

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
BEAUMONT DIVISION

CECIL SCOTT, ET AL

1

v.

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No. B-84-1103-CA

MONSANTO COMPANY

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VOLUME II

VIDEO DEPOSITION OF

WILLIAM PAPAGEORGE

May 20, 1987

1300 Post Oak Boulevard

Houston, Texas

Jerry Kelley, Court Reporter
Nell McCallum & Associates Inc.

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LAWYER'S NOTES

Page Line

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Volume 2 of the Videotape Deposition of
William Papageorge, taken on May 20, 1987, at 1300 Post
Oak Boulevard, Houston, Texas, between the hours of 9
a.m. and 5:15 a.m. before Jerry Kelley, CSR No. 2004 and
Notary Public in and for the State of Texas.

VIDEO OPERATOR: This is the continuing
deposition of Mr. William B. Papageorge. Today's date
is May 20th, 1987, and the time is approximately 8:54
a.m. The witness has previously been sworn under oath.

MR. LACEY:

Q Mr. Papageorge, I believe when we broke
yesterday evening we had discussed the cost of
production responsibilities that you had as the manager
of the Anniston, Alabama, plant that produced PCBs and
the relative understanding you had with regard to the
actual performance of PCBs in the marketplace in terms
of profitability, et cetera. I want to now turn to a
different topic. With regard to the production forces
at Anniston, Alabama, that work with PCBs, how were
those people provided with whatever protections you as

1 the plant manager and Monsanto generally thought were
2 necessary for them in their work with PCBs?

3 A They had unlimited and free access to any
4 safety equipment deemed appropriate for that -- for
5 their particular jobs. They were provided with
6 clothing, which included the proper footwear, gloves,
7 head cover, respirators, and, of course, the fire
8 extinguishers that are typical, harnesses which they
9 would attach to themselves if they entered vessels for
10 cleaning, and, as needed, they would also have access to
11 protective gear that was less permeable, for example, --
12 rubber-coated pants and jackets. I can't think of any
13 others at the moment.

14 Q Okay. Let me go back and see if I can
15 understand how all of this worked. First, when you say
16 they had free access to safety equipment, obviously they
17 could go and select anything that Monsanto made
18 available to them as they saw fit?

19 A Yes. It would either be in the immediate
20 vicinity or back in the storeroom.

21 Q Now, the clothing that was provided, was that
22 a Monsanto uniform that was provided?

23 A Yes.

24 Q Can you describe what that was? Was it a
25 jump suit or something like that that they put over

1 their street clothes or --

2 A No, at the Anniston plant it was a gray khaki
3 shirt and gray khaki trousers, a two-piece uniform.

4 Q And did all the employees at the plant have
5 that --

6 A Yes.

7 Q -- same uniform?

8 A All of the hourly-paid employees had that
9 particular uniform.

10 Q Was there anything different about the
11 uniforms for the PCB workers versus any other workers at
12 the plant?

13 A No.

14 Q How frequently were those uniforms provided?

15 A As needed. They were issued several sets of
16 clothing that were laundered. When the individual would
17 place them in the dirty laundry baskets and in their
18 lockers, they always had at least one clean set.

19 Q So that as the worker chose he could wear a
20 brand-new uniform each day or he could wear a uniform
21 for a week at a time if he wanted?

22 A Or as soon as it got dirty he could go
23 change, yes.

24 Q But that was totally within the worker's
25 discretion on what to do?

1 A There were times when the foreman or the
2 chief operator would tell them, "Go change your
3 clothes," when they observed too much material on them.

4 Q Okay. So on occasion, then, they would be
5 instructed to change clothing?

6 A Yes.

7 Q Now, with regard to the -- you said proper
8 footwear. What is the proper footwear?

9 A The normal footwear would consist of a
10 steel-toed, leather-top shoe or boot, or high-top shoe,
11 with an oil resistant sole. Some jobs, such as entering
12 a tank or a railroad tank car or tank wagon, where the
13 surface was oily, they would wear a bootee, which was an
14 oil-resistant overshoe over that leather shoe, or the
15 leather shoe would be removed and a more substantial
16 rubber boot would be used.

17 Q The bootees were designed to be oil
18 resistant?

19 A Yes.

20 Q And were those worn in all departments in the
21 plant?

22 A They were available to anyone.

23 Q No difference again between the PCB
24 department and any other department?

25 A The difference would be primarily in the

1 appropriateness of other types of footwear in other
2 locations in the plant.

3 Q Can you explain what you mean?

4 A There were available to some individuals the
5 more flimsy plastic vinyl like a Saran Wrap -- that's
6 exaggerating a little bit -- that could be put over
7 their shoes and tied for some operations, but that would
8 not be appropriate in PCBs, because it would not
9 withstand the effects of PCBs.

10 Q Would it eat it up?

11 A It would literally dissolve and disintegrate.

12 Q So in the PCB area you had a bootee that was
13 more substantial than supplied in at least some other
14 areas of the plant?

15 A Yes.

16 Q What about with regard to these shoes? Were
17 those supplied by Monsanto?

18 A Yes.

19 Q And were they left at the plant? In other
20 words, did people wear those to and from home?

21 A Some individuals wore them home.

22 Q That was the option of the worker?

23 A Correct.

24 Q With regard to the gloves you mentioned, what
25 sort of gloves were provided?

1 A I recall there were some that were the
2 ordinary canvas glove, white canvas gloves; there was
3 another type which was a white canvas glove that had
4 been coated with a plastic water resistant, oil
5 resistant coating; there was another type that was made
6 of a synthetic rubber, similar yet heavier than one
7 might describe surgical or hospital gloves; another type
8 would be the heavy -- it's a cloth interior with a black
9 synthetic rubber coating on the outside; there were
10 leather gloves, leather-palmed with canvas backs with
11 cuffs, canvas cuffs; and there were also all-leather --
12 gloves, some were wrist length and some were elbow
13 length.

14 Q And all of these would have been available in
15 the PCB department?

16 A They were available to employees of the PCB
17 department either in the unit or back at the storeroom.

18 Q Were there any particular types of gloves
19 that were required in the PCB department and others that
20 were considered inappropriate for that particular
21 department?

22 A The gloves that were required in that
23 department were the oil resistant, liquid resistant
24 types.

25 Q Okay. What I want to do is as we go through

1 the department I'm interested in what the PCB people
2 would have had and what they would have been wearing,
3 not what other sections of the plant might be wearing.
4 For example, to make it very clear, if it would have
5 been acceptable to the plant for certain departments to
6 wear these white canvas gloves that were not oil
7 resistant but would have been unacceptable in the PCB
8 department to wear them, I want to be able to tell the
9 distinction between the two.

10 A Well, I don't want to mislead. There are
11 circumstances in the department where, for example, a
12 maintenance man may arrive in the department to work on
13 an instrument. He can safely use a canvas glove. He is
14 in the PCB environment. Later another mechanic may show
15 up and he must work on another piece of equipment. He
16 may use the leather glove.

17 Further, a third mechanic may arrive, but he
18 must use the oil resistant type, because when he does
19 his work he's going to be exposed to the liquids, the
20 chemicals. So it depends not only on the department but
21 the circumstances.

22 Q Okay. Well, if I'm clear, then, whenever
23 anybody would be doing work where but for the glove
24 covering their hands they might come into contact with
25 PCBs, they were required to wear the oil resistant

1 gloves to keep the PCBs from contacting their skin.

2 A Certainly, yes.

3 Q Okay. And with regard to the clothing that
4 was issued, was that also true that if they were doing a
5 job where PCBs might come into contact with their
6 clothing that is when they would then wear the
7 rubber-coated clothing that would keep the PCBs from
8 coming into contact with their regular clothing?

9 A Yes.

10 Q And with regard to their footwear, if they
11 were doing a job where their shoe or any part of it —
12 might come into contact with PCB oils, is that where
13 they were required to wear these oil resistant bootees
14 or rubber boots?

15 A Yes.

16 Q Tell me about the head covering.

17 A At that point in time it was permissible to
18 wear a soft cover, a cap with a beak or whatever seemed
19 to please the individual. We supplied those with the
20 beaks.

21 Q Something like one of these gimme caps?

22 A Yes.

23 Q Okay.

24 A There were, however, available, and some
25 employees preferred, the hardtop, the helmet-type. So

1 both were permissible in the unit at that time.

2 Q If the employee were going to be in a job
3 where PCB oils might contact them on the head, were they
4 required to wear a type of head cover that would keep
5 the oils from coming into contact with the skin?

6 A Yes, there were rubber-coated skull caps that
7 could be used. And should be used.

8 Q If there was any possibility of the oils
9 contacting the skin?

10 A Yes.

11 Q Did you have available in the PCB department
12 materials that employees could put on the portions of
13 their skin that they could not cover with some type of
14 rubberized material in order to protect from the
15 possibility of PCB exposure to the skin?

16 A It was available.

17 Q And what was this material that was
18 available?

19 A I don't recall the trade name. It was a
20 lotion, skin lotion that repelled most oils for limited
21 periods of time.

22 Q The purpose or the way you use that is if you
23 thought you might have exposed skin that would come into
24 contact with PCBs, you would put the lotion on.

25 A Yes.

1 Q So that it would keep the oils from soaking
2 into the skin, then you remove both the lotion and the
3 oils that got on it at the same time?

4 A That was the intent, yes.

5 Q And that was made available by Monsanto to
6 its employees in the PCB department?

7 A Yes.

8 Q You don't recall any trade names of the
9 lotion?

10 A I don't recall trade names. I recall there
11 was a silicon base skin cream.

12 Q Then with regard to respirators, those
13 were -- did each employee have a respirator issued to
14 him in the PCB department?

15 A Yes.

16 Q Did he have that in his locker? Or how would
17 they keep it if they were not using it?

18 A Some would keep it in their personal lockers
19 back in the change area; some would keep it in the
20 smaller locker they had in the control room associated
21 with the production area.

22 Q What steps did you as the plant manager take
23 to ensure that the employees in the PCB department
24 always wore the necessary protective equipment to keep
25 them from being exposed to PCB materials?

1 A I personally would make spot-checks when I
2 was aware that a particular activity was to be
3 performed. I would visit the area and make my personal
4 observations. But for the constant surveillance, I
5 relied on the supervisor, the superintendent, the
6 supervisor and the foreman, as well as the chief
7 operators. All of us had responsibilities in this area.

8 Q You recognized, I take it, that it was
9 important to have some mechanism in place to ensure that
10 individual workmen actually used the protective
11 equipment in order to protect themselves?

12 A Certainly.

13 Q And you viewed that as part of your job?

14 A Yes.

15 Q It was not sufficient to you to simply say,
16 I've made the materials available to the people to
17 protect themselves, and whether they use them or not is
18 not my concern?

19 A That's not sufficient, you are right.

20 Q Okay. Is it your opinion that during the
21 time that you were the plant manager at the Anniston,
22 Alabama, plant you were generally successful in
23 enforcing the rules so that workers in the PCB unit were
24 not exposed to PCBs?

25 A Yes.

1 Q Can you recall any instances where your
2 workers were actually exposed to PCBs -- and by that I
3 mean where they had them, for example, come into contact
4 with their unprotected skin, no barrier creams, no
5 rubberized clothing to keep it out.

6 A In the five years I spent there, I recall
7 vividly only one incident.

8 Q Tell me about that one incident.

9 A One of the long-time employees, chief
10 operator, working alone on the night shift, apparently
11 was -- in a moment of poor judgment decided to perform-
12 some duties loading up a tank car with PCBs, did not
13 wear his gloves, and he sheepishly confessed to me the
14 following day or so, after he had gone to see the doctor
15 with severely reddened skin on his hands and admitted
16 that he should have worn gloves but the job was dirtier
17 than he thought it would be and he didn't get around to
18 washing his hands soon enough. That is the only
19 incident I personally -- I saw the hands and I recall
20 the incident vividly.

21 Q Was it your practice to require incidents
22 like that to be reported to you?

23 A Yes.

24 Q Did you take any disciplinary action against
25 this employee?

1 A No.

2 Q If you had repeated problems of a particular
3 employee who constantly ignored work safety rules, would
4 you have taken disciplinary action?

5 A I think before I discipline I would attempt
6 to retrain, recoach, and follow up with -- have the
7 foreman follow-up. And if it continued, then I would be
8 forced to some more severe action.

9 Q You as the plant manager had the authority to
10 take action to enforce the work safety rules?

11 A Oh, certainly. The foreman did, too.

12 Q I understand. But I mean up the line
13 eventually you were the person with the ultimate
14 responsibility?

15 A Yes.

16 Q Did that -- within the Monsanto organization,
17 did that authority reach to the point of even
18 terminating an employee who habitually ignored safety
19 rules?

20 A It could.

21 Q That was within the scope of your power?

22 A Yes.

23 Q And was the Monsanto safety program such that
24 employees knew that if they habitually violated work
25 rules they could be terminated?

1 A Yes.

2 Q Frequently reminded of that?

3 A Yes.

4 Q And did you frequently ensure that your
5 supervisors reminded employees of the reasons behind the
6 work rules, that is, the personal precautions were there
7 for a purpose?

8 A Yes.

9 Q So that it was brought home to the employees
10 that these work rules were not just unnecessary rules
11 and regulations, but designed for their personal
12 protection?

13 A Yes.

14 Q And as plant manager did -- as plant manager
15 did you feel that constantly reminding the employees of
16 the reason behind the work rules and the adverse things
17 that could happen to them personally if they ignored
18 them helped to ensure that they were generally followed?

19 A Yes.

20 Q Was it a safety practice that if someone,
21 despite all your efforts to keep them from coming into
22 physical contact with PCBs, actually came into physical
23 contact with PCBs that they were to be washed off
24 immediately?

25 A I don't know that I can properly use the

1 expression "immediately." Depending on the
2 circumstances. If the employee could postpone what he's
3 doing, permitting him to wash, that was strongly
4 suggested. If, however, there was an emergency kind of
5 situation, where certain actions must take place before
6 the worker can walk away from the scene, then there
7 could be a lapse of time without any harmful effect. So
8 it was not immediate as, say, an acid burn.

9 Q You wouldn't expect -- I take it what you're
10 saying is you wouldn't expect if an employee spilled
11 some PCBs on his skin to leave a valve open and let a
12 tank load run out on the ground.

13 A That is correct.

14 Q You would expect him to take the time to
15 close the valve and then go wash promptly?

16 A That is correct.

17 Q Were showers provided in the PCB area of the
18 plant? Or would the employee have to go all the way
19 back to the shower area of the plant to take a shower?

20 A The showers for cleansing were back in the
21 shower change room.

22 Q Okay.

23 A Not in the immediate working area.

24 Q Okay. So there was no water or shower
25 available to wash off PCBs in the work area?

1 A Oh, there were washbasins for hands and faces
2 and small wash areas. But not for complete body shower.

3 Q Okay. So if an employee got it on his hands
4 there would be a place to wash off and appropriate soaps
5 available right there in the unit?

6 A Yes.

7 Q And the instructions were to wash as soon as
8 possible without creating an emergency situation?

9 A That is correct.

10 Q And I take it in this case of this one
11 employee you've described for me he didn't follow
12 through on those instructions.

13 A That is correct.

14 Q And as a result he had some problem develop?

15 A Yes.

16 Q Okay. But that's the only incident you are
17 aware of in five years as plant manager?

18 A Yes.

19 Q Were you generally aware of any significant
20 exposure by your employees to PCBs?

21 A If it had occurred, I would have been.

22 Q That's what I'm -- it's not likely that there
23 would have been a hundred such incidents and you only
24 learned about one, is it?

25 A You're correct.

1 Q And I guess summing that up out of the -- let
2 me see if I can figure this out. You had approximately
3 30 to 40 employees in the PCB area when you came to the
4 plant, you had approximately 50 PCB employees when you
5 left the plant. So you've got somewhere on the average
6 of, say, 40 employees over five years working in the PCB
7 area. Correct?

8 A That is an approximation, yes.

9 Q And out of that group of 40 employees no more
10 than one or two would have had any exposure to PCBs
11 during the five years that you were at the plant because
12 of the protective equipment provided by Monsanto?

13 A I can't honestly say no exposure.

14 Q Okay.

15 A If there was exposure, it was low, and the
16 equipment and facilities available to them diminished
17 any effects of any exposure that might have taken place.

18 Q Let me ask it another way. We know of one
19 incident of an exposure that occurred beyond what would
20 be permitted by applying all the work rules.

21 A Correct.

22 Q So out of that 40 or so employees on average
23 over that five years we have one who had an exposure
24 greater than what could be obtained by observing all the
25 work rules?

1 A Correct.

2 Q And that was a one-time event. Correct?

3 A Correct.

4 Q How long did that employee tell you that the
5 PCBs had remained on his skin before they were removed?

6 A I don't recall that he told me any time
7 period.

8 Q Okay. You indicated he told you that they
9 stayed on the skin longer than they should have.

10 A Well, of course, I don't recall the exact
11 words, but the effect was that he admitted he knew —
12 better, he just didn't get around to washing his hands
13 in time. And sure enough, they became red.

14 Q Okay.

15 A That's all I really remember about the
16 conversation.

17 Q The exposure lasted less than seven or eight
18 hours, I take it.

19 A That is true, yes. One shift.

20 — Q And what you can tell me about all of that is
21 that you're not aware, with the exception of this one
22 employee who was exposed and had some skin irritation,
23 of any employee at the plant that you know of who had
24 any health problems at all because of working around
25 with PCBs.

1 A Yes.

2 Q And I guess the same -- what you can tell me
3 also is the only employee that you do know who had any
4 exposure to PCBs beyond what would occur with all this
5 protective equipment had some skin irritation.

6 A Yes.

7 Q What particular PCB product was this employee
8 working with?

9 A I've forgotten.

10 Q Was it a pure PCB product?

11 A It was one of the liquids, yes.

12 Q And by that I mean it wasn't a blended
13 product like a Pydraul or anything?

14 A That I don't know.

15 Q Okay. You only know that the product
16 contained PCBs?

17 A Correct.

18 Q And it was being loaded into or out of a
19 railroad tank car?

20 — A Into.

21 Q Was that a customary method by which PCB
22 materials were shipped?

23 A It was one of three methods.

24 Q I guess what I'm trying to find out is
25 whether it was a relatively rare occasion to ship PCBs

1 by railroad tank car or whether that was a relatively
2 common occurrence.

3 A It was common.

4 Q What percentage of the PCBs shipped out of
5 the plant would have gone by railroad tank car?

6 A I don't recall exactly. I would estimate
7 half of them.

8 Q Okay. And we're talking in terms of quantity
9 at this point?

10 A Yes.

11 Q The other means -- another means of shipment
12 was by a tank truck?

13 A Occasionally.

14 Q What percentage of the PCBs would have left
15 the plant by means of tank truck?

16 A Oh, five percent.

17 Q And that leaves roughly 45 percent or so,
18 give or take some percentage for margin of error, that
19 left in some other type of container?

20 A Yes.

21 Q What sort of containers were used for the
22 remaining PCBs that were shipped out of the plant?

23 A There were -- they were in every case steel
24 containers, a five-gallon pail, a 32-gallon drum and a
25 55-gallon drum.

1 Q Was it mandatory that your workers take a
2 shower at the end of each shift in the PCB department?

3 A No.

4 Q Were workers given paid time in which to take
5 a shower at the end of the shift?

6 A No.

7 Q And I take it, then, nobody would have
8 attempted to require workers to take a shower at the end
9 of the shift.

10 A I don't understand the question.

11 Q Okay. Let me -- if workers were paid for 10
12 or 20 minutes to take a shower and it was mandatory they
13 do so, then someone might attempt to enforce that rule
14 instead of letting them just leave 20 minutes early and
15 not take the shower. What I'm getting at is, you didn't
16 have -- you didn't have a mandatory requirement that
17 they take showers before they left, you didn't give them
18 paid time, and so nobody tried to enforce any
19 recommendation that they take showers before they leave.
20 Is that correct?

21 A That is correct. Now, the possibility
22 existed, and I don't know how many, where an individual
23 might get material on him near the end of his shift. At
24 that point it was mandatory, wash up. At that point he
25 would wash up and we would pay the man overtime.

1 Q So that if someone did get any material on
2 them, they would then be paid for taking a shower,
3 including overtime, if that were necessary?

4 A Correct.

5 Q In the locker room area of the plant the
6 employee, I take it, would wear his street clothes to
7 work.

8 A Yes.

9 Q Change into the company-supplied uniform at
10 the beginning of the day.

11 A Yes.

12 Q At the end of the day he would change out of
13 his company-supplied uniform and back into his street
14 clothes and go home?

15 A Most employees.

16 Q What did some employees do?

17 A Some wore their work clothes home.

18 Q Oh, okay. So some employees would actually
19 wear the work clothes to work and not have to make the
20 change in the locker room, and then wear them back home?

21 A Some would do that, yes.

22 Q Was that permissible?

23 A As long as the garment hadn't been
24 contaminated.

25 Q Would it have been permissible for an

1 employee to wear home a work garment supplied by
2 Monsanto that had any PCB product on it whatsoever?

3 A No.

4 Q These employees who wore the uniforms home,
5 would they launder them at home themselves?

6 A What they did at home I don't know. We
7 encouraged them to return it because the laundering was
8 no cost to them. I have no way of knowing if they did
9 any laundering at home.

10 Q There was a financial incentive to have it
11 laundered by the plant, but not a requirement?

12 A Certainly.

13 Q Were the workers provided with
14 company-supplied underclothing?

15 A No.

16 Q Did each worker have one locker in the change
17 area?

18 A Yes.

19 Q So he would come in at the beginning of the
20 day and there would be a locker containing his work
21 clothing. He would change into his street clothes and
22 put his street clothes into that locker and get his work
23 clothing and put it on. When he came back, he would put
24 his work clothes back in the same locker out of which he
25 took his street clothes to go home?

1 A Yes.

2 Q Was the PCB department labeled as a toxic
3 department at the Anniston, Alabama, plant?

4 A No.

5 Q Did you ever visit the PCB production unit at
6 the Krummrich plant in Sauget or East St. Louis,
7 Illinois?

8 A Yes.

9 Q What differences existed between those two
10 departments with regard to work practices?

11 A I don't know that there were any basic
12 differences. There were differences in types of
13 clothing, for example. The Krummrich plant employees
14 had the single-piece coverall jumper-suit type. As far
15 as their operating practices and the objectives, they
16 were, as far as I could tell, identical or similar.

