making progress toward a lower and lower
19 effluent level. I don't know where they
20 ultimately ended up.

21 Q. Let me ask you as an engineer, Mr.
22 Papageorge, prior to the recycle program of
23 Monsanto being in place, you agreed, did you not,
24 that the liquid wastes had to be going one of

1 three places, down the sewer, to a landfill or off
2 to an oil reprocessor; is that right?

3 A. Yes.

4 Q. Is that a fair statement, an accurate
5 statement?

6 A. It had to go to one of those three, all
7 right.

8 Q. Now, would you agree that if it was going
9 down the sewer, it was not an acceptable practice?

10 A. That's right.

11 MR. FRUEHWALD: We have been through this
12 about a half dozen times today, Joe, the same
13 questions, the same answer.

14 MR. KARAGANIS: Okay. Just a second.

15 MR. FRUEHWALD: How many times can you say it?

16 BY MR. KARAGANIS:

17 Q. If the amount of Inerteen or pcb's that
18 went down the sewer were sufficient to cause
19 sludge concentrations from several hundred to
20 several thousand parts per million, would that be
21 an acceptable level of pcb's going down the sewer?

22 A. I would have to know how long that had
23 been going on, one-year accumulation or one-day
24 accumulation or twenty-year accumulation.

1 Q. Is it an acceptable phenomenon to have a
2 sludge lagoon that at the end of result of a
3 number of years has several thousand parts per
4 million pcb's in it? Is that environmentally
5 acceptable?

6 MR. FRUEHWALD: Acceptable?

7 MR. KARAGANIS: From an engineering
8 standpoint.

9 MR. FRUEHWALD: From an engineering
10 standpoint.

11 MR. KARAGANIS:) And an environment standpoint.

12 MR. FRUEHWALD: Is there such an engineering
13 standard of such matters? I don't know.

14 A. I don't feel qualified and I don't know
15 that anybody else can answer that for you.

16 You have to know what effect that is
17 having. Just presence alone is not a good
18 indicator. You would have to know what impact is
19 that having on the environment that it is
20 associated with.

21 BY MR. KARAGANIS:

22 Q. So it is all right to pour pcb's into any
23 location, as long as it is not having an effect on
24 the immediate environment, and you don't make a

1 decision as to not to put it in until it has a
2 demonstrated effect; is that right?

3 A. That is true of any chemical. That's
4 right.

5 Q. So you can keep pouring it in wherever
6 you pour it in as long as you don't find a
7 demonstrated effect immediately; is that right?

8 A. Well, you have to watch what you pour it
9 in. Because --

10 Q. Pouring it down the sewer?

11 A. Well, there you don't know where it is
12 going to end up.

13 Q. So it is not good to pour it down the
14 sewer?

15 A. But if you know where it is going to end
16 up and you know there is no impact, there is no
17 problem.

18 If I put pcb's in a steel tank, and it
19 stays there for eons, there is no problem. If I
20 put those pcb's in a natural clay formation, it is
21 the equivalent of that steel tank. There is no
22 problem. It is not going to go anywhere.

23 Q. But if you put pcb's in a fractured
24 geographic or geologic strata?

1 A. Then I introduce an unknown. I don't
2 know where it is going to go. Therefore, I don't
3 know what problem it is going to cause.
4 Therefore, I don't want to take that risk.

5 Q. So let me just say from an engineering
6 environmental standpoint, if you don't know where
7 it is going to go, it is improper to let it go out
8 in the environment; is that right?

9 A. That's right.

10 MR. KARAGANIS: I have no further questions.

11 MR. FRUEHWALD: Good.

12 (Whereupon the deposition was
13 recessed to June 26, 1986.)