17 Q The PCB department at the Krummrich plant was
18 a toxic department, was it not?

19 A No. I don't know what you mean by toxic
20 department.

21 Q I see.

22 A There is no such terminology in Monsanto.

23 Q Okay. The employees at the Krummrich plant
24 were permitted paid time to take a shower at the end of
25 each shift, were they not?

1 A Yes.

2 Q As far as the PCB employees went. Is that
3 correct?

4 A No. This was a negotiated labor union
5 contract with the management of the plant for --

6 Q I see.

7 A -- as best I remember, all employees at the
8 plant. All members of the union.

9 Q And employees were required to take those
10 showers before leaving the plant if they were PCB
11 employees, were they not?

12 A That's a condition of being paid for having
13 time -- paid time to do so, yes.

14 Q Well, they were required to take the showers
15 if they worked in the PCB department, were they not?

16 A No different than the whole plant.

17 Q I see. In your view, the differences between
18 the shower arrangement at the Krummrich plant and at the
19 Anniston plant had nothing to do with safety whatsoever.
20 Is that correct?

21 MR. HALL: Would you read that back to me,
22 please?

23 [The record was read as requested]

24 A When you say nothing whatsoever, the concept
25 of showering was safety based, but it was negotiated

1 between the union and the management. So there was a
2 safety element in this discussion.

3 MR. LACEY:

4 zzz Q Was the safer practice the one at the
5 Krummrich plant?

6 A If you measure safety by results, I would say
7 the results being equivalent, then the practice could
8 not be described as safer.

9 Q So in your opinion it was no safer to require
10 each employee to shower at the end of the shift than to
11 leave that entirely up to their discretion?

12 A That is correct.

13 Q Okay. Did the employees at the Krummrich
14 plant have the same rubberized gloves for working with
15 PCBs, rubberized shoe coverings, rubberized head
16 coverings and the like?

17 A Yes.

18 Q So that the possibility of an employee at the
19 Krummrich plant coming into contact with PCBs was no
20 greater than the possibility of an employee at the
21 Anniston plant coming into contact with PCBs. Is that
22 correct?

23 A That is correct.

24 Q And I suppose to the extent that -- one more
25 question. Did the employees at the Krummrich plant also

1 have available to them these lotions or creams that they
2 could put on their unexposed -- or on their exposed skin
3 in order to keep PCBs from getting to the skin and being
4 absorbed?

5 A Yes.

6 Q So, then, the level of protection at the
7 Krummrich plant was fully as great as the level of
8 protection at the Anniston plant?

9 A Yes.

10 Q And possibly the exposure at the Krummrich
11 plant might be lessened to the extent that there's some
12 unnoticed quantities of PCBs that got on the skin at the
13 Krummrich plant, those would be washed off in the
14 mandatory shower, whereas in the Anniston plant they
15 might not be. Is that correct?

16 A It's only correct if you assume that the
17 Anniston employees did not shower at the end of the
18 shift.

19 Q Right. But to the extent that there was no
20 requirement that the people at Anniston shower at the
21 end of each shift. Correct?

22 A That is correct.

23 Q No financial incentive to shower at the end
24 of each shift.

25 A That is correct.

1 Q Whereas at the Krummrich plant showers were
2 supposed to be taken at the end of each shift. Correct?

3 A Correct.

4 Q There was a financial incentive to take
5 showers at the end of each shift.

6 A Correct.

7 Q The fact of the matter is that more people at
8 the Krummrich plant took showers at the end of each
9 shift than at the Anniston plant.

10 A I don't know that.

11 Q Well -- I see. You don't know, then --
12 strike that.

13 What percentage of the PCB workers at the
14 Anniston plant took showers at the end of each shift?

15 A I don't know.

16 Q I see. And you don't know anything about the
17 Krummrich plant results either?

18 A I don't know.

19 Q Okay. So it is possible, as far as you know,
20 that every Monsanto employee in a PCB section of the
21 Krummrich and the Anniston plants shower at the end of
22 each shift?

23 A That is possible.

24 Q Okay.

25 A And so is the reverse.

1 Q That none of the employees showered at the
2 end of each shift?

3 A Just went home.

4 Q If that were true at the Anniston plant,
5 there would be no financial repercussions from that,
6 would there?

7 A True.

8 Q If that happened at the Krummrich plant, each
9 employee would wind up losing an hour and 45 minutes or
10 so of paid time every week off his check.

11 A If he left early.

12 Q Or if he didn't shower.

13 A It would have to be somebody monitoring the
14 shower room, which was not done.

15 Q I see. So the time was provided, but nobody
16 actually made any efforts to ensure that the showers
17 were taken?

18 A That is correct.

19 Q Okay. Did you ever propose that the
20 employees in the Anniston, Alabama, plant be given paid
21 time within which to shower at the end of each shift?

22 A I have a vague recollection of the subject
23 being discussed at one of the contract negotiations
24 along with many other items. And as best I recall, that
25 particular suggestion was immediately rejected by the

1 union representatives and did not get serious
2 consideration.

3 Q I didn't ask my question quite the way I
4 intended to, I guess, because that wasn't what I was
5 asking. I was asking whether you as the plant manager
6 recommended to Monsanto that they provide paid showers
7 at the end of each shift as a safety matter to employees
8 without regard to having the union have to negotiate it
9 with you.

10 A Well, I -- in order to bring this up during
11 negotiations, I certainly had the thought initially and
12 cleared it with Monsanto, as you described it, as an
13 appropriate item.

14 Q Let me ask it a different way still. I'm
15 not -- would you have had -- maybe it's a matter I don't
16 understand how it worked. Let's assume we're in the
17 middle of the union contract period and the employees
18 are under obligation to work eight hours a day and get
19 paid so much per hour. Right?

20 A Yes.

21 Q Could you have said, instead of actually
22 working eight hours, I'm only going to ask you to work
23 seven hours and 40 minutes and provide 20 minutes of
24 paid time for you to go take a shower at the end of the
25 shift and I want you to do that?

1 A That's impractical. In the first place, I'm
2 violating the contract, second place, I don't have
3 workers standing at the gate to fill in the jobs that
4 the men have vacated to go to the showers. It's a very
5 complex agreement that has to be worked out to do the
6 thing you are proposing.

7 Q Okay. And at some point you proposed that
8 showers be provided? And a time for showers be
9 provided?

10 A Pay for shower time. Which meant the
11 employee completes his duties, is properly replaced, and
12 then is showering on his own time for some remuneration.

13 Q I see.

14 A It is not part of the eight-hour work shift.

15 Q I see. That's -- that would be overtime
16 showering?

17 A That's why the remuneration comes into
18 discussion.

19 Q Okay. I see. Was that the way the showering
20 was at the Krummrich plant, overtime showering?

21 A Yes.

22 Q And were the employees paid overtime for
23 showering?

24 A They were paid a -- an amount, not equal to
25 the normal overtime. Because that's another complex set

1 of rules.

2 Q Were they paid their normal hourly rate for
3 showering?

4 A I've forgotten. It's a little bit more, but
5 it's not quite the same as though staying over to
6 complete a job and being guaranteed four hours pay for
7 15 minutes of work or any such --

8 Q Okay. Let me try to -- let me try to sort
9 this out. Were they paid time and a half for the -- at
10 the time and a half rate for the number of minutes that
11 they showered, they had to shower?

12 A I forget the details, but that sounds like
13 very close to what I recall.

14 Q Okay. And your recollection is that you, in
15 negotiations with the union in Anniston, offered as an
16 additional benefit the opportunity for employees to
17 shower and get their overtime rate of pay for that, and
18 the union rejected that proposal?

19 A Yes.

20 Q Okay. Do you recall when that proposal was
21 made?

22 A I'm not certain. 1966, 1967.

23 Q Relatively early in your career as plant
24 manager at Anniston?

25 A Yes.

1 Q How often did you visit the PCB production
2 facilities at the Krummrich plant?

3 A As I recall, once while I was working at the
4 Krummrich plant and about three or four times after I
5 became the manager, environmental control.

6 Q So you would have visited once prior to 1966
7 and then approximately four times after 1970?

8 A Correct.

9 Q How many employees were employed in the PCB
10 department at the Krummrich plant?

11 A I don't know that I ever knew that. I don't
12 know.

13 Q Do you know in terms of generalities how it
14 compared with Anniston? Was it much lower than Anniston
15 or much larger or you just don't have any idea of the
16 scale at all?

17 A I would suggest it's very close to the same
18 population.

19 Q Did both of those plants run three shifts a
20 day?

21 A Yes.

22 Q Seven days a week?

23 A Yes.

24 Q Did people from the corporate medical
25 department ever come to the Anniston plant and review

1 the industrial hygiene and worker safety practices in
2 the PCB department at Anniston?

3 A Yes.

4 Q Were they familiar with the practices being
5 followed in the Anniston, Alabama, plant?

6 A Yes.

7 Q How frequently would people from the
8 industrial hygiene group at the medical department come
9 and visit your plant and review the safety practices and
10 the workers' safety?

11 A Well, the industrial hygiene representative--
12 would come about once a year. And Dr. Kelly would come
13 about once a year.

14 Q Those were separate visits?

15 A Yes.

16 Q Did industrial hygiene representatives of the
17 medical department visit other plants the same way they
18 visited the Anniston plant?

19 A I can't speak for him. I don't know what his
20 schedule for visits was based on.

21 Q Well, I guess what I'm trying to find out is
22 you were at the Queeny plant. Did the industrial
23 hygienist ever go to the Queeny plant?

24 A Yes.

25 Q You were at the Krummrich plant. Did the

1 industrial hygienist ever go to the Krummrich plant?

2 A Yes.

3 Q Okay. It wasn't just the Anniston plant that
4 got a visit from the industrial hygienist from time to
5 time?

6 A That is correct.

7 Q Did the industrial hygienist group there
8 include Mr. Wheeler?

9 A I personally did not associate Mr. Wheeler
10 with industrial hygiene.

11 Q I see.

12 A He could have done some of this. Well, let
13 me correct that. Mr. Wheeler served as a backup for Mr.
14 Garrett, who was the industrial hygiene representative.
15 When Mr. Garrett would be out of the office or
16 vacationing or ill, Mr. Wheeler would perform some of
17 those duties. Other than that I don't know what else
18 Mr. Wheeler did in industrial hygiene.

19 Q Mr. Garrett reported to Mr. Wheeler, did he
20 not?

21 A Yes.

22 Q So that at least as you understood it Mr.
23 Wheeler had supervisory responsibilities for industrial
24 hygiene at Monsanto?

25 A Yes.

1 Q Would have been responsible for knowing what
2 the work practices were and calling for changes if he
3 felt they were necessary?

4 A Yes.

5 Q Did Mr. Wheeler or Mr. Garrett ever advise
6 you of any changes in the work practices that they
7 recommended with regard to the PCB department at
8 Anniston?

9 A No.

10 Q Do you know whether or not they ever
11 recommended any changes in the work practices in the PCB
12 department at the Krummrich plant?

13 A Not to my knowledge. I don't know.

14 Q Do you know whether or not Mr. Wheeler and/or
15 Mr. Garrett thought there were any significant
16 differences between -- from an industrial hygiene
17 standpoint between the work practices at the Anniston,
18 Alabama, plant in the PCB department and the Krummrich
19 plant in the PCB department?

20 A I do not know.

21 Q Okay. Those were matters that would have to
22 be addressed to one of the company's industrial hygiene
23 people?

24 A Well, it would have to be answered by the
25 individuals, Mr. Garrett and Mr. Wheeler.

1 Q That's what I'm getting at. Industrial
2 hygiene at Monsanto was a matter that was in the
3 province of the medical department and the industrial
4 hygienists there?

5 A Correct.

6 Q And what the company's view, so to speak,
7 from the industrial hygiene perspective is a matter
8 industrial hygienists would have to speak to?

9 A Yes.

10 Q Not you?

11 A That's correct.

12 Q And you never held a position where you
13 became a technical spokesman on industrial hygiene on
14 behalf of the company. Correct?

15 A I don't know your definition of technical
16 spokesman.

17 Q Well, you're not trained as an industrial
18 hygienist?

19 A That is true.

20 Q Okay. Industrial hygiene is an area of some
21 room for training and experience. Correct?

22 A Yes.

23 Q And I'm just trying to find out if as between
24 you and a person who has been trained in that area the
25 person who has been trained in that area is more

1 qualified to speak on it.

2 A True.

3 Q Okay. That's all I wanted to make sure.
4 I've had a chance to talk with Mr. Wheeler, and I just
5 wanted to make sure that I can look to him as an
6 appropriate person for industrial hygiene and I don't
7 have to ask you all the questions I asked him about
8 industrial hygiene.

9 A All right.

10 Q Now, in terms of having any contact outside
11 of Monsanto itself with regard to PCBs, when was the --
12 first time that you had any contact with anybody outside
13 of Monsanto itself with regard to PCBs?

14 A I am having difficulty recalling the timing.
15 But in terms of PCBs and someone other than Monsanto, my
16 first contact was with General Electric people who
17 arrived at the Anniston plant, as best I remember, in --
18 shortly after I reported there. So it would have to be
19 early 1965.

20 Q What were these people coming to the Anniston
21 plant for?

22 A It had been a practice of the General
23 Electric Company to have a regular and continuing
24 relationship with the Anniston plant in the supplying of
25 the PCBs to General Electric facilities. And as I

1 recall, this was just one of many trips that were made,
2 not so much on a regular schedule but fairly frequent
3 schedule. And the discussions were centered around
4 quality of product, shipping, meeting shipping
5 schedules, condition of the railroad cars as they were
6 placed in service, new formulations that General
7 Electric might be considering, and an interchange on
8 technology on both parties, the General Electric people
9 on what new was taking place in the design of their
10 equipment, and Monsanto in what new processing
11 techniques were the research people considering. That--
12 type of discussion.

13 Q Was the Anniston plant the primary supplier
14 for GE with regard to PCBs?

15 A It depends on the point in time. In the
16 earlier years, yes. But later, in about the time I was
17 at the Anniston plant, the Krummrich plant became the --
18 an equal supplier. It evolved into an equal supplier.

19 Q The reason for my question is just trying to
20 understand why they would come to Anniston, Alabama, as
21 opposed to going to the St. Louis, Missouri, area.

22 A Oh, I didn't mean to imply that they did not
23 go to the Missouri plant -- the Illinois plant.

24 Q Do you know whether they did or not?

25 A I know that they arrived in St. Louis, across

1 the river. I also know that people from the Krummrich
2 plant were invited to those meetings. Now, whether the
3 General Electric people drove across the river and saw
4 the unit personally I do not know.

5 Q Okay. Did these visits that took place in
6 Anniston, Alabama, involve actually going out and
7 looking at the unit, or were these primarily office
8 meetings?

9 A They were both.

10 Q Okay. What would they do when they went out
11 and looked at the unit?

12 A They would look and observe and --

13 Q What could they tell by looking at it?

14 A Well, I suppose many things one could see if
15 he knows what he's looking for. He can see that the
16 unit is oily or dry in terms of the equipment and the
17 floors and the stairways, and he could see that there
18 was or was not any odor present indicating fumes were
19 escaping, he could see that the workers were -- looked
20 kind of dirty in their clothing or they were clean, that
21 they were wearing gloves or were not. These kinds of
22 observations could be made by a knowledgeable person.

23 Q With regard to General Electric, how
24 frequently -- and I understand you told me they weren't
25 regularly scheduled, but how frequently during the time

1 you were the plant manager at Anniston, Alabama, did
2 they come?

3 A I believe about three times in the five
4 years.

5 Q What other customer contacts did you have
6 during the time that you were at the Anniston, Alabama,
7 plant?

8 A I'm not certain, but it seems to me that a
9 delegation of Westinghouse representatives visited the
10 plant once.

11 Q Okay.

12 A I don't remember the specifics. It was again
13 a general discussion of Monsanto, Anniston, Alabama, PCB
14 production activities.

15 Q Where did the GE people physically come from,
16 if you know?

17 A I'm not certain, because each of the visits
18 would reflect a different interest on their part. And I
19 don't know which visit, but at least one of them came
20 out of Pittsfield, Massachusetts, which was their
21 transformer -- major transformer plant. I recall an
22 individual from their Rome, Georgia, plant visiting our
23 plant. It seems to me that a representative from their
24 New York Hudson Falls location was present, but I don't
25 recall his name.

1 Q So then the GE visits weren't the same people
2 coming back three times but people coming from three
3 different facilities on different occasions?

4 A Yes.

5 Q Where did the Westinghouse people that you
6 recall coming to Anniston come from?

7 A I recall south Boston, Virginia, their
8 research center in the Pittsburgh area, and I believe
9 there was an individual from the Bloomington, Indiana,
10 plant.

11 Q Do you know whether or not those same people
12 visited the Krummrich plant?

13 A I do not know.

14 Q Do you know how your plant was selected as
15 opposed to the Krummrich plant for the visit?

16 A I don't know.

17 Q Do you know whether or not that was a
18 Monsanto decision or a decision of the Westinghouse
19 people about whether they would rather go to St. Louis
20 or Anniston?

21 A I don't know.

22 Q Did you meet with any of these groups that
23 came to visit?

24 A Oh, yes.

25 Q What would you do?

1 A Well, I would welcome them to the plant, I
2 would make the opening remarks, introduce the
3 individuals in the plant who were going to make the
4 other presentations, and acted as host primarily, and
5 certainly an interested observer and participator
6 throughout the day.

7 Q You would stay around for the entirety of
8 each --

9 A Yes.

10 Q Besides GE and Westinghouse, who else do you
11 recall coming from -- coming to the Anniston, Alabama, --
12 plant?

13 A I don't recall any others.

14 MR. LACEY: Why don't we take a break right
15 here. Does that sound good, Bob?

16 MR. HALL: Fine.

17 VIDEO OPERATOR: We're off the record.

18 [Recess]

19 VIDEO OPERATOR: We've been off the record
20 for a short break. We're back on the record. The time
21 is 10:18 a.m.

22 MR. LACEY:

23 Q Mr. Papageorge, I believe yesterday we talked
24 very briefly about documents we called technical
25 bulletins or materials that were supplied to customers

1 containing information on PCBs.

2 A I recall that, yes.

3 Q I want to show you some documents -- I really
4 don't want to review the substance of them with you, but
5 just to see if these are the types of documents that you
6 were talking about yesterday that could be referred to
7 as technical bulletins or customer literature or
8 whatever the appropriate name might be. And what I'm
9 going to do is simply identify the document by its name
10 and its number, if it's got a number, and then the case
11 number and let you look at it and see if that's the sort
12 of document you're talking about. Let me show you first
13 a document called the Aroclors, Physical Properties and
14 Suggested Applications, Application Data Bulletin No.
15 P-115, document number in this case 1581 through 1605,
16 and ask you if that's a type of literature that would be
17 referred to as a technical bulletin or literature
18 provided to customers to give them information on PCBs.

19 A Yes.

20 Q All right. Let me show you another document,
21 titled the Aroclors, Physical Properties and Suggested
22 Applications, Application Data Bulletin No. P-115,
23 Document No. 1722 through 1752, and ask you if that is
24 another one of the types of documents that would be
25 referred to as a technical bulletin or literature for

1 customers on PCBs.

2 A Yes.

3 Q Let me show you another document, titled the
4 Aroclors, Physical Properties and Suggested
5 Applications, Application Data Bulletin No. OP-115,
6 Document No. 1889 through 1918, and ask if that's the
7 type of document that would be referred to as a
8 technical bulletin or literature for customers about
9 PCBs.

10 A Yes.

11 Q Let me show you another document, called the
12 Aroclor Compounds -- I don't believe this one has a
13 number associated with it except the document number,
14 1919 through 1966, and ask if that's another type of
15 document or another document that would be referred to
16 as a technical bulletin or a piece of literature for
17 customers.

18 A Yes.

19 Q Let me show you another document, called
20 Monsanto Askarel Inspection and Maintenance Guide.
21 Again I don't think it has a technical bulletin number
22 associated with it, but document 2299 through 2331, and
23 ask if that's another one of the types of documents that
24 would be referred to as a technical bulletin or
25 literature for customers about PCBs.

1 A Yes.

2 Q Let me show you another version of the
3 document referred to as Monsanto Askarel Inspection and
4 Maintenance Guide, 2347 through 2377, and ask if that
5 isn't another type of document or it may be even a very
6 similar one on technical material or literature provided
7 to customers about PCBs.

8 A Yes.

9 Q And yet another Monsanto Askarel Inspection
10 and Maintenance Guide, document 2278 -- I'm sorry, 2378
11 through 2410, and ask if that is yet another type of --
12 document or another copy of a document that would
13 provide customers with information on PCBs.

14 A Yes.

15 Q Let me show you another document, with a
16 different-looking cover, but labeled Transformer Askarel
17 Inspection and Maintenance Guide. This has got a
18 bulletin number ICFF 38, Document No. 2450 through 2477,
19 and ask if you if that's another type of -- type of
20 technical bulletin or customer literature that would be
21 provided by Monsanto to its customers with information
22 on PCBs.

23 A Yes.

24 Q Let me show you another document, also called
25 Transformer Askarel Inspection and Maintenance Guide,

1 bulletin No. ICFF 38 R 2, document 2478 through 2505,
2 and ask if that's another type of document that would be
3 referred to as a technical bulletin or customer
4 literature for customers on PCBs.

5 A Yes.

6 Q Let me show you another document, labeled
7 When You Want Fire Safety Reliability, Minimum
8 Maintenance and Askarel type -- specify Askarel type
9 transformers. Let me do that again and getting the
10 title right. It's a long title. Let me show you
11 another document, entitled When You Want Fire Safety, --
12 Reliability, Minimum Maintenance, Specify Askarel-Type
13 Transformers, Document No. 2522 through 2531, and ask
14 you if that's another type of document that would
15 contain technical information or be supplied to
16 customers with information on PCBs.

17 A Yes.

18 Q Finally, let me show you one other document,
19 labeled Care and Grooming of Askarel Transformer Fluid,
20 Document No. 2506 through 2521, and ask you if that's
21 another type of document that would be supplied to
22 customers to give them technical information or other
23 information on PCBs.

24 A Yes.

25 Q Now, are you aware of the fact that there are

1 other technical bulletins besides the ones that I've
2 shown you here today that existed within Monsanto that
3 had to do with PCBs?

4 A Yes.

5 Q And the reason I've shown you these is just
6 to establish that these types of documents are the sort
7 of things that we're referring to when we talk about
8 technical bulletins or customer literature provided to
9 customers about PCBs.

10 A Yes.

11 Q Okay.

12 A I understand.

13 Q I'm not going to take the time to go through
14 the large stack of variations of and maybe even
15 duplicates of these documents that have been provided to
16 me by Monsanto in connection with the lawsuit. So I'll
17 stop with that.

18 And let me direct your attention now to
19 another type of document that we've previously
20 discussed. Let me show you a document that is titled
21 Process for the Manufacture of Diphenyl and Santo Wax,
22 dated November 1950, Document No. 11085 through 11229,
23 and ask you if that's the type of manufacturing process
24 document that we talked about yesterday that gave
25 information on how one would go about in the plant

1 manufacturing a particular material, provide training
2 material or reference material in the plant, and contain
3 information about the safe handling of the product that
4 was being manufactured.

5 A This would be representative of a type of
6 document that would convey that information.

7 Q And those were standard documents that
8 Monsanto had on its various manufacturing processes?

9 A Yes.

10 Q It was customary to have a document like that
11 for every manufacturing process of Monsanto?

12 A Yes.

13 Q And those types of documents would be from
14 time to time reviewed and updated to have the
15 appropriate information as it was then in compliance
16 with what was being done and what needed to be done?

17 A Yes.

18 Q Let me show you another document, entitled --
19 let me show you the document entitled Process for the
20 Production of Aroclor, Pyranol, et cetera, at the
21 Anniston and Krummrich plant, dated April 1955, Document
22 No. 11238 through 11714, and ask if that's the type of
23 operating manual that would be operative for the
24 manufacture of PCB products and contain in it the
25 information about how particular steps were to be done,

1 advise new people or train new people, provide refresher
2 material for existing operators and the like.

3 A This document is the technical document
4 describing the process for making the chemicals you
5 described. It is not the document used in training or
6 is it the document available to the operating personnel.
7 That is a separate document.

8 Q Is it a smaller document?

9 A It's generally smaller and in laymen's
10 language rather than highly-technical language, and does
11 not contain all of the specifics this extensive document
12 contains.

13 Q The document you have there is a very
14 extensive, detailed document, is it not?

15 A Yes.

16 Q Who would make use of a document like that?

17 A The members of the technical community, the
18 chemists, the engineers, as well as the managers of the
19 unit, the supervisors, superintendent.

20 Q Would that be a document that would be
21 available to the plant manager?

22 A Yes.

23 Q Would the plant manager have one of those
24 type of documents on each process in the plant he
25 supervised?

1 A Yes.

2 Q And people who worked under the plant manager
3 with regard to any particular process in the plant as a
4 supervisory-type person would also have a copy of that
5 document available to him?

6 A They would have access to the plant manager's
7 copy, they may have their own copy, or they may have
8 sections of the -- the appropriate sections of this
9 document.

10 Q Of this document?

11 A That would apply to them.

12 Q Okay. But that is one of the -- I guess what
13 we could say a full and complete copy of the most
14 technical manufacturing document that Monsanto would
15 make for a particular process involving PCBs?

16 A This is representative of that type of
17 information.

18 Q Okay.

19 Let me show you another document and I --
20 this may be the same thing as that last one. It sounds
21 similar, and I'm not quite sure if it's identical or
22 not. This one is titled process for the production of
23 Aroclors, Pyranols, et cetera, at the Anniston and the
24 Wm. G. Krummrich plant, April 1955, with Mr. Mather's
25 name, Document 6393 through 6895. Again, that's another

1 pretty hefty one there.

2 A Yes. This is again a very detailed document
3 describing the processes. It appears to me to be
4 identical to the previous document.

5 Q Okay. That's what it appeared to me, too,
6 but I wasn't quite certain.

7 Let me show you another document, and this
8 document is labeled -- actually, on the label it
9 initially said Process Description for the Manufacture
10 of -- I can't read it, because it's been scratched out.
11 But then it's been written in hand below that Aroclors--
12 and Pyranols in Department A 246, Document No. 12523
13 through Document No. 12610, and ask you if that's a type
14 of operating instruction that would be generated by
15 Monsanto and used in the plant in a regular basis.

16 A Yes.

17 Q Is that a -- is that the shorter, more
18 condensed version of the earlier documents we've looked
19 at?

20 A Yes.

21 Q And who would have that document available to
22 them?

23 A Normally copies of this document would be
24 available to the plant manager, the superintendent,
25 supervisor, the foreman of the operation, as well as a

1 copy available to the operators in the producing unit.

2 Q So if I understand correctly, each individual
3 workman would have his own copy of that that would be
4 available to him.

5 A No. There would be a common copy to which he
6 has access.

7 Q Well, that's what I meant to ask. I guess I
8 didn't ask it well. Each individual workman would have
9 an opportunity to look at that type of document?

10 A Yes.

11 Q Whereas each individual workman would not
12 have the opportunity to look at the more complete
13 document?

14 A That is correct. Not normally.

15 Q Okay. But as far as a supervisory level
16 person went, they would have access both to the lengthy
17 version and to the shortened version?

18 A That is correct.

19 Q May I see that again just a moment? In the
20 visits that were made to your plant by other companies,
21 people like General Electric or Westinghouse or anybody
22 else who visited, would they be permitted to see the
23 detailed operating instructions that Monsanto had on its
24 processes?

25 A There was no reason not to share the

1 operating instructions with the visitors. I do not
2 recall whether they've ever asked for that opportunity.

3 Q I see. But these wouldn't be considered
4 anything that you would not be willing to share if
5 someone asked for it?

6 A The operating instructions.

7 Q Which one is that? Is that the thin one?

8 A That's the -- yes, the thin one.

9 Q The thicker one, the more detailed one, would
10 there be any reason you wouldn't want to share that with
11 customers who came to the plant?

12 A There may be sections in there that are
13 proprietary to Monsanto, and we would be very careful
14 about divulging some of the information in the thicker
15 document, more detailed document.

16 Q I see. And is that the reason that the more
17 detailed document was not available to individual
18 workmen?

19 A That's one of the reasons.

20 Q What other reasons were there for not making
21 it available to individual workmen?

22 A In virtually every case the individual
23 workman would not understand much of what's written, and
24 he would have no use for it in performing his duties.

25 Q The document that we've looked at that talks

1 about the process description for the manufacture of
2 Aroclors and Pyranols in Department A 246. What is
3 Department A 246?

4 A That is the designation for the PCB-producing
5 unit at the W. G. Krummrich plant.

6 Q Okay. This document -- and let me direct
7 your attention to Page 12525, is a document that was in
8 effect or became effective in 1961. Is that correct?

9 A That's what it says here.

10 Q The people that are shown as issuing that,
11 are they people at the Krummrich plant?

12 A Yes.

13 Q Would they be responsible for the Aroclor
14 department there?

15 A Yes.

16 Q Okay. Did your plant issue similar operating
17 documents?

18 A Yes.

19 Q Were they identical or were there individual
20 differences? Plant to plant.

21 A They were not identical, they were similar.

22 Q Okay. Let me --

23 MR. HALL: I assume when you refer to your
24 plant you were referring to the Anniston, Alabama,
25 plant. Is that correct? In several questions you've

1 asked him about his plant.

2 MR. LACEY: If the context suggested that,
3 yes. And when I use the term comparing the Krummrich
4 plant to your plant, I'm talking about the Anniston
5 plant, where you were the plant manager.

6 THE WITNESS: That's what I understood, yes.

7 MR. LACEY: Okay. Yes.

8 Q If at any point the context of my questions
9 does not make clear what I'm talking about, will you
10 please let me know?

11 A I will.

12 Q Have you done that thus far? Have we gotten
13 you confused?

14 A I don't think I'm confused.

15 Q Okay. Well, if you're not confused and I'm
16 not confused, then somebody else will have to tell us
17 we're confused. And I'll trust Mr. Hall to let us know
18 that we're confused.

19 Let me direct your attention specifically to
20 Page 12565 of this process manual that was available to
21 all the workers in the PCB department. Under the
22 Section E on that document number, where it refers to
23 bathing, that specifically provided that everybody who
24 worked in the PCB department at the Krummrich plant was
25 required to bathe before leaving the plant each day?

1 A Yes.

2 Q And that was one of the differences or would
3 have been one of the differences between the manual that
4 was in force in your plant and the manual that was in
5 force at the Krummrich plant?

6 A Yes.

7 Q Okay. And there may be other similar
8 differences where small areas that you consider
9 unimportant as far as any substance of the matter.
10 Correct?

11 A Not knowing the areas, I don't know if
12 they're unimportant.

13 Q Well, is it possible that there were matters
14 of difference between the PCB processes at the Krummrich
15 plant and the Anniston plant that were material to
16 anything?

17 A [No reply]

18 Q I certainly don't anticipate asking you to
19 look through two of these documents and find all the
20 differences and tell me -- if you can tell me either
21 there were or weren't material differences, that's fine.
22 Or maybe you don't know.

23 A There were differences in the printed word.

24 Q Right.

25 A And I would suggest that this printed words

1 repeats what's written in another document, the union
2 agreement about bathing.

3 Q Yes.

4 A This statement would not appear in the
5 Anniston plant, because there was no commitment on
6 either party to mandate this approach.

7 Q Whereas at the Krummrich plant there was
8 commitment on both parties to mandate that approach?

9 A Yes. This is why the word "must bathe" is
10 included. This does not say that bathing is unimportant
11 at Anniston. I didn't mean to leave you with that
12 thought.

13 Q Right.

14 Do you know whether or not there was any
15 effort taken at the Krummrich plant to enforce the
16 provision of the operating manual requiring each
17 employee to bathe at the end of each shift?

18 A I do not know personally.

19 Q Okay.

20 Do you know whether or not -- and I will
21 direct your attention again to the same page, 12565,
22 under Section A on smoking privileges -- do you know
23 whether or not those restrictions at the Krummrich plant
24 effectively prohibited employees from smoking in areas
25 of the department where Aroclors could be present?

1 A Smoking was permitted where Aroclors were
2 present.

3 Q Okay. I notice there are some restrictions
4 there that say where you can and you can't. But that
5 did not prohibit smoking where Aroclors were present.
6 Is that correct?

7 A Again, I don't wish to mislead you. It's
8 possible for Aroclors to be present, but flammable
9 materials to also be present.

10 Q Yes.

11 A Therefore, in those areas smoking would not
12 be permitted.

13 Q Okay. The smoking restrictions only related
14 to flammable materials?

15 A That is correct.

16 Q Okay. That, I think, answers my question.

17 Were the same work rules in effect at the
18 Anniston plant?

19 A Roughly so, yes, uh-huh.

20 Q By that I mean specifically smoking was
21 permitted in the Aroclor department so long as it wasn't
22 a section where flammable materials were present?

23 A That is correct.

24 MR. HALL: May I see that document, please,
25 Mr. Lacey?

1 MR. LACEY: Surely.

2 MR. HALL: Thank you.

3 MR. LACEY:

4 Q Let me show you another document, entitled
5 Process Description for Manufacture of Aroclors in
6 Department 246, Document No. 13522 through 13649, and
7 ask you first of all, the Department 246 is a reference
8 to what plant again?

9 A It's the Krummrich plant.

10 Q And what process within the Krummrich plant?

11 A This is the Aroclor process.

12 Q Okay. What was the department number, if
13 that is applicable, in the Anniston plant?

14 A There was a number, but it was not commonly
15 used in documents of this type. It was more used in
16 accounting documents. So I don't recall the number.

17 Q Okay. Well, I guess I was just trying to
18 figure out how I would identify a document that was
19 applicable to the Anniston plant.

20 A It would refer to the Aroclor department
21 rather than by number.

22 Q I see.

23 May I see that document just a moment? The
24 reason, I guess, I asked that is this one doesn't say
25 which plant it is, but it does reference Department 246,

1 which tells you that it meant the Krummrich plant.

2 A That is correct.

3 Q And I'm not sure I've seen any of the
4 separate documents that related solely to the Anniston
5 plant. But there would have been some separate
6 documents that were limited solely to the Anniston plant
7 of this type. Is that correct?

8 A That is correct.

9 Q Okay.

10 MR. HALL: What's the number of that one in
11 your hand?

12 MR. LACEY: It's 13522 through 13649.

13 MR. HALL: Thank you.

14 MR. LACEY:

15 Q This document is the one that was issued
16 initially in -- sometime in 1966. Is that correct?

17 A There is a handwritten date 1966 on it. I do
18 not know the accuracy of that.

19 Q Well, it's written at the spot where one
20 would expect to find the date that it became an
21 operative document. Correct?

22 A Yes.

23 Q By the way, that was a numbered series of
24 documents, was it not?

25 A Yes.

1 Q What was the purpose of numbering each copy
2 of those type of documents?

3 A Well, I believe it was multi-purposed. One
4 is to make certain that when revisions were made that
5 the revised copies would be sent to the same individuals
6 or same library or whoever the custodian was. Another
7 was to limit the copies to those individuals in the
8 organization who had what we called the need to know
9 reason for having such a copy. And to discourage the
10 misuse of this information, giving it to parties that
11 should not have it.

12 Q Were those numbered documents like that
13 lists -- had lists specifically kept of who had each
14 particular copy?

15 A It is shown on the -- on the document itself
16 where the copies went.

17 Q Okay.

18 A And those copies marked extra were retained
19 by the author, principal author.

20 Q The person who would write these types of
21 documents, these process documents, be they either the
22 long form that we've looked at before that has all the
23 detail or the short form, would that be a job that would
24 be assigned to that person as a part of his duties with
25 Monsanto?

1 A Yes.

2 Q What sort of person would draw the assignment
3 of developing these process descriptions, either long
4 form or short form?

5 A The long form typically went to a
6 technically-trained individual in the technical group of
7 the plant, whether it be the engineering -- whatever
8 it's called, engineering department or technical
9 services department. That's the normal assignment. On
10 occasion some of these documents were written by the
11 research chemist in the St. Louis office. The operating
12 instructions typically were assigned to a foreman in the
13 unit familiar with the details in the operating unit or
14 if the foreman didn't have that capability it would be
15 assigned to a supervisor of that operating unit.

16 Q And would those documents be reviewed by
17 appropriate people in Monsanto before they got the
18 official publication authorization?

19 A Well, I don't know what you mean by corporate
20 people.

21 Q Well, I mean would the author just write it
22 and then start sending it out, or would some people
23 review it to make sure it was accurate before it went
24 out?

25 A It would be reviewed by the appropriate

1 levels, higher levels, by people who were -- who had the
2 skill and knowledge to critique, comment and approve it.

3 Q So these types of documents, be they long
4 form or short form, didn't get out in the public domain,
5 so to speak, within Monsanto? And that's what I'm
6 talking about. They didn't get beyond the author's
7 draft and into a final form unless and until they had
8 been reviewed by whatever people Monsanto thought were
9 appropriate higher-ups to review them?

10 A Correct.

11 Q And after they had been reviewed and the
12 accuracy had been confirmed and the proper coverage of
13 each topic had been confirmed, then they would be
14 actually made available for use?

15 A That is correct.

16 Q To whatever limited group was supposed to
17 have them?

18 A Yes.

19 Q Okay.

20 Let me show you another document, entitled
21 Process Description for the Manufacture of Pyranols and
22 Inerteen in Department 246, Document No. 8640 through
23 8700, and ask you if that's another copy of the type of
24 process description document that was issued by Monsanto
25 for use by workmen.

1 A It is.

2 Q And that's what, a 1966 document?

3 A That's the date typed on the cover page.

4 Q Now, let me hand you back the previous
5 document you had that was the process description for
6 the manufacture of Aroclors. Both of those documents
7 relate to the same department within Monsanto, do they
8 not?

9 A They do.

10 Q The reference to Aroclor is a reference to
11 Monsanto's name for PCBs. Correct?

12 A That is correct.

13 Q The reference to Pyranols and Inerteen is a
14 reference to or references to the trade names of General
15 Electric and Westinghouse for dielectric fluids that
16 either consisted wholly of PCBs or contained PCBs in
17 them. Correct?

18 A That is correct.

19 Q And that department within the Krummrich
20 plant, when we're talking about Department 246,
21 manufactured PCBs that were sold as Aroclors. Correct?

22 A Yes.

23 Q That department also manufactured PCBs that
24 were sold as Inerteen or Pyranol. Correct?

25 A I don't wish to mislead you.

1 Q Certainly.

2 A It's the same group of people in terms of
3 operators and supervisors. The physical facilities are
4 adjacent or intermingled. But depending on how one
5 looks at it, you will note that one document referring
6 to the manufacture of Aroclors refers to Document 246.
7 The document referring to the Pyranol and Interteens is
8 A 246. So it's -- it's in some respects another
9 department. But in the real world it's the same,
10 really, group of people and operation.

11 Q Basically what Monsanto did was take
12 Department 246, which tells us it involves PCBs, and
13 divide that into subclassifications, depending upon what
14 the PCBs were used for. Is that correct?

15 A Well, I don't know so much the use as the
16 operations are different. The 246 is actually a
17 chemical operation. A 246 is a blending and packaging
18 operation.

19 Q Okay. Fair enough. I think I understand.
20 Were there any other subdepartments in 246?

21 A I don't recall.

22 Q All right. Back to my question. The
23 Inerteen and Pyranol terms refer to the trade names used
24 by General Electric and Westinghouse for dielectric
25 fluids that either consisted wholly of or contained

1 PCBs. Correct?

2 A That is correct.

3 Q And Monsanto would actually in that
4 Department 246 -- subdepartment A, is it?

5 A Yes, sir.

6 Q Actually either put the PCBs into a container
7 that had an Inerteen label on it or blend it, if it was
8 a blended Inerteen, and then put it in a drum or
9 container, whatever it might be, that had the Inerteen
10 label on it?

11 A Yes.

12 Q And some of the Interteens were pure PCBs.
13 Correct?

14 A Correct.

15 Q Some of them were -- were a mixture of PCBs
16 and other chemicals?

17 A Correct.

18 Q The same thing is true for Pyranols, is it
19 not?

20 A That is correct.

21 Q Okay. Let me get those back for just a
22 moment.

23 Did the Anniston, Alabama, plant have a
24 similar situation where they both manufactured PCBs and
25 then also had PCBs they packaged under and did whatever

1 was necessary to send out Interteens and Pyranols?

2 A Yes.

3 Q Was there some different description or
4 terminology used to distinguish those operations within
5 the plant?

6 A Well, locally we refer to it as the PCB
7 drumming station and warehouse.

8 Q Did the same safety precautions -- and what
9 I'm talking about now, we described the rubberized
10 gloves and head coverings and all this sort of thing
11 that would be used by workmen if they were in a position
12 to have PCBs come into contact with them -- did the same
13 safety precautions apply for workmen who might have
14 Inerteen or Pyranol come into contact with them?

15 A Yes.

16 Q Now, did the Anniston plant do any of the
17 blending that made the Pydrauls, the hydraulic fluids?

18 A Not to my knowledge.

19 Q Was that all always done at the Queeny plant?

20 A No.

21 Q Where else was that done?

22 A The Krummrich plant did the original blending
23 and packaging of Pydraul. The Queeny plant subsequently
24 did it all.

25 Q So it all at one time was at Krummrich, then

1 later it was all moved to Queeny?

2 A And they were both involved during the
3 transition period.

4 Q Certainly. As you made the changeover.

5 Now, did the same safety precautions that
6 applied to workmen who might be exposed to PCBs and to
7 workmen who might be exposed to Inerteen or Pyranols
8 also apply to workmen who might be exposed to Pydrauls?

9 A Yes.

10 Q So the safety precautions within Monsanto
11 that related to workmen who were handling any
12 PCB-containing dielectric fluid or any PCB-containing
13 hydraulic fluid were the same?

14 A Yes.

15 Q And that was true at Queeny, at Krummrich and
16 at Anniston?

17 A Yes.

18 Q Save and except, I guess, the issue of the
19 bathing at Krummrich?

20 A Well, the bathing provisions that were at
21 Krummrich also were present at Queeny.

22 Q Oh, okay. Queeny workmen had the same
23 bathing rules, responsibilities, rights, whatever you
24 want to call it, as at Krummrich plant?

25 A Yes.

1 Q Did all of the Monsanto plants in the
2 St. Louis area -- and I don't know, maybe those are the
3 only two plants, I don't know, but did all the Monsanto
4 plants in the St. Louis area have the same bathing
5 provisions?

6 A There are other plants in the St. Louis area.
7 I do not know what their bathing provisions are.

8 Q Okay. You are familiar with two plants in
9 the area, and they both have the same bathing
10 provisions?

11 A That is correct.

12 Q Which is to provide a paid time at the end of
13 the shift for the workmen to bathe and to require that
14 the workmen in fact bathe?

15 A Correct.

16 Q Is any effort made to -- and if you don't
17 know, that's fine. But is any effort made to ensure
18 that the workmen actually take a bath at the end of the
19 shift?

20 A Not that I know of.

21 Q Let me show you another document, entitled
22 Standard Manufacturing Process Aroclors, Department 246,
23 document 13323 through 13521, and ask if this is another
24 one of those documents that provided information within
25 Monsanto about how to manufacture PCB-containing

1 products and safety precautions and the like.

2 A This appears to be another version of the
3 manufacturing process for PCBs at the Krummrich plant.

4 Q Is that long form or short form? It's sort
5 of in between in the thickness of it. Is that the one
6 that the ordinary workman would have access to or is
7 that --

8 A No. The workman's copy always had the word
9 "instructions."

10 Q I see.

11 A Or operating procedures. The more technical
12 document had the word "manufacturing process."

13 Q I see. So that is --

14 A This is the more technical document.

15 Q Okay.

16 A Or a copy of it.

17 Q All right. And that's a 1972 document, is it
18 not?

19 A There is -- yes. It's dated 1972.

20 Q Okay.

21 Let me show you another document, entitled
22 Standard Manufacturing Process, Aroclors, and it's got a
23 parenthesis, Take Over Distilled, closing parenthesis,
24 Department 246, Document No. 12972 through 13150, and
25 ask if this is another one of those documents that would

1 have contained a technical description of the process
2 and the handling of the chemicals involved in it at
3 Monsanto.

4 A Yes, this is another example of such a
5 document.

6 Q That's a 1976 version, is it not?

7 A Yes.

8 Q And is that -- that is the longer form, I
9 take it from the fact it has standard manufacturing
10 process on it.

11 A Yes.

12 Q Now, again, like with the technical
13 bulletins, I haven't shown you all the copies of these
14 types of documents I have. You appreciate and can
15 understand there would be many more such documents that
16 Monsanto would have regarding its PCB processes over the
17 years it manufactured it?

18 A Yes.

19 Q And each of those documents would be a
20 document that was prepared at the time it was prepared
21 by somebody who was assigned that task and reviewed by
22 the appropriate levels in the company before it was
23 issued. Correct?

24 A Yes.

25 Q It would have been issued for the purpose of

1 providing information to particular people in Monsanto
2 to assist them in doing their jobs and to do them safely
3 and properly?

4 A Yes.

5 Q Okay. Again, I won't burden you with trying
6 to look at all of them. We've got at least the idea of
7 what these were. I appreciate that.

8 Let me show you a memo dated September 20 --

9 VIDEO OPERATOR: I'm sorry. It's okay.

10 MR. LACEY:

11 Q Let me show you a memo dated September 21st,
12 1967, from P. G. Benignus. Do you know who Mr. Benignus
13 is?

14 A Yes, I do.

15 Q Who is Mr. Benignus?

16 A He's a former Monsanto employee who was
17 involved with the marketing of PCBs in dielectric fluids
18 and in hydraulic systems.

19 Q It's addressed to a Mr. Gerald Miller at
20 Anniston. Do you know who he was?

21 A Yes.

22 Q Who was he?

23 A At that time Mr. Miller was the chief chemist
24 in charge of the analytical laboratory at the Anniston
25 plant.

1 Q And then there are various people who
2 received copies. And it appears that you received a
3 copy of that memo. Correct?

4 A Yes.

5 Q You might take a second to look at that.

6 A I have read it.

7 Q First let me ask you, there's a name up at
8 the top on the right-hand side that's been highlighted,
9 I guess, and didn't copy as well as it might have and
10 it looks like the name may be Bryant at Anniston.

11 A Yes.

12 Q Can you tell me that person's name first, if
13 you know?

14 A James.

15 Q James Bryant?

16 A James C. Bryant.

17 Q And who was Mr. Bryant?

18 A Mr. Bryant was a member of the technical
19 services department at the Anniston plant who concerned
20 himself with technical problems in the PCB manufacturing
21 process.

22 Q Does that memo relate to this visit that you
23 recalled people from Westinghouse making to the Anniston
24 plant while you were the plant manager there?

25 A It appears to be, yes.

1 Q Okay. And it seems to indicate that those
2 people came from Bloomington to the plant.

3 A Yes.

4 Q Do you know where Bloomington, Indiana, is?

5 A I think I do, yes.

6 Q Well, I mean it's possible you don't. I just
7 wonder if you do. Do you know the approximate distance
8 from Bloomington to Anniston, Alabama?

9 A No, I don't.

10 Q Is it closer from Bloomington to Anniston,
11 Alabama, or closer to Bloomington to St. Louis,
12 Missouri?

13 A I would suspect the distances are about the
14 same, but the ability to get to St. Louis would be
15 easier.

16 Q Traveling from --

17 A Traveling.

18 Q -- Anniston to Bloomington or vice versa
19 would not be particularly easy just as a single trip
20 itself?

21 A Correct.

22 Q Okay. May I see the memo just for a second,
23 please?

24 The individuals who came from Westinghouse,
25 Mr. Pickett and Mr. McNally, did you know those people

1 before they arrived at the Anniston plant?

2 A No.

3 [Q Do you recall actually meeting with them at
4 the Anniston plant?

5 A I do, yes.

6 Q Do you know, after meeting and visiting with
7 them, what sorts of positions they held in Bloomington?

8 A Mr. Pickett was the maintenance supervisor,
9 and the other individual was the manufacturing
10 supervisor's representative. I don't quite know what
11 level of supervisor. But he had to do with the working
12 personnel as distinguished from the maintenance
13 personnel.]

14 Q All right. The memo indicates that the
15 Anniston plant supplied all of the Inerteen that was
16 used for capacitors to the Westinghouse plant. Do you
17 recall whether that was in fact correct or not?

18 A I don't recall.

19 Q Okay. Do you have any reason to believe that
20 the reference in the memo to the fact that Anniston
21 supplied Westinghouse with all the capacitor Inerteen is
22 incorrect?

23 A I have no reason to believe that.

24 Q Would the author of the memo be in a position
25 to be aware of that fact?

1 A Oh, yes.

2 Q The sales that were made to Bloomington --
3 well, strike that.

4 When the reference is to providing
5 Westinghouse with all of its capacitor Inerteen, do you
6 know whether or not there was more than one Westinghouse
7 facility that bought capacitor Inerteen from Monsanto?

8 A I do not know of any other capacitor
9 manufacturing facility operated by Westinghouse.

10 Q So then you would understand that to apply at
11 least to Bloomington and probably not to any other
12 plant?

13 A That's my understanding.

14 Q Capacitor Inerteen in 1967 was Aroclor 1242,
15 was it not?

16 A That is the material we supplied
17 Westinghouse. I do not know if they added anything to
18 it.

19 Q Okay. Well, that really was my question.
20 What you supplied to Westinghouse as capacitor Inerteen
21 was Aroclor 1242?

22 A Yes.

23 Q Were they a customer who typically bought by
24 railroad car quantities?

25 A Are you referring to Westinghouse in general

1 or Westinghouse Bloomington?

2 Q Westinghouse Bloomington in particular.

3 A Yes.

4 Q And those rail cars would leave the Anniston
5 plant and travel as a sealed car until they got to the
6 plant where the entire car would be unloaded to
7 Westinghouse?

8 A Yes.

9 Q Okay. The memo indicates that -- strike
10 that.

11 Do you know when Monsanto first started
12 supplying Westinghouse in Bloomington with PCBs for
13 capacitor dielectric purposes?

14 A I do not.

15 Q The memo indicates that as of 1967, the time
16 of the memo, the people at Westinghouse had never seen
17 the Monsanto facility that made their PCBs. Correct?

18 A That's what it says, yes.

19 Q And you don't recall any visit by
20 Westinghouse people to your facility prior to this
21 visit? Correct?

22 A That is correct.

23 Q The stated purpose of the visit was what?

24 A The stated purpose was to review with the
25 Westinghouse Bloomington representatives the proper

1 handling of PCBs to avoid spills, people exposure, and
2 the like.

3 Q Westinghouse as a purchaser of PCB materials
4 from Monsanto was looking to Monsanto to acquire
5 information about proper handling or to protect the
6 safety of its workers. Correct?

7 A Yes.

8 Q And you saw nothing inappropriate as the
9 plant manager about having people at your plant as the
10 manufacturer and seller of those PCB materials to
11 Westinghouse give information to Westinghouse on those
12 matters?

13 A Correct.]

14 Q And in fact it was logical and made sense to
15 you that the Westinghouse people would look to Monsanto
16 as the manufacturer and seller of the PCBs for
17 information on toxicology and safe handling. Isn't that
18 correct?

19 A Yes.

20 MR. LACEY: Why don't we go ahead and take a
21 break to change the tape right here.

22 [Recess]

23 VIDEO OPERATOR: This is the continuing
24 deposition of Mr. William B. Papageorge. The time is
25 11:15 a.m. and it's May 20th, 1987.

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MR. LACEY:

Q Mr. Benignus notes in his memo to the fact that Westinghouse had been handling PCBs in a sloppy fashion. Correct?

A He does, yes.

Q Would Mr. Benignus be in a position to know that type of information?

A Yes.

Q In fact, he goes on to detail some specific information he had with regard to the Westinghouse handling of PCBs, does he not?

A Yes.

Q What specifically does he indicate he knew about Westinghouse's handling of PCBs?

A Well, in the memo Mr. Benignus refers to spills soaking in the workmen's shoes and clothing, no change of shoes or clothing are practiced. He refers to Westinghouse as considering the use of, to quote the memo, Vitron gloves, aprons and the like.

Q So Mr. Benignus, at least as of the date of that memo in 1967, was aware of the fact that the PCBs sold by Monsanto to Westinghouse were being allowed to get in contact with Westinghouse workers in a way that Monsanto would think was totally inappropriate. Correct?

1 A Correct.

2 Q There's no doubt in your mind that what Mr.
3 Benignus describes is totally inappropriate? Correct?

4 A That is correct.

5 Q And potentially very hazardous to the workmen
6 who are being exposed in that fashion. Wouldn't you
7 agree?

8 A I don't know about very hazardous, but
9 potentially harmful.

10 Q Well, Monsanto had had the experience itself
11 of having workers who had, when they had substantial --
12 exposure before Monsanto enacted its work rules in the
13 mid-Thirties or late Thirties had yellow atrophy of the
14 liver, had it not?

15 A Yes, there was some experience before
16 Monsanto acquired the facility, yes.

17 Q When work practices were sloppy, as they had
18 been at Swann. Correct?

19 A All right. The degree of sloppiness is what
20 I don't know.

21 Q I understand. But I mean what I -- the point
22 I want to make is that Monsanto knew in the history of
23 the plant that it had acquired from Swann that when
24 there were some sloppiness in the work practices there
25 had, to whatever degree, that workmen had developed --

1 some of them had developed yellow atrophy of the liver
2 as a result. Correct?

3 A That's correct.

4 Q And that's very hazardous, is it not?

5 A Yes.

6 Q You can die from that, can't you?

7 A Yes.

8 Q Okay.

9 Now, Mr. Benignus then was aware -- and I
10 guess you became aware of this memo when you got your
11 copy of it --

12 A Yes, sir.

13 Q -- that Westinghouse's work practices had
14 been very sloppy and that, for example, people were
15 continuing or allowed at Westinghouse to work in soaked
16 work clothes. Correct?

17 A That's what it indicates.

18 Q A practice that you certainly would not
19 support at all.

20 A That is correct.

21 Q That would be a matter that you would
22 consider very serious, would it not?

23 A Yes.

24 Q And from the standpoint of worker safety a
25 practice that should be changed immediately. Correct?

1 A Yes.

2 Q Now, this visit provided an opportunity for
3 Monsanto to impress upon Westinghouse personnel the
4 importance of safe work practices, did it not?

5 A Yes.

6 Q They were going to spend the day at your
7 plant where you could talk to them about the importance
8 of good practice to keep their workers from coming into
9 contact with PCBs. Correct?

10 A Correct.

11 Q A visit of this type was an opportunity for
12 Monsanto to put together a well-prepared and
13 well-presented program to meet the customer's needs, was
14 it not?

15 A Yes.]

16 Q In fact, in terms of the resources that were
17 given to the project Monsanto would bring to bear
18 whatever resources the people who carried it out thought
19 appropriate to convey the information, would it not?

20 A Yes.

21 Q Now, Mr. Benignus notes in his memo that he
22 thinks this visit provides some opportunities to pass
23 along some other information, doesn't he?

24 A It does.

25 Q What things does Mr. Benignus want to get out

1 of this visit?

2 A Well, from reading and refreshing my memory,
3 it appears that Mr. Benignus had two objections.

4 Q And they were?

5 A One is to share with the representatives of
6 Westinghouse Bloomington Monsanto's procedures for
7 protecting their workers, and No. 2, to share with them
8 the latest in some new technology on purifying Aroclor
9 1242.]

10 Q Now, Mr. Benignus was a salesman, wasn't he?

11 A I would more correctly describe Mr. Benignus
12 as marketing manager.

13 Q Well, okay. Let me -- he was responsible for
14 salesmen selling the product?

15 A Correct.

16 Q He had salesmen who reported to him and he
17 supervised?

18 A Correct.

19 Q And his job, if you're a chemical company,
20 it's not enough to make the chemical, you've got to sell
21 it, too. Right?

22 A True.

23 Q And his job was to get PCB products sold to
24 customers as dielectric fluids and hydraulic fluids.
25 Correct?

1 A At different times.

2 Q Yes.

3 A Yes.

4 Q And at this point in time he is responsible
5 for getting the PCBs that Monsanto manufactured sold to
6 customers as dielectric fluids.

7 A That is correct.

8 Q And one of the things that you're interested
9 in doing when you're a salesman is touting the quality
10 of your product. Right?

11 A Certainly, yes.

12 Q And he saw an opportunity to use this meeting
13 to tout the quality of the product? Correct?

14 A Yes.

15 Q And Mr. Benignus was simply suggesting, of
16 course, to the people at the plant what he thought the
17 opportunities were. It was up to the plant people to
18 decide how actually to allocate the time and what to do.
19 Correct?

20 A That is correct.

21 Q May I see the memo again briefly?

22 A Sure.

23 Q Mr. Bryant was the person who was going to be
24 responsible for the technical sales opportunity, if
25 there were any. Correct?

1 A Yes.

2 Q There also was scheduled some entertainment
3 of the Westinghouse -- there was a suggestion that there
4 been entertainment of the Westinghouse people when they
5 arrived, was there not?

6 A Yes, the last paragraph refers to that.

7 Q That's one of the functions that a plant
8 manager gets involved in from time to time, is it not?

9 A Yes.

10 Q Okay.

11 Now, these Westinghouse people wound up
12 actually visiting the Anniston plant apparently in
13 conjunction with another trip. Is that correct?

14 A That's what the memo indicates.

15 Q Okay. And they were going to go to
16 Vicksburg, was it?

17 A Yes.

18 Q And that would get them closer to the
19 Anniston area?

20 A Yes.

21 Q Now, let me show you another document,
22 Document 25282, which is a September 27th, 1967, memo
23 written by Mr. Bryant to a variety of people, including
24 yourself. That memo is the agenda for this proposed
25 visit, is it not?

1 A It is.

2 Q Mr. Bryant was the person who had either the
3 responsibility or who took upon himself the
4 responsibility of preparing the agenda for the meeting.
5 Correct?

6 A Correct.

7 Q And the schedule planned for the people to
8 arrive at about 8:00?

9 A 8:30, it says.

10 Q 8:30?

11 A Yes.

12 Q And you would make the -- the plan was for
13 you to make the introduction and carry out your function
14 as the host for this meeting beginning at 8:30?

15 A Yes, sir.

16 Q And they were to stay at the plant until
17 what, 2:00?

18 A A little bit beyond 2:00. 2:00 was scheduled
19 for a -- what was referred to here as a wrap-up
20 discussion.

21 Q I see.

22 A There was no way to know how long that
23 discussion was going to take place.

24 Q I see. So you can't tell from the agenda --
25 the meeting would break up sometime after 2:00?

1 A Correct.

2 Q And in there there was scheduled a lunch
3 hour, of course.

4 A Yes, sir.

5 Q Would that be at some cafeteria in the plant
6 or what type of facilities did you usually make
7 available when people like this came?

8 A I don't recall the specific one, but it's
9 possible that we went to a restaurant, it is possible we
10 had something catered into the plant or to the local
11 Country Club. It could be any one of those.

12 Q Now, the purpose of the visit again was to
13 learn about the safe handling of PCB products. Correct?

14 A [No reply]

15 Q That's why Westinghouse was coming?

16 A Correct.

17 Q And Monsanto was fully aware of the fact that
18 Westinghouse had been handling the products poorly so
19 that it's workmen in Bloomington were being exposed to
20 PCBs in a way that Monsanto would think unsafe.
21 Correct?

22 A Yes.

23 Q How much time did Mr. Bryant allot out of the
24 agenda for the discussion of the matters that
25 Westinghouse was coming to talk about?

1 A It appears he had here half an hour.

2 Q The remainder of the time allotted in the
3 agenda was allotted to discuss and have things that
4 related to the sales interests that Mr. Benignus
5 suggested might be accomplished at this meeting, was it
6 not?

7 A The item that Mr. Benignus suggested, as I
8 read this schedule, was scheduled for half an hour from
9 10:00 to 10:30. The remaining items were not suggested
10 in Mr. Benignus's letter. And I have no way of knowing
11 today who proposed the remainder of the agenda.

12 Q But they're in Mr. Bryant's memo?

13 A Yes.

14 Q And there's certainly nothing to indicate
15 from the documents we have here that it wasn't Mr.
16 Bryant or somebody else at the plant who decided on the
17 specifics of that agenda. Correct?

18 A Or it could have been Mr. Benignus talking to
19 Westinghouse people. We don't know.

20 Q Possibly Mr. Benignus suggested to the
21 Westinghouse people while they were present they might
22 do some of these other things. Correct?

23 A It's possible.

24 Q Now, the memo has on it some handwritten
25 notes, does it not?

1 A Yes.

2 [Q First let me ask you: The schedule was that
3 at 8:30 you would make the introductory remarks and they
4 would last 15 minutes?

5 A Yes.

6 Q Then there would be a discussion of the
7 toxicology materials and safe handling materials from
8 8:45 to 9:15?

9 A Yes.

10 Q Do you recall whether this meeting went off
11 as scheduled?

12 A No, I don't.]

13 Q The handwritten notes indicate, do they not,
14 that for some reason the Westinghouse people did not
15 arrive as scheduled at 8:30 but instead arrived three
16 hours later, at 11:30. Is that correct?

17 A I don't know that.

18 Q Well, what does the memo say?

19 A There is a handwritten note on a copy that
20 was sent to Mr. Fuhrmeister, who is Mr. Bryant's
21 supervisor, that says 11:30 a.m. arrival. I don't know
22 if that refers to the Westinghouse arrival. Does it
23 refer to Mr. Fuhrmeister returning from a trip and his
24 intent to attend starting after 11:30 I have -- That
25 doesn't tell me much.

1 Q I see. You just don't recall whether they
2 arrived as scheduled or not?

3 A I do not.

4 Q Do you see a squiggly line running through
5 the early items on the agenda, the times on them?

6 A I see -- yes, there are some lines faintly
7 printed here.

8 Q That's the -- that's the copy of this
9 document that's been provided to us by Monsanto. If the
10 lines were bolder in the original, I apologize. But
11 that -- does that seem to indicate to you that those
12 events did not take place?

13 A Not necessarily.

14 Q So you cannot tell us whether or not the
15 Westinghouse people did arrive late on that day.
16 Correct?

17 A That is correct.

18 Q You cannot tell us what portions of the
19 agenda were scrubbed if the Westinghouse people arrived
20 late. Is that correct?

21 A That is correct.

22 Q And you don't have any personal recollection
23 about what happened other than that there was this
24 visit? Correct?

25 A That is correct.

1 Q You don't recall any of the topics that were
2 discussed at the visit?

3 A That is correct.

4 Q Okay.

5 MR. LACEY: May I see that, please, Bob?

6 MR. HALL: Sure.

7 MR. LACEY:

8 Q You noted that this copy appears to be Mr.
9 Fuhrmeister's copy. Correct?

10 A Yes, sir.

11 Q Was Mr. Fuhrmeister scheduled to make a
12 presentation at this meeting as per the agenda?

13 A Yes.

14 Q What time was his presentation scheduled?

15 A 10:00.

16 Q So if everything had gone as scheduled, Mr.
17 Fuhrmeister would have needed to be at the meeting at
18 10:00 to make his presentation?

19 A Yes.

20 Q There are some initials out beside that 10:00
21 entry. Those are Mr. Fuhrmeister's initials?

22 A No.

23 Q Whose initials are those?

24 A William F. Taffee, T a f f e e.

25 Q And who is Mr. Taffee?

1 A He was assistant superintendent reporting to
2 Mr. Fuhrmeister.

3 Q I see. Does that help you in any way unravel
4 this question?

5 A I would interpret these notes to indicate to
6 me that Mr. Fuhrmeister was going to arrive from
7 somewhere at 11:30, he could not be present for the full
8 agenda, therefore, on his copy he puts this -- these
9 squiggle marks on the times that he could not be
10 present. And when it came time for him to make the
11 presentation, he assigned Mr. Taffee to do it for him.-

12 Q Okay. And that's your -- your guess of what
13 that means. Correct?

14 A That's my -- yes, my guess.

15 Q Okay. And it's nothing more than that, is
16 it?

17 A That is correct.

18 Q You have no recollection whatsoever of what
19 actually happened?

20 A That is correct.

21 Q Would it have been your custom to or the
22 custom of those who worked for you to make some sort of
23 memorandum concerning this meeting?

24 A It varied with the individual. Some
25 individuals kept diaries, some kept notes, some

1 published minutes. I don't know what happened in this
2 case.

3 Q You don't recall?

4 A I don't recall.

5 Q Do you know whether or not whatever may have
6 been said at this meeting, if anything, about safe
7 handling of Aroclors was followed up with any written
8 communication with Westinghouse?

9 A I don't recall any.

10 Q Prior to this visit, would Westinghouse have
11 had any source of information about the proper handling
12 of PCBs other than the technical bulletins and customer
13 literature supplied to it by Monsanto?

14 A Normally they would have the information
15 reinforced by discussions with Monsanto's sales
16 representatives.

17 Q What were sales representatives instructed to
18 tell customers about safe handling?

19 A Two key points: Do not breathe those vapors;
20 don't get it on your skin.

21 Q Were they to relay that information in
22 terminology that was consistent with the terminology
23 used in the technical bulletins?

24 A Yes.

25 Q So if the technical bulletins said avoid

1 prolonged skin contact, then what the sales
2 representative should be saying is avoid prolonged skin
3 contact. Correct?

4 A Or words to that effect, yes.

5 Q Yes. In other words, they weren't authorized
6 to give far more detailed warnings than the warnings or
7 the safe handling recommendations contained in the
8 product literature, were they?

9 A That is correct.

10 Q And in fact from the time that Dr. Kelly
11 became the medical director at Monsanto there was a
12 specific directive, was there not, that questions
13 concerning toxicology and safe handling had to go
14 through the medical department, and all things provided
15 to others about toxicology and safe handling had to be
16 approved by the medical department?

17 A That is correct.

18 Q And so it would not be within the province of
19 a sales representative to be saying something to the
20 customer about safe handling and toxicology of a
21 chemical that it did not come from or was inconsistent
22 with the specific directions from the medical
23 department?

24 A That is correct.

25 Q And that was true even for you as a plant

1 manager?

2 A Yes.

3 Q It was true for you as people at this meeting
4 with Westinghouse?

5 A Yes.

6 Q You-all were not authorized to tell
7 Westinghouse more or go beyond what the medical
8 department had already said about safe handling and
9 toxicology. Correct?

10 A That is correct.

11 Q There was a -- I should say this -- I don't
12 want to say it in an ugly way, but there was an
13 authorized version of what was to be told to the
14 customer, and it was important to Monsanto and the
15 medical department that every customer get that same
16 information?

17 A Yes. This is when laymen were concerned or
18 involved.

19 Q Well, and you in this meeting -- were you-all
20 laymen to laymen?

21 A Yes.

22 Q So you were in that situation where what
23 needed to be conveyed or what was authorized by the
24 medical department to be conveyed to Westinghouse was
25 the authorized version that was already set forth in the

1 technical bulletins?

2 A Yes.

3 Q And if there were to be something more
4 detailed or more specific than what was set forth in the
5 technical bulletins, that would have to come from the
6 professionals in the medical department to professionals
7 at Westinghouse?

8 A Yes.

9 Q Did you make any contact with the medical
10 department about this visit and the problems that
11 existed at Westinghouse?

12 A No.

13 Q Was anybody on this memo that Mr. Benignus
14 sent out in the medical department? What I'm trying to
15 ask, so I can make it clear, was anybody in the medical
16 department a recipient of that memo from what it shows?

17 A No.

18 Q So, as far as you know, from the information
19 that Mr. Benignus sent out, the information that
20 transpired at the meeting, nobody at the medical
21 department was made aware of the extent of the problem
22 that existed at the Westinghouse plant in Bloomington,
23 Indiana. Correct?

24 A That is correct.

25 Q And therefore nobody in the medical

1 department would have known of any need or any reason to
2 call any of their technical counterparts at Westinghouse
3 and read them the riot act, so to speak, about safe
4 handling of PCBs?

5 A That is correct.

6 Q Are you aware of anybody in this time frame
7 in the medical department contacting a technical
8 counterpart at Westinghouse to set them straight on the
9 proper handling of PCBs?

10 A No.

11 MR. LACEY: Bob, since you didn't get
12 breakfast this morning, do you want to take an early
13 lunch?

14 MR. HALL: Whatever is up to you.

15 MR. LACEY: My grape nuts have about worn
16 out. How about we go ahead and take an early lunch?

17 MR. HALL: That's fine.

18 MR. LACEY: What time do you want to try to
19 be back, 12:30?

20 MR. HALL: Yeah, that's plenty of time, I
21 think.

22 MR. LACEY: Let's do it. Let's shoot for
23 12:30, then.

24 VIDEO OPERATOR: We're off the record.

25 [Recess]

1 VIDEO OPERATOR: We've been off the record
2 for a lunch break. We're back on the record. It's
3 12:32 p.m.

4 MR. LACEY:

5 Q Mr. Papageorge, we were talking about
6 Westinghouse and the information that was communicated
7 to them in the Sixties before the lunch break. Did you
8 ever personally visit the capacitor plant that
9 Westinghouse had in Bloomington, Indiana?

10 A Yes.

11 Q When did you first visit that plant?

12 A I believe it was June or July 1970.

13 Q And is that the only visit you made to that
14 plant?

15 A Yes.

16 Q What was the purpose of the visit?

17 A To share with the management of the plant
18 Monsanto's understanding of the PCB issued -- issue and
19 to give the management of that plant a status report on
20 Monsanto's research studies, toxicity studies,
21 analytical methodology, development.

22 Q The toxicology studies that you were giving a
23 report on, were those the IBT studies?

24 A Yes.

25 Q What analytical methods were you giving a

1 report on?

2 A These were methods to determine the presence
3 and amount of PCBs in water, soils, animal tissues, air
4 at very low levels and with reliable consistent results.

5 Q Did those analytical methods also determine
6 the presence of contaminants in PCBs?

7 A No.

8 Q Do you recall with whom you met at the
9 Bloomington plant of Westinghouse?

10 A I don't remember all the people in the room.
11 The name that comes to mind was -- escapes me also at
12 the moment. I believe Mr. Pickett was there.

13 Q Did you recall meeting Mr. Pickett a few
14 years earlier when he came to Anniston?

15 A Yes. And a Don -- and I can't recall the
16 last name at the moment. It will come to me. I
17 don't -- I don't recall the names of the other
18 individuals.

19 Q If you remember Don's last name, you can tell
20 us throughout the course of the deposition.

21 A I'll try to remember it.

22 Q And if you don't remember it during the
23 deposition but you remember it afterwards but before you
24 read and sign your deposition, I'm going to ask the
25 court reporter to leave a blank at this point in your

1 deposition where you can add Don's last name. Will you
2 do that?

3 A I think I have it. McClain.

4 Q Okay. That's simple. We won't even need a
5 blank.

6 When you went to the Bloomington facility of
7 Westinghouse, did you remember that you had met with him
8 two or three years earlier about problems with regard to
9 their handling of PCBs?

10 A Yes.

11 Q Did you inquire of them whether or not they
12 had cleaned things up?

13 A Yes.

14 Q Of whom did you inquire?

15 A Of the room full of individuals. It was a
16 conference room full of eight or ten people.

17 Q And what was your specific inquiry in that
18 line?

19 A I do not recall the exact words, but the
20 essence was: Have you instituted any new practices
21 regarding control of spillage on your employees'
22 clothing, washing and the like? And I was assured they
23 had.

24 Q Did you tour the facility while you were
25 there?

1 A Yes.

2 Q What portions of the facility did you tour?

3 A I recall a -- other than their offices, I
4 recall a -- a large enclosed area consisting of what I
5 believe was a chamber in which the capacitors were
6 impregnated with liquid and a rather complex conveyor
7 system that carried the baskets of capacitors to the
8 points where the employees were performing the next step
9 in the process. And I also recall an outdoor area with
10 a railroad siding.

11 Q Is that where the railroad cars with PCBs
12 arrived and were unloaded?

13 A In some parts of that siding, yes.

14 Q Did you see any of the employees actually
15 working with PCBs?

16 A There were a few individuals. But the line
17 on that day was not actively producing capacitors. For
18 some reason, it was idle.

19 Q So you actually weren't able to determine
20 whether in the production operation things had in fact
21 been cleaned up?

22 A That is true.

23 Q Did you learn whether the plant had started
24 issuing plant clothing to the employees?

25 A I do not remember.

1 Q Did you learn whether the plant provided paid
2 showers at the end of a shift?

3 A I do not know.

4 Q Did you learn whether the plant provided
5 laundry and cleaning services for the clothing worn by
6 employees at the plant?

7 A I don't remember.

8 Q Did you learn whether or not the plant
9 provided impermeable shoe coverings to keep PCBs off of
10 the shoes if they were going to be in an area where they
11 could come into contact with PCBs?

12 A I do not remember.

13 Q Did you learn whether the plant provided
14 impermeable trouser and torso coverings over their
15 regular clothing if they were going to be in an area
16 where they could come into contact with PCBs?

17 A I do not remember.

18 Q Did you learn whether the plant provided
19 impermeable hand coverings for the employee, gloves or
20 something like that?

21 A I do not remember.

22 Q Did you learn whether or not the plant
23 provided impermeable head coverings of the sort that
24 Monsanto had for its employees where they might come
25 into contact with PCBs?

1 A I don't recall.

2 Q Did you learn whether the plant provided any
3 barrier creams that could be applied by the employees to
4 the bare skin if they were going to be in an area where
5 they might come into contact with PCBs?

6 A I don't recall.

7 Q Did you review the ventilation system to see
8 if you felt that it was adequate?

9 A Yes. I remember that.

10 Q Did you find the ventilation system to be
11 adequate?

12 A It appeared to be, yes.

13 Q Did you specifically inquire about these
14 other matters, the clothing, the protective coverings,
15 the barrier creams and the like, and just not remember
16 today what you found out? Or did you inquire at all?

17 A I recall inquiring about that -- those items.
18 The answer given me seemed satisfactory. And the
19 concentration then concentrated on environmental
20 matters. The rest of the day was spent on those
21 matters.

22 Q The primary purpose of your trip was
23 environmental?

24 A Yes.

25 Q The other was incidental to the trip?

1 A Correct.

2 Q But you do recall specifically inquiring
3 about all of the protective clothing items. Correct?

4 A Yes.

5 Q Including barrier creams?

6 A Yes.

7 Q And did you inquire about the showers? Or do
8 you recall?

9 A I don't recall the specifics of the
10 discussion.

11 Q Whatever they told you, you did not conclude
12 that you should warn them to do more. Is that correct?

13 A That is correct.

14 Q Did you prepare any sort of written summary
15 of your trip which included any discussion about what
16 you just said or what they told you about these safety
17 measures with regard to their workmen?

18 A No.

19 Q Did you prepare any summary or memorandum
20 about the trip that dealt with the environmental matters
21 that you discussed?

22 A No.

23 Q I'd like to spend a little bit of time
24 talking in more detail about the job that you held from
25 1970 through 1976, where you had responsibility for the

1 PCB matters almost exclusively, I understand, in '70 to
2 '72 and then still responsible but free to do other
3 things as well from '73 through '76. Do you understand
4 the period of time I'm now inquiring about?

5 A I understand the period of time and I
6 understand the reference to PCBs and other chemicals. I
7 don't understand the meaning of the word "responsible"
8 as you use it.

9 Q I see. Well, you were the manager,
10 environmental control, then the manager, environmental
11 protection, then the manager, product acceptability as
12 it related to PCBs during that six-year period?

13 A Yes.

14 Q You had the responsibility of coordinating
15 various functions within Monsanto to be the primary
16 source of information about the PCB problem? Is that
17 correct?

18 A I was not primary in terms of the degree of
19 sophistication regarding that knowledge. I was primary
20 in that I was the general source of all types of
21 information. For example, I was not the primary medical
22 source as it regards PCB. I was not the primary
23 analytical chemist source. But I was expected to know
24 enough about each of these to be able to relay to other
25 laymen my understanding of the situation.

1 Q And you related to laymen in many different
2 areas?

3 A Correct.

4 MR. LACEY: Let me ask you to mark that as
5 the next exhibit, please.

6 [Exhibit 5 marked]

7 MR. LACEY:

8 Q Let me hand you what has been marked as
9 Deposition Exhibit No. 5 and ask you if you recognize
10 that document.

11 A I have seen this document once before.

12 Q When was that?

13 A The deposition conducted on the Outboard
14 Marine case.

15 Q Is that a copy of the document that contained
16 the basic job description and function for the position
17 that you held?

18 A May I read it first?

19 Q Surely. Absolutely.

20 A I recognize some of the numbered duties as
21 being part of the assignment. I do not believe the
22 remaining were expected of me.

23 Q Do you know whose job, then, this does
24 describe?

25 A I don't think this job -- this document

1 describes any job. It looks like a draft that was never
2 approved.

3 Q I see. This is a Monsanto document, is it
4 not?

5 A Yes.

6 Q It was prepared in the ordinary course of
7 business at Monsanto by someone responsible for
8 developing job descriptions? Correct?

9 A That I don't know.

10 Q I see. Well, who did develop the job
11 description for your job?

12 A I don't know.

13 Q Which task on that Exhibit No. 5 are tasks
14 that you agree were your responsibility?

15 A There's a -- an element of the guidance
16 function under Duty No. 2. I would suggest that it was
17 limited guidance, more persuasion. No. 4, No. 5, No. 6
18 and No. 7.

19 Q Let me see if I can get it clear, then. You
20 would agree that your job involved participating
21 directly in visits with customers, plants and other
22 international producers and with government testing
23 agencies and collaborators?

24 A Yes.

25 Q Your job involved acting as a central point

1 of liaison and communications?

2 A Yes.

3 Q Your job involved working with the public
4 relations department to handle all "outside" matters of
5 concern and maintain Monsanto's image in the most
6 favorable manner?

7 A Yes.

8 Q And it involved reporting to the functional
9 fluids business director with a dotted line
10 responsibility to the plasticizer business director?

11 A Yes.

12 Q You also indicated that to a certain extent
13 you thought that you did guide the activities of a task
14 force comprised of members of two business groups,
15 medical, law, manufacturing and public relations
16 departments.

17 A Yes.

18 Q And the question there is the extent to which
19 you were the guide of that group.

20 A Correct.

21 Q Who were the other members on that task
22 force?

23 A There were the directors of research from the
24 two business groups --

25 Q Those were plasticizers and functional

1 fluids?

2 A Correct. There were the marketing directors
3 of the two groups or their representatives, the
4 manufacturing managers from the two groups. That
5 describes the members out of the two business groups.

6 Q And out of the medical group?

7 A The medical group is primarily Mr. Wheeler.

8 Q The law group?

9 A The law group was primarily Mr. Phocian Park.
10 P h o i c a n. I mentioned the manufacturing
11 individuals. Public relations, initially it was Mr. Ed
12 John, and he was replaced by several others as time went
13 on.

14 Q Who were the various business group and
15 manufacturing representatives by name?

16 A The research directors were Dr. Richard and
17 Dr. Farrar. Also representing the research function
18 were Dr. Keller and Dr. Tucker.

19 Q Scott Tucker?

20 A Yes, sir. The manager of manufacturing was
21 initially a Mr. William Kuhn, K u h n, and he was later
22 replaced by a Mr. James Savage, S a v a g e.

23 The marketing director initially for the
24 functional groups it was Donald Olson, replaced by
25 Thomas Gossage.

1 And Walter Schalk, S c h a l k, represented
2 the plasticizers group.

3 There were individuals who would substitute
4 for these principal members when they were not
5 available.

6 Q Were there any particular people who were
7 frequently in attendance at the meeting as substitutes
8 because the persons they represented were not available
9 on a regular basis?

10 A Not frequently, no.

11 Q The two duties that you say you had no
12 responsibility for, I take it, is the one of assuming
13 overall responsibility for total management of the
14 Aroclor pollution problem.

15 A That is correct.

16 Q And the supervising and budgeting, objective
17 setting, assignment of priorities and implementing
18 programs.

19 A That is correct.

20 Q Who at Monsanto assumed the overall
21 responsibility for the total management of the Aroclor
22 pollution problem?

23 A I hesitate because I -- I believe it fell
24 upon at least two individuals, a Mr. John Mason and a
25 Mr. Howard Bergen.

1 Q These are at different times?

2 A No, Mr. Howard Bergen was a business director
3 for the functional fluids group, and he reported to Mr.
4 Mason, who was the assistant general manager responsible
5 for that business group to -- Mr. Bergen reported to Mr.
6 Mason. So the overall responsibility from my
7 perspective rested on those two individuals.

8 Q And the other aspect that you say you didn't
9 have responsibility for was budgeting, objective setting
10 of assignment priorities and implementing programs. Who
11 did that fall on?

12 A I looked to Mr. Howard Bergen for those
13 activities.

14 Q So basically if we look at Exhibit 5
15 responsibilities 1 and 3 fell on Mr. Bergen or his boss.
16 Correct?

17 A Correct.

18 Q And responsibilities 2, 4, 5, 6 and 7 fell
19 primarily on you?

20 A Yes.

21 Q On the second page of that exhibit there's a
22 notation that the supervision for this position under
23 direct supervision is none. Would you indicate that you
24 felt your position was one where you did not have a
25 specific direct supervisor?

1 A Well, I had the supervisor. This refers to
2 people I would be supervising.

3 Q I see. Who was your direct supervisor?

4 A Mr. Bergen.

5 Q And you -- did you have anybody that you
6 supervised?

7 A No.

8 Q This job was something of a one-man band?

9 A Yes.

10 Q In terms of your participation directly in
11 visits with customers, plants, producers, testing
12 agencies and collaborators. What's a collaborator?

13 A I don't know what the author of this document
14 had in mind. My interpretation would be entities that
15 work with the government in performing tests,
16 evaluations, providing consulting services.

17 Q Can you give me some examples?

18 A Can I give you some examples?

19 Q Yes.

20 A Yes.

21 Q Of the groups that would be collaborators.

22 A I don't recall all of their names, but there
23 were consulting firms in the Washington, D.C., area that
24 were working for the government agencies to conduct
25 studies for them.

1 Q That's what you're talking about basically,
2 then, is private groups employed by the government?

3 A That is one form.

4 Q Okay.

5 A Another form is, for example, there was a
6 group that I recall at Massachusetts Institute of
7 Technology working on a grant from the government
8 assigned the task of looking into PCBs. It's that type
9 of outside entity working with the government.

10 Q Okay.

11 Now, in terms of visiting directly with
12 customers, you've told me about a visit you made to the
13 Westinghouse plant at Bloomington. Was that in
14 connection with the job that you picked up in 1970?

15 A Yes.

16 Q How many other customers' plants did you
17 visit -- I'm looking just for an estimate at this
18 point -- during this period of time?

19 A I never made a count. As best I recall,
20 there were about a dozen plants at that point in time.

21 Q Now I'm talking about from '70 through the
22 '76. Is that the time you're talking about?

23 A Oh, I'm sorry. I thought you meant the
24 summer of 1970.

25 Q No, no. I'm sorry. I meant the entire time

1 that you held this responsibility.

2 A I don't know the number. Couple dozen.

3 Q Somewhere on the order of 25?

4 A Something like that.

5 Q Did any customer get more than one visit?

6 A [No reply]

7 Q And let me be very specific there. For
8 example, in those 25 visits would there be more than one
9 visit to GE at any facility?

10 A Yes.

11 Q How many different GE facilities did you
12 visit?

13 A I visited their offices in Schenectady, New
14 York, their plant at Hudson Falls, New York, their plant
15 at Pittsfield, Massachusetts, and I believe their plant
16 at Rome, Georgia. I can't recall any other GE facility.

17 Q In each of the plant visits did you review
18 the practices that were being observed with regard to
19 protection of employees in the plant?

20 A No.

21 Q In any of those visits did you review that?

22 A I don't recall a discussion centered on
23 employee exposure.

24 Q Let's go to Westinghouse. We know you've
25 told me already that you went to the Bloomington plant.

1 Did you visit any other Westinghouse facilities?

2 A I visited the South Boston, Virginia, site
3 and the -- I believe it was two facilities in the
4 Pittsburgh area.

5 Q Were those both plants?

6 A No. These were -- one was a research center
7 and the other was primarily an office center.

8 Q In any of the visits other than the
9 Bloomington visit did you have any discussions about
10 worker safety?

11 A I don't recall any.

12 Q What other plants did you visit?

13 A There were two plants in the New Bedford,
14 Massachusetts, area.

15 Q Do you know whose plants they were?

16 A One was the Aerovox, A e r o v o x, plant and
17 the other was Cornell-Dubblrier, D u b b i l i e r.

18 Q What other plants did you visit?

19 A There was a plant in Vermont, the JARD
20 Company, J A R D company; the Sangamo electric plant in
21 Pickens, South Carolina; the Mallory plant in Tennessee,
22 I believe it was near Murfreesboro, Tennessee; the
23 Wagner Electric plant in St. Louis; the Allis-Chalmers
24 plant in Milwaukee; Rayethon plant in Lowell,
25 Massachusetts; the Ciba-Geigy plant in Tennessee. I

1 don't recall the city. There were at least two more
2 transformer plants, and I can't recall the city or the
3 name at the moment.

4 Q Any other types of plants besides dielectric
5 plants?

6 A The Rayethon and Ciba-Geigy were not
7 dielectric at the time.

8 Q All right.

9 A I can't recall any others at the moment.

10 Q In the New Bedford area did you discuss or
11 inquire about worker protections?

12 A That was not a topic of discussion.

13 Q In Gerard -- JARD Company.

14 A JARD? No.

15 Q What about Sangamo? Was that an area of
16 discussion?

17 A No.

18 Q The Mallory plant?

19 A No.

20 Q Wagner Electric?

21 A No.

22 Q Allis-Chalmers?

23 A No.

24 Q Rayethon?

25 A No.

1 Q Ciba-Geigy?

2 A No.

3 Q The other transformer plants you visited?

4 A No.

5 Q So the only plant that you ever discussed
6 worker protection at was the Bloomington Westinghouse
7 plant?

8 A To my recollection.

9 Q Okay. Now, did you ever visit any Ford
10 facility at all?

11 A No.

12 Q Did you ever visit any TVA facility?

13 A No.

14 Q For purposes of your customer visits --
15 strike that.

16 We talked a little bit yesterday about the
17 fact that after Monsanto limited its sale of PCBs to
18 dielectric fluids it refused to sell to companies that
19 did not provide it with written indemnities. Correct?

20 A Correct.

21 Q And furthermore there were some companies
22 that would not be considered for sales because they
23 weren't of sufficient size or strength to provide a
24 meaningful indemnity. Correct?

25 A Correct.

1 Q Now, Monsanto was willing for and even
2 suggested to the companies that were its customers, that
3 is, that were big enough to provide an indemnity
4 Monsanto could rely on and who did sign one that they
5 could in turn sell dielectric fluids to companies that
6 Monsanto would not sell to direct. Correct?

7 A Correct.

8 Q Did you, for purposes of your job, consider
9 companies to whom Monsanto delivered dielectric fluids,
10 even though they weren't the technical purchaser, to be
11 customers?

12 A Did I personally? No.

13 Q Okay. There were definitely situations, were
14 there not, in the 1970s where, for example, if you were
15 going to sell PCB materials to Westinghouse and they
16 were to provide for a resale or whatever you might call
17 it to somebody that Monsanto wouldn't sell to directly,
18 what would actually happen is Westinghouse would place
19 the order but direct that the materials be shipped to
20 the third party?

21 A Yes.

22 Q And you did not consider those third parties
23 to whom the materials were shipped directly by Monsanto
24 to be a customer on whom you should make a visit or a
25 call?

1 A That is true.

2 Q Why not?

3 A Just by the sheer definition of what is a
4 customer and who do we communicate with and what is
5 the -- what are the particulars of the arrangement of
6 the sale? They didn't fit any of these. They were just
7 a ship-to point as far as our records are concerned. We
8 don't know who is the official recipient of that
9 material and what they're doing with it. We had to rely
10 on the bill-to identity.

11 Q Well, you knew full well the relationship, --
12 didn't you? I mean you're the ones who had set up the
13 system of not selling to people who couldn't provide you
14 with the indemnity you wanted, and suggesting this
15 arrangement of a nominal sale to somebody who had an
16 indemnity with the return delivery to the party you
17 wouldn't sell to directly.

18 A And who had the knowledge of the situation
19 that we felt was appropriate.

20 Q Who had the knowledge?

21 A Those customers willing to go along and sign
22 with this indemnity.

23 Q Well, were you always confident those to whom
24 you shipped had sufficient knowledge?

25 A We don't know who received it at the other

1 end and who handled it.

2 Q Well, if your purchase order was ship to, you
3 knew where it wound up, didn't you?

4 A I think we have a misunderstanding. Many
5 times the General Electric Company would order their
6 Pydrauls shipped to such and such a company. That meant
7 that General Electric crews would arrive at that site,
8 receive the material, handle it properly, do what was
9 right with it. So it was still General Electric
10 involved. We don't know who handled the material at the
11 ship-to location.

12 Q You didn't have any idea?

13 A That's right. The billing -- the order
14 doesn't say: So-and-so will handle it.

15 Q What effort was made to provide any technical
16 bulletins or other information on safe handling and
17 toxicology to the locations to which PCBs were shipped?

18 A The environmental statements issued in early
19 1970 with some followups in subsequent years went to all
20 entities listed on our ship-to, bill-to lists.

21 Q When you talk about environmental statements,
22 are you talking about the sort of technical bulletins
23 that we looked at earlier today?

24 A No. These were the memoranda designed to
25 update all of these companies regarding the

1 environmental presence of PCBs and our cautioning: Do
2 not let it get to the environment. Those letters.

3 Q But not the documents that contained
4 information on safe handling?

5 A The safe handling documents, I do not know
6 who got them and who in Monsanto supplied them.

7 Q So you don't know whether or not they went to
8 people who were ship-tos but not the technical purchaser
9 under the purchase order?

10 A That is correct.

11 Q In connection with your function as the
12 central point of liaison and communication and your work
13 with the public relations department to handle outside
14 matters of concern, did you respond to inquiries and
15 correspondence directed to Monsanto concerning PCBs?

16 A Yes.

17 Q And in fact was your name made known by
18 Monsanto to others as a person with whom to correspond
19 about matters relating to PCBs?

20 A Yes.

21 Q Do you have any idea of the volume of
22 correspondence that you received from customers
23 concerning PCBs in the period from 1970 to 1976?

24 A I -- I do not have an idea other than it was
25 quite extensive in '70 and '71, and became less frequent

1 in the period '74 to '76.

2 Q Did you make an effort to respond to the
3 correspondence that was sent to you?

4 A Certainly.

5 Q That was part of your job?

6 A Yes.

7 Q It was the expectation of Mr. Bergen, I take
8 it, that if people wrote in to Monsanto asking questions
9 about Monsanto's PCB products and that came to you you
10 were to provide them with a response?

11 A Or have someone better qualified respond.

12 Q Okay. If someone better qualified responded,
13 would they respond in their own name or in your name?

14 A The vast majority of the time in their own
15 name.

16 Q And typically if that happened they would
17 indicate at the outset that the letter was referred to
18 them by you?

19 A As appropriate. Because many times a
20 recipient didn't know who I was.

21 Q Okay. In the case of a person who sent a
22 letter specifically to you, either you would respond or
23 you would refer it to someone who would respond and
24 reference the referral by you?

25 A Correct.

1 MR. LACEY: Would you mark that as the next
2 exhibit, please?

3 [Exhibit 6 marked]

4 MR. LACEY:

5 Q Let me hand you what has been marked by the
6 court reporter as Exhibit No. 6 and ask if it's an
7 exhibit consisting of three pages, ask if you recognize
8 the letter that is dated February 2nd, 1972, from
9 Mr. R. T. Richards at Texaco to you and the response
10 that you wrote on February 4th, 1972.

11 A Now that I've read them, I recall the -- the
12 two documents you refer to.

13 Q Okay. I'll tell you what. To make it
14 convenient, let me have the reporter mark the letter
15 that Mr. Richards wrote to you as Exhibit 6 A, and then
16 we can distinguish between your response as Exhibit 6
17 and the Richards' letter 6 A.

18 [Exhibit 6 A marked]

19 MR. LACEY:

20 Q Let me hand it back to you. Now the reporter
21 has marked Mr. Richards' letter to you as Exhibit 6 A.
22 It was part of your function to receive letters of the
23 type that Mr. Richards wrote to you which is marked as
24 Exhibit 6 A?

25 A Yes.

1 Q And it was a part of your function on behalf
2 of Monsanto to respond to letters like that from
3 Mr. Richards with the type of response you wrote which
4 is marked as Exhibit 6?

5 A Yes.

6 Q Obviously Mr. Richards knew who to correspond
7 with because the letter is addressed specifically to
8 you. Correct?

9 A Yes.

10 Q This letter was written in February of 1972.
11 Correct?

12 A Correct.

13 Q And by that time had your position at
14 Monsanto become one that was somewhat well-known around
15 the country as being associated with responsibility for
16 PCBs at Monsanto?

17 A I believe so, yes.

18 Q You in fact had gone on news programs as a
19 Monsanto spokesman about PCBs, had you not?

20 — A A few, yes.

21 Q And your name had appeared in documents that
22 were provided to customers and governmental agencies and
23 others about PCBs, had it not?

24 A Yes.

25 Q In fact, you had spoken on behalf of Monsanto

1 to various groups by this time, had you not?

2 A Yes.

3 Q So it wasn't at all surprising to find people
4 who knew your name as the person to write to with
5 questions about PCBs by this time, was it?

6 A That is correct.

7 Q Did you know Mr. Richards personally?

8 A No.

9 Q Had you ever visited the Texaco facilities?

10 A No.

11 Q They were not a customer that you went to? --

12 A That is correct.

13 Q In Mr. Richards' letter he asked for certain
14 information about PCBs. Correct?

15 A Yes.

16 Q And your response, which is Exhibit 6, was
17 written -- in fact, we don't -- you don't have a
18 Received stamp on this letter, do you?

19 A No.

20 Q It looks like the mail service was pretty
21 good.

22 A It does.

23 Q His letter is dated February 2nd, your
24 response is dated February 4th. So you were very prompt
25 in getting a response back to him, were you not?

1 A I tried to be, yes.

2 Q Were you always that prompt?

3 A When I was in the office I tried to keep up
4 with it. Otherwise I would get inundated. It was a
5 matter of survival.

6 Q Okay. Did you normally write the responses
7 yourself?

8 A Yes.

9 Q Okay. So what we have here, then, is your
10 response, not one written by somebody else for you?

11 A That is correct.

12 Q And did you give Mr. Richards a full and
13 complete response to his inquiry?

14 A I'll have to read point by point, make the
15 comparison.

16 Q Okay. Well --

17 A To answer.

18 Q You may want to do that. I really wasn't
19 trying to find a particular flaw in it but just to make
20 sure you fully responded in your mind.

21 A Well, it appears that my response answered
22 his key questions.

23 Q Okay. And was it customary for you when you
24 filed things to do it like this, to put the response
25 letter together with the letter that was the inquiry

1 letter so you would have the two together in your filing
2 system?

3 A No, this is not my way of filing.

4 Q I see. How did you normally file things?

5 A By subject chronologically. And the subject
6 would be at my discretion as to which folder to put it
7 in.

8 Q What sort of folders could Mr. Richards'
9 letter have fallen into as you filed things?

10 A This probably fell into the customers 1972
11 folder.

12 Q Okay. And where would your response be
13 filed, in that same folder?

14 A Yes.

15 Q And so the difference would be if there were
16 any letters you received -- well, let me ask that. Did
17 you file the letters by the date that you received them
18 or by the date that they were dated? When you would
19 file in that folder.

20 — A The date they were dated.

21 Q Okay. So the difference between what we have
22 here as Exhibit 6 and 6 A or whether or not it's filed
23 exactly as it would have been is whether or not you
24 would have received a document dated February 3rd or
25 written a document dated February 3rd. Correct?

1 A Or written other documents February 2nd.

2 Q Okay. And then that -- how would you decide
3 where they were filed in order if it was February 2nd?

4 A My secretary would put them in there by
5 dates.

6 Q Okay.

7 A And we would have to go retrieve them
8 manually and find them.

9 Q Okay. So depending on whether or not there
10 were any documents that you wrote on February 2nd filed
11 after this letter or documents you wrote on February 2
12 3rd, these might have been contained right next to each
13 other in your filing system?

14 A Yes.

15 Q Was it your customary practice to maintain
16 for your file copy of your document the type of document
17 we have as 6, Exhibit 6?

18 A Yes.

19 Q Did the original go out on your letterhead?

20 A Yes.

21 Q But the file copy did not have your
22 letterhead on it?

23 A No.

24 Q Did you sign the original document that went
25 out?

1 A Yes.

2 Q But you didn't sign the copy that you
3 retained for your file?

4 A No.

5 Q So what we have here is -- as Exhibit 6 is a
6 correct copy, then, of the file copy you kept of that
7 letter?

8 A Yes.

9 Q And what we have as Exhibit 6 A is a correct
10 copy of the letter that you received from Mr. Richards
11 to which you responded?

12 A Yes.

13 Q Did you ever have any further communication
14 with Mr. Richards after you wrote him this response?

15 A I don't recall.

16 Q Did you ever, after you received Mr.
17 Richards' letter, do any investigation to find out about
18 the products that Texaco did purchase from Monsanto?

19 A I don't recall.

20 Q The reason I ask that, one of Mr. Richards'
21 questions dealt with whether or not Monsanto Aroclors
22 contained PCBs. Correct?

23 A [No reply]

24 Q Look at the last sentence in the third
25 paragraph of his letter.

1 A The reason I'm hesitating, he doesn't use the
2 word "Monsanto's Aroclors."

3 Q If you'll look at the last sentence in the
4 third paragraph, I read that sentence to say Texaco has
5 used --

6 A I'm sorry.

7 Q -- Monsanto Aroclors.

8 A You're right. You are right. He is asking
9 that.

10 Q And it is obvious from the way that letter is
11 written that Mr. Richards was under the impression that
12 Monsanto Aroclors had no PCBs in them. Correct?

13 A Yes.

14 Q And your response points out that there are
15 some specific series that have Aroclors as ingredients.
16 Correct?

17 A Yes.

18 Q And other series that have PC -- I'm sorry.
19 That was a --

20 -- MR. HALL: You're just following along. He
21 meant to say had PCBs.

22 MR. LACEY: I certainly did.

23 Q Aroclors and PCBs generally in my mind are
24 linked, but there's a slight difference. There are
25 certain Monsanto Aroclors that have PCBs in them as a

1 constituent part. Correct?

2 A Yes.

3 Q There are other Monsanto Aroclors, items that
4 go under that trade name, that have PCBs in them as a
5 contaminant?

6 A Yes.

7 Q And the way you've written your response you
8 cover both possibilities.

9 A Yes.

10 Q And it appears to me that you wrote the
11 response without having to go and check the records and
12 see which one they actually bought.

13 A That is correct.

14 Q And so you weren't sure whether they bought
15 the products that had PCBs in them as a contaminant or
16 the ones that had PCBs in them as a constituent part.

17 A That is correct.

18 Q And you never did go and actually determine
19 which particular Aroclor they bought?

20 — A No.

21 Q The letter also asks about some other names.
22 In particular, he asks about what he calls Askarels,
23 A s c o r a l s. Correct?

24 A I see that, yes.

25 Q And the Ascorals was a misspelling of the

1 term Askarels, A s k a r e l s. Correct?

2 A Well, I didn't at the time and to this moment
3 know whether that's a misspelling or whether it's a
4 trademark of some other kind that he is knowledgeable
5 of. This is why my response -- I indicated I'm not
6 familiar with that word unless he's referring to the
7 generic name askarels, lower case a. I had no way of
8 knowing what he meant by the word he used.

9 Q I see. There was a sufficient doubt in your
10 mind or a sufficient question in your mind that what he
11 meant to say was Askarels and misspelled it?

12 A This is why I went ahead and then pointed
13 that out.

14 Q Okay. And, of course, Askarels were just a
15 name for PCB-containing dielectric fluids. Correct?

16 A At that point in time Askarels did contain
17 PCBs, you're right.

18 Q And they were dielectric fluids?

19 A Yes.

20 — Q In fact, in some of the technical bulletins
21 we looked at earlier this morning there was discussion
22 by Monsanto of Askarel-type transformers.

23 A Yes.

24 Q And that was talking about PCB fluid
25 transformers?

1 department would have known of any need or any reason to
2 call any of their technical counterparts at Westinghouse
3 and read them the riot act, so to speak, about safe
4 handling of PCBs?

5 A That is correct.

6 Q Are you aware of anybody in this time frame
7 in the medical department contacting a technical
8 counterpart at Westinghouse to set them straight on the
9 proper handling of PCBs?

10 A No.

11 MR. LACEY: Bob, since you didn't get
12 breakfast this morning, do you want to take an early
13 lunch?

14 MR. HALL: Whatever is up to you.

15 MR. LACEY: My grape nuts have about worn
16 out. How about we go ahead and take an early lunch?

17 MR. HALL: That's fine.

18 MR. LACEY: What time do you want to try to
19 be back, 12:30?

20 MR. HALL: Yeah, that's plenty of time, I
21 think.

22 MR. LACEY: Let's do it. Let's shoot for
23 12:30, then.

24 VIDEO OPERATOR: We're off the record.

25 [Recess]

1 VIDEO OPERATOR: We've been off the record
2 for a lunch break. We're back on the record. It's
3 12:32 p.m.

4 MR. LACEY:

5 Q Mr. Papageorge, we were talking about
6 Westinghouse and the information that was communicated
7 to them in the Sixties before the lunch break. Did you
8 ever personally visit the capacitor plant that
9 Westinghouse had in Bloomington, Indiana?

10 A Yes.

11 Q When did you first visit that plant?

12 A I believe it was June or July 1970.

13 Q And is that the only visit you made to that
14 plant?

15 A Yes.

16 Q What was the purpose of the visit?

17 A To share with the management of the plant
18 Monsanto's understanding of the PCB issued -- issue and
19 to give the management of that plant a status report on
20 Monsanto's research studies, toxicity studies,
21 analytical methodology, development.

22 Q The toxicology studies that you were giving a
23 report on, were those the IBT studies?

24 A Yes.

25 Q What analytical methods were you giving a

1 report on?

2 A These were methods to determine the presence
3 and amount of PCBs in water, soils, animal tissues, air
4 at very low levels and with reliable consistent results.

5 Q Did those analytical methods also determine
6 the presence of contaminants in PCBs?

7 A No.

8 Q Do you recall with whom you met at the
9 Bloomington plant of Westinghouse?

10 A I don't remember all the people in the room.
11 The name that comes to mind was -- escapes me also at
12 the moment. I believe Mr. Pickett was there.

13 Q Did you recall meeting Mr. Pickett a few
14 years earlier when he came to Anniston?

15 A Yes. And a Don -- and I can't recall the
16 last name at the moment. It will come to me. I
17 don't -- I don't recall the names of the other
18 individuals.

19 Q If you remember Don's last name, you can tell
20 us throughout the course of the deposition.

21 A I'll try to remember it.

22 Q And if you don't remember it during the
23 deposition but you remember it afterwards but before you
24 read and sign your deposition, I'm going to ask the
25 court reporter to leave a blank at this point in your

1 deposition where you can add Don's last name. Will you
2 do that?

3 A I think I have it. McClain.

4 Q Okay. That's simple. We won't even need a
5 blank.

6 When you went to the Bloomington facility of
7 Westinghouse, did you remember that you had met with him
8 two or three years earlier about problems with regard to
9 their handling of PCBs?

10 A Yes.

11 Q Did you inquire of them whether or not they
12 had cleaned things up?

13 A Yes.

14 Q Of whom did you inquire?

15 A Of the room full of individuals. It was a
16 conference room full of eight or ten people.

17 Q And what was your specific inquiry in that
18 line?

19 A I do not recall the exact words, but the
20 essence was: Have you instituted any new practices
21 regarding control of spillage on your employees'
22 clothing, washing and the like? And I was assured they
23 had.

24 Q Did you tour the facility while you were
25 there?

1 A Yes.

2 Q What portions of the facility did you tour?

3 A I recall a -- other than their offices, I
4 recall a -- a large enclosed area consisting of what I
5 believe was a chamber in which the capacitors were
6 impregnated with liquid and a rather complex conveyor
7 system that carried the baskets of capacitors to the
8 points where the employees were performing the next step
9 in the process. And I also recall an outdoor area with
10 a railroad siding.

11 Q Is that where the railroad cars with PCBs
12 arrived and were unloaded?

13 A In some parts of that siding, yes.

14 Q Did you see any of the employees actually
15 working with PCBs?

16 A There were a few individuals. But the line
17 on that day was not actively producing capacitors. For
18 some reason, it was idle.

19 Q So you actually weren't able to determine
20 whether in the production operation things had in fact
21 been cleaned up?

22 A That is true.

23 Q Did you learn whether the plant had started
24 issuing plant clothing to the employees?

25 A I do not remember.

1 Q Did you learn whether the plant provided paid
2 showers at the end of a shift?

3 A I do not know.

4 Q Did you learn whether the plant provided
5 laundry and cleaning services for the clothing worn by
6 employees at the plant?

7 A I don't remember.

8 Q Did you learn whether or not the plant
9 provided impermeable shoe coverings to keep PCBs off of
10 the shoes if they were going to be in an area where they
11 could come into contact with PCBs?

12 A I do not remember.

13 Q Did you learn whether the plant provided
14 impermeable trouser and torso coverings over their
15 regular clothing if they were going to be in an area
16 where they could come into contact with PCBs?

17 A I do not remember.

18 Q Did you learn whether the plant provided
19 impermeable hand coverings for the employee, gloves or
20 something like that?

21 A I do not remember.

22 Q Did you learn whether or not the plant
23 provided impermeable head coverings of the sort that
24 Monsanto had for its employees where they might come
25 into contact with PCBs?

1 A I don't recall.

2 Q Did you learn whether the plant provided any
3 barrier creams that could be applied by the employees to
4 the bare skin if they were going to be in an area where
5 they might come into contact with PCBs?

6 A I don't recall.

7 Q Did you review the ventilation system to see
8 if you felt that it was adequate?

9 A Yes. I remember that.

10 Q Did you find the ventilation system to be
11 adequate?

12 A It appeared to be, yes.

13 Q Did you specifically inquire about these
14 other matters, the clothing, the protective coverings,
15 the barrier creams and the like, and just not remember
16 today what you found out? Or did you inquire at all?

17 A I recall inquiring about that -- those items.
18 The answer given me seemed satisfactory. And the
19 concentration then concentrated on environmental
20 matters. The rest of the day was spent on those
21 matters.

22 Q The primary purpose of your trip was
23 environmental?

24 A Yes.

25 Q The other was incidental to the trip?

1 A Correct.

2 Q But you do recall specifically inquiring
3 about all of the protective clothing items. Correct?

4 A Yes.

5 Q Including barrier creams?

6 A Yes.

7 Q And did you inquire about the showers? Or do
8 you recall?

9 A I don't recall the specifics of the
10 discussion.

11 Q Whatever they told you, you did not conclude
12 that you should warn them to do more. Is that correct?

13 A That is correct.

14 Q Did you prepare any sort of written summary
15 of your trip which included any discussion about what
16 you just said or what they told you about these safety
17 measures with regard to their workmen?

18 A No.

19 Q Did you prepare any summary or memorandum
20 about the trip that dealt with the environmental matters
21 that you discussed?

22 A No.

23 Q I'd like to spend a little bit of time
24 talking in more detail about the job that you held from
25 1970 through 1976, where you had responsibility for the

1 PCB matters almost exclusively, I understand, in '70 to
2 '72 and then still responsible but free to do other
3 things as well from '73 through '76. Do you understand
4 the period of time I'm now inquiring about?

5 A I understand the period of time and I
6 understand the reference to PCBs and other chemicals. I
7 don't understand the meaning of the word "responsible"
8 as you use it.

9 Q I see. Well, you were the manager,
10 environmental control, then the manager, environmental
11 protection, then the manager, product acceptability as
12 it related to PCBs during that six-year period?

13 A Yes.

14 Q You had the responsibility of coordinating
15 various functions within Monsanto to be the primary
16 source of information about the PCB problem? Is that
17 correct?

18 A I was not primary in terms of the degree of
19 sophistication regarding that knowledge. I was primary
20 in that I was the general source of all types of
21 information. For example, I was not the primary medical
22 source as it regards PCB. I was not the primary
23 analytical chemist source. But I was expected to know
24 enough about each of these to be able to relay to other
25 laymen my understanding of the situation.

1 Q And you related to laymen in many different
2 areas?

3 A Correct.

4 MR. LACEY: Let me ask you to mark that as
5 the next exhibit, please.

6 [Exhibit 5 marked]

7 MR. LACEY:

8 Q Let me hand you what has been marked as
9 Deposition Exhibit No. 5 and ask you if you recognize
10 that document.

11 A I have seen this document once before.

12 Q When was that?

13 A The deposition conducted on the Outboard
14 Marine case.

15 Q Is that a copy of the document that contained
16 the basic job description and function for the position
17 that you held?

18 A May I read it first?

19 Q Surely. Absolutely.

20 A I recognize some of the numbered duties as
21 being part of the assignment. I do not believe the
22 remaining were expected of me.

23 Q Do you know whose job, then, this does
24 describe?

25 A I don't think this job -- this document

1 describes any job. It looks like a draft that was never
2 approved.

3 Q I see. This is a Monsanto document, is it
4 not?

5 A Yes.

6 Q It was prepared in the ordinary course of
7 business at Monsanto by someone responsible for
8 developing job descriptions? Correct?

9 A That I don't know.

10 Q I see. Well, who did develop the job
11 description for your job?

12 A I don't know.

13 Q Which task on that Exhibit No. 5 are tasks
14 that you agree were your responsibility?

15 A There's a -- an element of the guidance
16 function under Duty No. 2. I would suggest that it was
17 limited guidance, more persuasion. No. 4, No. 5, No. 6
18 and No. 7.

19 Q Let me see if I can get it clear, then. You
20 would agree that your job involved participating
21 directly in visits with customers, plants and other
22 international producers and with government testing
23 agencies and collaborators?

24 A Yes.

25 Q Your job involved acting as a central point

1 of liaison and communications?

2 A Yes.

3 Q Your job involved working with the public
4 relations department to handle all "outside" matters of
5 concern and maintain Monsanto's image in the most
6 favorable manner?

7 A Yes.

8 Q And it involved reporting to the functional
9 fluids business director with a dotted line
10 responsibility to the plasticizer business director?

11 A Yes.

12 Q You also indicated that to a certain extent
13 you thought that you did guide the activities of a task
14 force comprised of members of two business groups,
15 medical, law, manufacturing and public relations
16 departments.

17 A Yes.

18 Q And the question there is the extent to which
19 you were the guide of that group.

20 A Correct.

21 Q Who were the other members on that task
22 force?

23 A There were the directors of research from the
24 two business groups --

25 Q Those were plasticizers and functional

1 fluids?

2 A Correct. There were the marketing directors
3 of the two groups or their representatives, the
4 manufacturing managers from the two groups. That
5 describes the members out of the two business groups.

6 Q And out of the medical group?

7 A The medical group is primarily Mr. Wheeler.

8 Q The law group?

9 A The law group was primarily Mr. Phocian Park.
10 P h o i c a n. I mentioned the manufacturing
11 individuals. Public relations, initially it was Mr. Ed
12 John, and he was replaced by several others as time went
13 on.

14 Q Who were the various business group and
15 manufacturing representatives by name?

16 A The research directors were Dr. Richard and
17 Dr. Farrar. Also representing the research function
18 were Dr. Keller and Dr. Tucker.

19 Q Scott Tucker?

20 A Yes, sir. The manager of manufacturing was
21 initially a Mr. William Kuhn, K u h n, and he was later
22 replaced by a Mr. James Savage, S a v a g e.

23 The marketing director initially for the
24 functional groups it was Donald Olson, replaced by
25 Thomas Gossage.

1 And Walter Schalk, S c h a l k, represented
2 the plasticizers group.

3 There were individuals who would substitute
4 for these principal members when they were not
5 available.

6 Q Were there any particular people who were
7 frequently in attendance at the meeting as substitutes
8 because the persons they represented were not available
9 on a regular basis?

10 A Not frequently, no.

11 Q The two duties that you say you had no
12 responsibility for, I take it, is the one of assuming
13 overall responsibility for total management of the
14 Aroclor pollution problem.

15 A That is correct.

16 Q And the supervising and budgeting, objective
17 setting, assignment of priorities and implementing
18 programs.

19 A That is correct.

20 Q Who at Monsanto assumed the overall
21 responsibility for the total management of the Aroclor
22 pollution problem?

23 A I hesitate because I -- I believe it fell
24 upon at least two individuals, a Mr. John Mason and a
25 Mr. Howard Bergen.

1 Q These are at different times?

2 A No, Mr. Howard Bergen was a business director
3 for the functional fluids group, and he reported to Mr.
4 Mason, who was the assistant general manager responsible
5 for that business group to -- Mr. Bergen reported to Mr.
6 Mason. So the overall responsibility from my
7 perspective rested on those two individuals.

8 Q And the other aspect that you say you didn't
9 have responsibility for was budgeting, objective setting
10 of assignment priorities and implementing programs. Who
11 did that fall on?

12 A I looked to Mr. Howard Bergen for those
13 activities.

14 Q So basically if we look at Exhibit 5
15 responsibilities 1 and 3 fell on Mr. Bergen or his boss.
16 Correct?

17 A Correct.

18 Q And responsibilities 2, 4, 5, 6 and 7 fell
19 primarily on you?

20 A Yes.

21 Q On the second page of that exhibit there's a
22 notation that the supervision for this position under
23 direct supervision is none. Would you indicate that you
24 felt your position was one where you did not have a
25 specific direct supervisor?

1 A Well, I had the supervisor. This refers to
2 people I would be supervising.

3 Q I see. Who was your direct supervisor?

4 A Mr. Bergen.

5 Q And you -- did you have anybody that you
6 supervised?

7 A No.

8 Q This job was something of a one-man band?

9 A Yes.

10 Q In terms of your participation directly in
11 visits with customers, plants, producers, testing
12 agencies and collaborators. What's a collaborator?

13 A I don't know what the author of this document
14 had in mind. My interpretation would be entities that
15 work with the government in performing tests,
16 evaluations, providing consulting services.

17 Q Can you give me some examples?

18 A Can I give you some examples?

19 Q Yes.

20 A Yes.

21 Q Of the groups that would be collaborators.

22 A I don't recall all of their names, but there
23 were consulting firms in the Washington, D.C., area that
24 were working for the government agencies to conduct
25 studies for them.

1 Q That's what you're talking about basically,
2 then, is private groups employed by the government?

3 A That is one form.

4 Q Okay.

5 A Another form is, for example, there was a
6 group that I recall at Massachusetts Institute of
7 Technology working on a grant from the government
8 assigned the task of looking into PCBs. It's that type
9 of outside entity working with the government.

10 Q Okay.

11 Now, in terms of visiting directly with
12 customers, you've told me about a visit you made to the
13 Westinghouse plant at Bloomington. Was that in
14 connection with the job that you picked up in 1970?

15 A Yes.

16 Q How many other customers' plants did you
17 visit -- I'm looking just for an estimate at this
18 point -- during this period of time?

19 A I never made a count. As best I recall,
20 there were about a dozen plants at that point in time.

21 Q Now I'm talking about from '70 through the
22 '76. Is that the time you're talking about?

23 A Oh, I'm sorry. I thought you meant the
24 summer of 1970.

25 Q No, no. I'm sorry. I meant the entire time

1 that you held this responsibility.

2 A I don't know the number. Couple dozen.

3 Q Somewhere on the order of 25?

4 A Something like that.

5 Q Did any customer get more than one visit?

6 A [No reply]

7 Q And let me be very specific there. For
8 example, in those 25 visits would there be more than one
9 visit to GE at any facility?

10 A Yes.

11 Q How many different GE facilities did you
12 visit?

13 A I visited their offices in Schenectady, New
14 York, their plant at Hudson Falls, New York, their plant
15 at Pittsfield, Massachusetts, and I believe their plant
16 at Rome, Georgia. I can't recall any other GE facility.

17 Q In each of the plant visits did you review
18 the practices that were being observed with regard to
19 protection of employees in the plant?

20 A No.

21 Q In any of those visits did you review that?

22 A I don't recall a discussion centered on
23 employee exposure.

24 Q Let's go to Westinghouse. We know you've
25 told me already that you went to the Bloomington plant.

1 Did you visit any other Westinghouse facilities?

2 A I visited the South Boston, Virginia, site
3 and the -- I believe it was two facilities in the
4 Pittsburgh area.

5 Q Were those both plants?

6 A No. These were -- one was a research center
7 and the other was primarily an office center.

8 Q In any of the visits other than the
9 Bloomington visit did you have any discussions about
10 worker safety?

11 A I don't recall any.

12 Q What other plants did you visit?

13 A There were two plants in the New Bedford,
14 Massachusetts, area.

15 Q Do you know whose plants they were?

16 A One was the Aerovox, A e r o v o x, plant and
17 the other was Cornell-Dubblrier, D u b b i l i e r.

18 Q What other plants did you visit?

19 A There was a plant in Vermont, the JARD
20 Company, J A R D company; the Sangamo electric plant in
21 Pickens, South Carolina; the Mallory plant in Tennessee,
22 I believe it was near Murfreesboro, Tennessee; the
23 Wagner Electric plant in St. Louis; the Allis-Chalmers
24 plant in Milwaukee; Rayethon plant in Lowell,
25 Massachusetts; the Ciba-Geigy plant in Tennessee. I

1 don't recall the city. There were at least two more
2 transformer plants, and I can't recall the city or the
3 name at the moment.

4 Q Any other types of plants besides dielectric
5 plants?

6 A The Rayethon and Ciba-Geigy were not
7 dielectric at the time.

8 Q All right.

9 A I can't recall any others at the moment.

10 Q In the New Bedford area did you discuss or
11 inquire about worker protections?

12 A That was not a topic of discussion.

13 Q In Gerard -- JARD Company.

14 A JARD? No.

15 Q What about Sangamo? Was that an area of
16 discussion?

17 A No.

18 Q The Mallory plant?

19 A No.

20 Q Wagner Electric?

21 A No.

22 Q Allis-Chalmers?

23 A No.

24 Q Rayethon?

25 A No.

1 Q Ciba-Geigy?

2 A No.

3 Q The other transformer plants you visited?

4 A No.

5 Q So the only plant that you ever discussed
6 worker protection at was the Bloomington Westinghouse
7 plant?

8 A To my recollection.

9 Q Okay. Now, did you ever visit any Ford
10 facility at all?

11 A No.

12 Q Did you ever visit any TVA facility?

13 A No.

14 Q For purposes of your customer visits --
15 strike that.

16 We talked a little bit yesterday about the
17 fact that after Monsanto limited its sale of PCBs to
18 dielectric fluids it refused to sell to companies that
19 did not provide it with written indemnities. Correct?

20 A Correct.

21 Q And furthermore there were some companies
22 that would not be considered for sales because they
23 weren't of sufficient size or strength to provide a
24 meaningful indemnity. Correct?

25 A Correct.

1 Q Now, Monsanto was willing for and even
2 suggested to the companies that were its customers, that
3 is, that were big enough to provide an indemnity
4 Monsanto could rely on and who did sign one that they
5 could in turn sell dielectric fluids to companies that
6 Monsanto would not sell to direct. Correct?

7 A Correct.

8 Q Did you, for purposes of your job, consider
9 companies to whom Monsanto delivered dielectric fluids,
10 even though they weren't the technical purchaser, to be
11 customers?

12 A Did I personally? No.

13 Q Okay. There were definitely situations, were
14 there not, in the 1970s where, for example, if you were
15 going to sell PCB materials to Westinghouse and they
16 were to provide for a resale or whatever you might call
17 it to somebody that Monsanto wouldn't sell to directly,
18 what would actually happen is Westinghouse would place
19 the order but direct that the materials be shipped to
20 the third party?

21 A Yes.

22 Q And you did not consider those third parties
23 to whom the materials were shipped directly by Monsanto
24 to be a customer on whom you should make a visit or a
25 call?

1 A That is true.

2 Q Why not?

3 A Just by the sheer definition of what is a
4 customer and who do we communicate with and what is
5 the -- what are the particulars of the arrangement of
6 the sale? They didn't fit any of these. They were just
7 a ship-to point as far as our records are concerned. We
8 don't know who is the official recipient of that
9 material and what they're doing with it. We had to rely
10 on the bill-to identity.

11 Q Well, you knew full well the relationship, -
12 didn't you? I mean you're the ones who had set up the
13 system of not selling to people who couldn't provide you
14 with the indemnity you wanted, and suggesting this
15 arrangement of a nominal sale to somebody who had an
16 indemnity with the return delivery to the party you
17 wouldn't sell to directly.

18 A And who had the knowledge of the situation
19 that we felt was appropriate.

20 Q Who had the knowledge?

21 A Those customers willing to go along and sign
22 with this indemnity.

23 Q Well, were you always confident those to whom
24 you shipped had sufficient knowledge?

25 A We don't know who received it at the other

1 end and who handled it.

2 Q Well, if your purchase order was ship to, you
3 knew where it wound up, didn't you?

4 A I think we have a misunderstanding. Many
5 times the General Electric Company would order their
6 Pydrauls shipped to such and such a company. That meant
7 that General Electric crews would arrive at that site,
8 receive the material, handle it properly, do what was
9 right with it. So it was still General Electric
10 involved. We don't know who handled the material at the
11 ship-to location.

12 Q You didn't have any idea?

13 A That's right. The billing -- the order
14 doesn't say: So-and-so will handle it.

15 Q What effort was made to provide any technical
16 bulletins or other information on safe handling and
17 toxicology to the locations to which PCBs were shipped?

18 A The environmental statements issued in early
19 1970 with some followups in subsequent years went to all
20 entities listed on our ship-to, bill-to lists.

21 Q When you talk about environmental statements,
22 are you talking about the sort of technical bulletins
23 that we looked at earlier today?

24 A No. These were the memoranda designed to
25 update all of these companies regarding the

1 environmental presence of PCBs and our cautioning: Do
2 , not let it get to the environment. Those letters.

3 Q But not the documents that contained
4 information on safe handling?

5 A The safe handling documents, I do not know
6 who got them and who in Monsanto supplied them.

7 Q So you don't know whether or not they went to
8 people who were ship-tos but not the technical purchaser
9 under the purchase order?

10 A That is correct.

11 Q In connection with your function as the
12 central point of liaison and communication and your work
13 with the public relations department to handle outside
14 matters of concern, did you respond to inquiries and
15 correspondence directed to Monsanto concerning PCBs?

16 A Yes.

17 Q And in fact was your name made known by
18 Monsanto to others as a person with whom to correspond
19 about matters relating to PCBs?

20 A Yes.

21 Q Do you have any idea of the volume of
22 correspondence that you received from customers
23 concerning PCBs in the period from 1970 to 1976?

24 A I -- I do not have an idea other than it was
25 quite extensive in '70 and '71, and became less frequent

1 in the period '74 to '76.

2 Q Did you make an effort to respond to the
3 correspondence that was sent to you?

4 A Certainly.

5 Q That was part of your job?

6 A Yes.

7 Q It was the expectation of Mr. Bergen, I take
8 it, that if people wrote in to Monsanto asking questions
9 about Monsanto's PCB products and that came to you you
10 were to provide them with a response?

11 A Or have someone better qualified respond.

12 Q Okay. If someone better qualified responded,
13 would they respond in their own name or in your name?

14 A The vast majority of the time in their own
15 name.

16 Q And typically if that happened they would
17 indicate at the outset that the letter was referred to
18 them by you?

19 A As appropriate. Because many times a
20 recipient didn't know who I was.

21 Q Okay. In the case of a person who sent a
22 letter specifically to you, either you would respond or
23 you would refer it to someone who would respond and
24 reference the referral by you?

25 A Correct.

1 MR. LACEY: Would you mark that as the next
2 exhibit, please?

3 [Exhibit 6 marked]

4 MR. LACEY:

5 Q Let me hand you what has been marked by the
6 court reporter as Exhibit No. 6 and ask if it's an
7 exhibit consisting of three pages, ask if you recognize
8 the letter that is dated February 2nd, 1972, from
9 Mr. R. T. Richards at Texaco to you and the response
10 that you wrote on February 4th, 1972.

11 A Now that I've read them, I recall the -- the
12 two documents you refer to.

13 Q Okay. I'll tell you what. To make it
14 convenient, let me have the reporter mark the letter
15 that Mr. Richards wrote to you as Exhibit 6 A, and then
16 we can distinguish between your response as Exhibit 6
17 and the Richards' letter 6 A.

18 [Exhibit 6 A marked]

19 MR. LACEY:

20 Q Let me hand it back to you. Now the reporter
21 has marked Mr. Richards' letter to you as Exhibit 6 A.
22 It was part of your function to receive letters of the
23 type that Mr. Richards wrote to you which is marked as
24 Exhibit 6 A?

25 A Yes.

1 Q And it was a part of your function on behalf
2 of Monsanto to respond to letters like that from
3 Mr. Richards with the type of response you wrote which
4 is marked as Exhibit 6?

5 A Yes.

6 Q Obviously Mr. Richards knew who to correspond
7 with because the letter is addressed specifically to
8 you. Correct?

9 A Yes.

10 Q This letter was written in February of 1972.
11 Correct?

12 A Correct.

13 Q And by that time had your position at
14 Monsanto become one that was somewhat well-known around
15 the country as being associated with responsibility for
16 PCBs at Monsanto?

17 A I believe so, yes.

18 Q You in fact had gone on news programs as a
19 Monsanto spokesman about PCBs, had you not?

20 — A A few, yes.

21 Q And your name had appeared in documents that
22 were provided to customers and governmental agencies and
23 others about PCBs, had it not?

24 A Yes.

25 Q In fact, you had spoken on behalf of Monsanto

1 to various groups by this time, had you not?

2 A Yes.

3 Q So it wasn't at all surprising to find people
4 who knew your name as the person to write to with
5 questions about PCBs by this time, was it?

6 A That is correct.

7 Q Did you know Mr. Richards personally?

8 A No.

9 Q Had you ever visited the Texaco facilities?

10 A No.

11 Q They were not a customer that you went to? --

12 A That is correct.

13 Q In Mr. Richards' letter he asked for certain
14 information about PCBs. Correct?

15 A Yes.

16 Q And your response, which is Exhibit 6, was
17 written -- in fact, we don't -- you don't have a
18 Received stamp on this letter, do you?

19 A No.

20 -- Q It looks like the mail service was pretty
21 good.

22 A It does.

23 Q His letter is dated February 2nd, your
24 response is dated February 4th. So you were very prompt
25 in getting a response back to him, were you not?

1 A I tried to be, yes.

2 Q Were you always that prompt?

3 A When I was in the office I tried to keep up
4 with it. Otherwise I would get inundated. It was a
5 matter of survival.

6 Q Okay. Did you normally write the responses
7 yourself?

8 A Yes.

9 Q Okay. So what we have here, then, is your
10 response, not one written by somebody else for you?

11 A That is correct.

12 Q And did you give Mr. Richards a full and
13 complete response to his inquiry?

14 A I'll have to read point by point, make the
15 comparison.

16 Q Okay. Well --

17 A To answer.

18 Q You may want to do that. I really wasn't
19 trying to find a particular flaw in it but just to make
20 sure you fully responded in your mind.

21 A Well, it appears that my response answered
22 his key questions.

23 Q Okay. And was it customary for you when you
24 filed things to do it like this, to put the response
25 letter together with the letter that was the inquiry

1 letter so you would have the two together in your filing
2 system?

3 A No, this is not my way of filing.

4 Q I see. How did you normally file things?

5 A By subject chronologically. And the subject
6 would be at my discretion as to which folder to put it
7 in.

8 Q What sort of folders could Mr. Richards'
9 letter have fallen into as you filed things?

10 A This probably fell into the customers 1972
11 folder.

12 Q Okay. And where would your response be
13 filed, in that same folder?

14 A Yes.

15 Q And so the difference would be if there were
16 any letters you received -- well, let me ask that. Did
17 you file the letters by the date that you received them
18 or by the date that they were dated? When you would
19 file in that folder.

20 — A The date they were dated.

21 Q Okay. So the difference between what we have
22 here as Exhibit 6 and 6 A or whether or not it's filed
23 exactly as it would have been is whether or not you
24 would have received a document dated February 3rd or
25 written a document dated February 3rd. Correct?

1 A Or written other documents February 2nd.

2 Q Okay. And then that -- how would you decide
3 where they were filed in order if it was February 2nd?

4 A My secretary would put them in there by
5 dates.

6 Q Okay.

7 A And we would have to go retrieve them
8 manually and find them.

9 Q Okay. So depending on whether or not there
10 were any documents that you wrote on February 2nd filed
11 after this letter or documents you wrote on February 2
12 3rd, these might have been contained right next to each
13 other in your filing system?

14 A Yes.

15 Q Was it your customary practice to maintain
16 for your file copy of your document the type of document
17 we have as 6, Exhibit 6?

18 A Yes.

19 Q Did the original go out on your letterhead?

20 — A Yes.

21 Q But the file copy did not have your
22 letterhead on it?

23 A No.

24 Q Did you sign the original document that went
25 out?

1 A Yes.

2 Q But you didn't sign the copy that you
3 retained for your file?

4 A No.

5 Q So what we have here is -- as Exhibit 6 is a
6 correct copy, then, of the file copy you kept of that
7 letter?

8 A Yes.

9 Q And what we have as Exhibit 6 A is a correct
10 copy of the letter that you received from Mr. Richards
11 to which you responded?

12 A Yes.

13 Q Did you ever have any further communication
14 with Mr. Richards after you wrote him this response?

15 A I don't recall.

16 Q Did you ever, after you received Mr.
17 Richards' letter, do any investigation to find out about
18 the products that Texaco did purchase from Monsanto?

19 A I don't recall.

20 Q The reason I ask that, one of Mr. Richards'
21 questions dealt with whether or not Monsanto Aroclors
22 contained PCBs. Correct?

23 A [No reply]

24 Q Look at the last sentence in the third
25 paragraph of his letter.

1 A The reason I'm hesitating, he doesn't use the
2 word "Monsanto's Aroclors."

3 Q If you'll look at the last sentence in the
4 third paragraph, I read that sentence to say Texaco has
5 used --

6 A I'm sorry.

7 Q -- Monsanto Aroclors.

8 A You're right. You are right. He is asking
9 that.

10 Q And it is obvious from the way that letter is
11 written that Mr. Richards was under the impression that
12 Monsanto Aroclors had no PCBs in them. Correct?

13 A Yes.

14 Q And your response points out that there are
15 some specific series that have Aroclors as ingredients.
16 Correct?

17 A Yes.

18 Q And other series that have PC -- I'm sorry.
19 That was a --

20 -- MR. HALL: You're just following along. He
21 meant to say had PCBs.

22 MR. LACEY: I certainly did.

23 Q Aroclors and PCBs generally in my mind are
24 linked, but there's a slight difference. There are
25 certain Monsanto Aroclors that have PCBs in them as a

1 constituent part. Correct?

2 A Yes.

3 Q There are other Monsanto Aroclors, items that
4 go under that trade name, that have PCBs in them as a
5 contaminant?

6 A Yes.

7 Q And the way you've written your response you
8 cover both possibilities.

9 A Yes.

10 Q And it appears to me that you wrote the
11 response without having to go and check the records and
12 see which one they actually bought.

13 A That is correct.

14 Q And so you weren't sure whether they bought
15 the products that had PCBs in them as a contaminant or
16 the ones that had PCBs in them as a constituent part.

17 A That is correct.

18 Q And you never did go and actually determine
19 which particular Aroclor they bought?

20 — A No.

21 Q The letter also asks about some other names.
22 In particular, he asks about what he calls Askarels,
23 A s c o r a l s. Correct?

24 A I see that, yes.

25 Q And the Ascorals was a misspelling of the

1 term Askarels, A s k a r e l s. Correct?

2 A Well, I didn't at the time and to this moment
3 know whether that's a misspelling or whether it's a
4 trademark of some other kind that he is knowledgeable
5 of. This is why my response -- I indicated I'm not
6 familiar with that word unless he's referring to the
7 generic name askarels, lower case a. I had no way of
8 knowing what he meant by the word he used.

9 Q I see. There was a sufficient doubt in your
10 mind or a sufficient question in your mind that what he
11 meant to say was Askarels and misspelled it?

12 A This is why I went ahead and then pointed
13 that out.

14 Q Okay. And, of course, Askarels were just a
15 name for PCB-containing dielectric fluids. Correct?

16 A At that point in time Askarels did contain
17 PCBs, you're right.

18 Q And they were dielectric fluids?

19 A Yes.

20 — Q In fact, in some of the technical bulletins
21 we looked at earlier this morning there was discussion
22 by Monsanto of Askarel-type transformers.

23 A Yes.

24 Q And that was talking about PCB fluid
25 transformers?

1 A Yes.

2 Q Okay.

3 He also asked in his letter for a list of
4 trade names or series names of Monsanto products that
5 contained PCBs. And your first paragraph sets out the
6 various trade names or series that contain PCBs as a
7 constituent part. Correct?

8 A Yes.

9 Q And that included the Aroclor 1200 series?

10 A Yes.

11 Q Now, you didn't mention the 1100 series. Is
12 that because so little of it was sold for commercial
13 purposes?

14 A That is right.

15 Q But Aroclor 1100 would also be a series that
16 did contain PCBs?

17 A Yes.

18 Q The Aroclor 2000 series. Correct?

19 A Correct.

20 — Q The Aroclor 4000 series?

21 A Correct.

22 Q Thermonol FR. Correct?

23 A Correct.

24 Q The Santovac 1 and Santovac 2. Correct?

25 A Correct.

1 Q The Pydrauls?

2 A Correct.

3 Q And the Montars?

4 A Correct.

5 Q Now, Thermonol FR was the heat transfer fluid
6 that contained PCBs. Correct?

7 A Correct.

8 Q This was the type of PCB-containing material
9 that was involved in the situations you've told me about
10 when you were discussing the various lawsuits you've
11 been involved in where there were heat transfer fluids
12 that leaked into something. Correct?

13 A Correct.

14 Q The Pydraul, that's the industrial hydraulic
15 fluids. Correct?

16 A Correct.

17 Q The type of things that were used in large
18 presses and die casting machines and that sort of thing.

19 A Yes.

20 Q Montar. Was that the -- the bottoms of the
21 Aroclor production?

22 A Yes.

23 Q And that had PCBs in it as well?

24 A Yes.

25 Q What was the Santovac 1 and 2?

1 A They were fluids used in vacuum pump systems.
2 Santovac 1 was Aroclor 1242 and Santovac 2 was Aroclor
3 1248.

4 Q Mr. Richards also indicated in his letter
5 that from time to time Texaco disposed of transformer
6 oils in a manner that was similar to waste oils.
7 Correct?

8 A I see that, yes.

9 Q And they were concerned about that practice
10 because of the issues that arose with regard to PCBs.

11 A Yes.

12 Q In your response letter you talk about in the
13 last paragraph of the first page disposal of scrap
14 fluids by incineration. Correct?

15 A Correct.

16 Q And you reference a temperature exceeding
17 1600 degrees Fahrenheit. Why is that particular
18 temperature so important?

19 A It takes very close to that temperature to
20 achieve -- to achieve the total destruction of PCBs to
21 reach three stable chemicals, one being water, the other
22 being carbon dioxide and the third being hydrochloric
23 gas.

24 Q If PCBs are burned at a lower temperature
25 instead of creating those three chemicals other

1 chemicals can be created, can they not?

2 A Yes.

3 Q In particular, burning of PCBs at lower
4 temperatures can lead to the production of
5 dibenzofurans.

6 A I am told that, yes.

7 Q And can lead to the production of
8 dibenzodioxins.

9 A I do not understand that is possible.

10 Q You do not?

11 A That is not.

12 Q I see.

13 A I'm told it's not feasible.

14 Q By whom have you been told that?

15 A Organic research chemists in Monsanto.

16 Q I see. You remember the transformer fire
17 that we discussed in Binghamton, New York, yesterday?

18 A Yes, sir.

19 Q Did you ever learn enough about that to find
20 out what chemical by-products were found in that office
21 building following that fire?

22 A As we discussed yesterday, chlorodioxins and
23 chlorodibenzofurans, PCBs and others were present or
24 determined to be present.

25 Q I see. Where did you understand that the

1 dioxins that were present in the products of that fire
2 came from?

3 A I understand they could have come from the
4 incomplete incineration of chlorobenzenes that were also
5 present in the fluid.

6 Q I see. And it is also your understanding, I
7 take it, that they could not have come from the
8 incomplete combustion of PCBs.

9 A From my understanding of chemistry and my
10 discussions with professionals, I find it difficult to
11 see how that can happen chemically. And that has not
12 been demonstrated that I'm aware of.

13 Q We've got our graph or chart here again. Can
14 you draw me on that chart a molecule of dibenzofuran and
15 a molecule of dibenzodioxin?

16 A Yes.

17 Q And I think we need -- if we can use the red
18 for the carbon again, the black for the hydrogen and the
19 green for the oxygen, we'll be in good shape.

20 A All right. Let me -- [Drawing].

21 Q I think it's under that document that's
22 laying there.

23 A There. That represents the dibenzofuran.

24 Q Okay. Let me get the court reporter to mark
25 that before you turn the page.

1 [Exhibit 7 marked]

2 MR. LACEY:

3 Q Let me ask you, before we turn the page, on
4 Exhibit No. 7, do we have your sketch of a dibenzofuran
5 molecule?

6 A Yes.

7 Q Okay.

8 Are you going to put on the next page a
9 dibenzodioxin for us?

10 A Yes.

11 Q Okay. That's fine.

12 A [Drawing] That is the dibenzodioxin.

13 Q Okay.

14 Let me ask the court reporter to mark that as
15 the next exhibit.

16 [Exhibit 8 marked]

17 MR. LACEY:

18 Q Let me ask you, Mr. Papageorge, if Exhibit
19 No. 8 represents your drawing of a molecule of
20 dibenzodioxin.

21 A It does.

22 Q Let me ask you if I understand your testimony
23 correctly. It is your understanding that in an
24 incomplete combustion process PCBs can be converted into
25 dibenzofurans as shown on defendant's exhibits -- or on

1 Deposition Exhibit No. 7. Correct?

2 — A No. What I showed on Exhibit No. 7 is the
3 nonchlorinated molecule.

4 Q Okay. If -- let me clarify that. Both the
5 dibenzofuran and the dibenzodioxin that you have drawn
6 as Exhibits 7 and 8 can be chlorinated compounds?

7 A Yes.

8 Q It is your opinion that in the incomplete
9 combustion of PCBs, PCBs can be converted into
10 chlorinated dibenzofurans. Correct?

11 A Correct.

12 Q But it is your opinion that in incomplete
13 combustion of PCBs they cannot be converted into
14 chlorinated dibenzodioxins. Correct?

15 A Correct.

16 Q And that opinion is held in part based on
17 your knowledge of chemistry. Correct?

18 A Correct.

19 Q How long have you held the opinion that as a
20 matter of chemistry chlorinated PCBs cannot be converted
21 into chlorinated dibenzodioxins?

22 A I don't know that it happened on any
23 particular day. It evolved to my present understanding
24 at about -- it's after I was removed from PCB
25 assignments. And at the moment it seems to me somewhere

1 in '77, '78, that period of time.

2 — Q Did you hold a different opinion about the
3 principles of chemistry prior to your removal of -- from
4 the PCB area, and in specific I mean did you at that
5 time hold the opinion that chlorinated PCBs could be
6 converted into chlorinated dibenzodioxins by incomplete
7 combustion?

8 A I had a suspicion based upon the presence of
9 the benzene ring, chlorine and oxygen that under
10 conditions that might be present those three types of
11 chemicals could form the right combination to form the
12 chlorodioxins. This was not based on any exotic science
13 other than the presence of those three entities. And I
14 followed very closely any research in those areas for
15 several years until I reached this other point of
16 understanding which exists today.

17 Q Explain to me the principles of chemistry
18 which cause you to say that it is not possible for
19 chlorinated dibenzodioxin to be formed from the
20 incomplete combustion of PCBs.

21 A It has to do with the configuration as
22 represented by this flat piece of paper. Where these
23 molecules are in reality three-dimensional.

24 Q You're referring to Deposition Exhibit 8 when
25 you are talking about the flat piece of paper?

1 A Yes.

2 — Q Okay.

3 A This graphically shows the relative positions
4 of the molecules, but it doesn't show us the
5 configuration of three dimensions. And I am told in the
6 very real chemical world the space between these points
7 here is such that it prevents the easy introduction of
8 an oxygen to displace the chlorines or hydrogens that
9 might have been there in the first place and easily
10 reached a double oxygen addition.

11 Q Well, of course, for chlorinated
12 dibenzodioxins to exist at all we must have a compound
13 that has achieved both in terms of a flat paper drawing,
14 a drawing like that shown on Exhibit 8, and also
15 whatever the true spatial relationship is in three
16 dimensions?

17 A Correct.

18 Q So it is certainly possible to achieve that
19 spatial relationship in order to create the chemical
20 compound, is it not?

21 A Yes.

22 Q Now, are you telling me that it's your
23 understanding that the probabilities of that compound
24 being created in a combustion process from PCBs is low
25 or that it is impossible?

1 A I'm not saying either one. It depends on the
2 conditions. I'm saying that there are different routes
3 to the production of that chemical, starting with
4 different starting materials, and it might go very fast
5 and very easily. So the probability under those
6 conditions is extremely good.

7 Q My question is: Are you telling me that
8 because of the spatial relationships, three dimensional,
9 that exists in polychlorinated biphenyls that it is
10 difficult or that it is impossible under incomplete
11 combustion to achieve the relationships necessary to
12 form chlorinated dibenzodioxin?

13 A I'm saying it's impossible.

14 Q Okay.

15 The PCBs actually produced by Monsanto were
16 contaminated with dibenzofurans, were they not?

17 A Some of them.

18 Q Which ones were contaminated with
19 dibenzofurans?

20 A I understand from analyses done that some
21 batches of some of the Aroclors were found to have low
22 levels of the polychlorodibenzofurans.

23 Q We're talking about a furan with more than
24 one chlorine?

25 A Correct.

1 Q What is your understanding about the
2 frequency with which Monsanto's PCB production was
3 contaminated with chlorinated dibenzofurans?

4 A I have no feel for that at all.

5 Q When do you understand that Monsanto first
6 started checking its PCBs for contamination with
7 chlorinated dibenzofurans?

8 A It was in the spring, early summer 1970.

9 Q And when that check was first made, it was
10 discovered that the PCB products were contaminated with
11 chlorinated dibenzofurans, was it not?

12 A They were not. Nondetectable is the report I
13 got.

14 Q I see. When were they next tested?

15 A There was a laboratory in the Netherlands
16 testing PCBs from several suppliers. And the
17 investigators at the University of Utrecht informed me
18 that they found the furans in European made material,
19 French and German material, but had not detected it in
20 the Monsanto-produced material, and asked me to try to
21 explain why the difference. So to me that indicated
22 another laboratory also did not observe furans in
23 Monsanto material.

24 Q I see. When were they next tested?

25 A I don't -- it must have been after '76,

1 because I don't recall any activity in the period '70
2 to -- through '75.

3 Q And I take it, then, it's your understanding
4 when these next tests occurred in '76 that it was
5 discovered that they were contaminated.

6 A The more sophisticated methodology was able
7 to detect low levels. Somewhere in the three part per
8 million range. And not all samples had it.

9 Q Now, the opinion that you have rendered in
10 this case, which is Exhibit No. 3, and let me hand that
11 back to you for a moment, deals with Monsanto's
12 production of PCBs, does it not?

13 A Yes.

14 Q And the substance of your opinion is to
15 describe that PCBs were made by taking benzene and in a
16 heated state over catalyst -- is that correct, it's over
17 catalyst -- making diphenyl? Is that correct?

18 A I am not aware of any catalyst in that
19 process.

20 Q It was only heat?

21 A Heat and pressure.

22 Q Pressure. Okay. So it's a combination of
23 heat plus pressure, as opposed to catalyst, by which
24 benzene is converted to biphenyl or diphenyl. Correct?

25 A I don't refer to that in this document.

1 Q I'm sorry. I see. You start only with the
2 biphenyl?

3 A Yes, sir.

4 Q Were you responsible for the plant that made
5 the biphenyl?

6 A Yes.

7 Q Okay. But you're not an expert in how that
8 was made?

9 A I was not asked the question. I can answer
10 it just as well as I could this particular question.

11 Q I see. Well, in fact, that document was
12 drafted before you were asked any question, wasn't it?

13 A True.

14 Q Okay.

15 Well, let's go back, then, and talk about the
16 process by which the biphenyl was made.

17 A All right.

18 Q The plant started with benzene acquired from
19 other sources, did it not?

20 A Yes.

21 Q And the benzene was heated under pressure to
22 make biphenyl. Is that correct?

23 A Correct.

24 Q Now, if oxygen were present in the process by
25 which benzene was converted to biphenyl, furans could be

1 made at that point, could they not?

2 - A It's possible.

3 Q Then the biphenyl which is separated out from
4 any other products that are made when the biphenyl is
5 made, terphenyl -- right?

6 A Yes.

7 Q Unreacted benzene?

8 A Yes.

9 Q And you attempt to obtain a pure biphenyl to
10 start the next process. Correct?

11 A Yes.

12 Q Would that purification process, if operated
13 properly, remove any dibenzofurans made when benzene is
14 converted to biphenyl?

15 A I don't know the boiling point of
16 dibenzofurans. So I -- I cannot answer your question.
17 I don't know where it would appear.

18 Q Okay. Then you take biphenyl and again in
19 the presence of heat -- and is there a catalyst at this
20 point?

21 A Yes.

22 Q -- and a catalyst, you add chlorine to obtain
23 PCBs. Correct?

24 A Correct.

25 Q And again, if oxygen is present in that

1 process you can create dibenzofurans and chlorinated
2 dibenzofurans during the process of making PCBs, can you
3 not?

4 A It's possible.

5 Q Well, we know it's more than possible,
6 because measurements were made that found furans in
7 PCBs, don't we?

8 A Yes. But we don't know where in these
9 multiple steps they were formed. And your questioning
10 implies they were only formed in that particular step.
11 I don't know.

12 Q Okay. So what you're telling me is they
13 could have been formed in the step by which benzene was
14 converted into diphenyl. Right?

15 A Could be. That was why we said possible.

16 Q They could have been formed in the step by
17 which the diphenyl is chlorinated into PCBs?

18 A Possible.

19 Q And if we have PCBs in which that product
20 dibenzofurans or chlorinated dibenzofurans is found we
21 know that in one or the other of those two steps they
22 are being produced. Correct?

23 A Might be in the third step.

24 Q That's the purification step?

25 A Yes, sir.

1 Q All right. Well, let's talk about that just
2 very briefly. The purification step involves heat, does
3 it not?

4 A Yes.

5 Q And again, if there is oxygen present in the
6 purification step then during the purification process
7 dibenzofurans or chlorinated dibenzofurans may be
8 created.

9 A Yes.

10 Q So if we have a PCB product manufactured by
11 Monsanto in which chlorinated dibenzofurans or
12 dibenzofurans are found, we know that in one of the
13 three steps, either the manufacture of the diphenyl, the
14 chlorination of the diphenyl or the purification of the
15 PCBs the furans or chlorinated dibenzofurans have been
16 created. Correct?

17 A All right.

18 Q That is correct?

19 A Correct.

20 Q Now, I understand you to have told me that
21 there were specimens of PCBs that had no dibenzofurans
22 in them. Correct?

23 A I told that, yes.

24 Q What that means is that it was possible to
25 make PCBs without creating dibenzofurans. Correct?

1 A Correct.

2 — Q And it was only when Monsanto failed to make
3 the PCBs correctly that they allowed oxygen to be
4 introduced into the system in some place that
5 dibenzofurans were made. Isn't that correct?

6 A Well, the oxygen has always been present.
7 When you add lime to neutralize the material, the oxygen
8 associated with the lime has been present in every batch
9 of PCBs produced by Monsanto. The system itself is
10 blanketed with nitrogen, so oxygen from the air is a
11 very remote possibility. The European producers use lye
12 sodium hydroxide, a more aggressive agent. So their
13 ability to introduce oxygen is greater by that process.
14 So there really is no change in the process, but
15 something chemically is happening that today we don't
16 understand.

17 Q There are certain batches that made according
18 to your specifications don't have furan contamination?

19 A That's my understanding.

20 — Q Are you telling me that there are other
21 batches that everything works perfectly but they just
22 pop up somewhere?

23 A That's the way it appears, yes.

24 Q I see. And is there any process by which
25 they can be purified to remove the furans?

1 A I personally do not know.

2 - Q Did Monsanto ever make any effort, to your
3 knowledge, to remove the furans that contaminated its
4 product at least from time to time before it was sold?

5 A Not to my knowledge.

6 MR. LACEY: Why don't we take about a
7 five-minute break.

8 [Recess]

9 VIDEO OPERATOR: This is the continuing
10 deposition of William B. Papageorge. It's May 20th,
11 1987, at 2:18 p.m. We are back on the record.

12 MR. LACEY:

13 Q Mr. Papageorge, let me show you a document,
14 No. 56290, and ask you what this refers to.

15 A It obviously refers to a meeting that I'm
16 calling on the subject of PCB dibenzofurans and FDA.

17 Q The FDA is the Food and Drug Administration?

18 A Yes.

19 Q And the dibenzofurans you're talking about
20 are dibenzofurans that were contaminants in the PCBs
21 made by Monsanto?

22 A I don't think -- I don't recall the
23 specifics.

24 Q I see. You don't recall anything about why
25 that meeting was called or anything else?

1 A No. I'll have to refresh my memory on that.
2 I just don't recall anything about that.

3 Q Let me show you another document. That
4 meeting was scheduled when?

5 A June the 10th, 1975.

6 Q Let me show you another document, dated June
7 13th, 1975, written by you regarding PCB furans, 56289,
8 and ask you if that helps you recall what these meetings
9 with the FDA about furans were all about.

10 A I recall now some of the discussion. This
11 was in response to an FDA inquiry regarding: Are there
12 any chlorinated dibenzofurans in your PCBs? And this
13 meeting was called to develop a program to get the right
14 answers to that question.

15 Q And in fact it was when Monsanto undertook
16 that investigation in response to the FDA request that
17 it found furans in its PCBs?

18 A Eventually, yes.

19 Q Prior to that time Monsanto had been of the
20 opinion it had no furans in its PCBs. Correct?

21 A Based on earlier analytical results with less
22 sophisticated methodology, yes.

23 Q And part of the reason that the meeting
24 called for the development of a more sophisticated
25 analytical methodology was that Monsanto was concerned

1 about assuring the FDA of the absence of furans based on
2 the methodologies they had previously used. Correct?

3 A Correct.

4 Q Simply put, they weren't reliable enough to
5 base information on for the government?

6 A They were reliable to the level that we
7 claimed we could detect. The FDA wanted a method that
8 could detect to lower levels.

9 Q The FDA was concerned that furan
10 contamination at a level that you previously could not
11 detect could nevertheless be harmful?

12 A I don't know.

13 Q You don't know why --

14 A They didn't express that.

15 Q I see.

16 Did you ever learn anything about the
17 toxicity of dibenzofurans and chlorinated dibenzofurans?

18 A I recall references to highly toxic
19 properties of these materials. I personally am not
20 aware of any sophisticated animal studies to demonstrate
21 this nor am I personally knowledgeable of any known
22 human exposure at known levels that are related to human
23 health problems.

24 Q Do you hold the opinion that dibenzofurans
25 are more toxic than PCBs, less toxic than PCBs, about

1 the same as PCBs, or have no opinion whatsoever?

2 A I have no basis for making a comparison. I
3 just do not know.

4 Q Okay. So this study of furan contamination
5 in PCBs was an exercise that Monsanto undertook simply
6 to satisfactory an FDA request?

7 A I think it was more than that. It was to
8 satisfy -- not simply to satisfy FDA requests but to
9 satisfy an FDA request as well as assure ourselves.

10 Q Well, Monsanto had not been seeking any
11 assurance for itself until the inquiry came from the --
12 FDA. Correct?

13 A That is correct.

14 Q It was only in response to the FDA inquiry
15 that Monsanto undertook to develop the methodology and
16 the other things necessary to satisfy the FDA?

17 A Yes. On a semivoluntary basis. There was no
18 requirement on the FDA's part. We just decided, rather
19 than tell FDA we don't know, to try to find out.

20 Q Well, at the time you undertook this testing
21 in response to FDA request, Monsanto was still
22 attempting to influence various government agencies to
23 take no action to ban the manufacture of PCBs. Isn't
24 that correct?

25 A That is correct.

1 Q Because this was before the time that you
2 reached the opinion or the decision that it was
3 appropriate for Monsanto to cease the production of
4 PCBs. Correct?

5 A Correct.

6 Q And therefore the corporate policy was still
7 to produce PCBs and plan to the foreseeable future.
8 Correct?

9 A Correct.

10 Q Let me show you a memo dated November 10th,
11 1975, written by you to Dr. Calandra. He was with
12 Industrial Biotest. Correct?

13 A Correct.

14 Q Dr. Roush and J. C. Weber. Document 1487,
15 1488.

16 A I recall the document.

17 Q That memo sets forth the agenda for a visit
18 by you and Dr. Calandra, Dr. Roush and I'm not sure,
19 Mr. Weber, I guess, to Washington, D.C., to meet with a
20 number of federal agencies.

21 A Yes.

22 Q At the time that that meeting was undertaken
23 had you already reached the opinion that Monsanto should
24 cease the production of PCBs?

25 A I personally had in my own mind reached that

1 point.

2 Q Had you advised Mr. Fitzsimmons of that yet?
3 Or was it Fitzgerald? I can't remember the name.

4 A Mr. Fitzgerald.

5 Q Fitzgerald.

6 A I don't believe I advised Mr. Fitzgerald
7 until at or close to Thanksgiving Day. So it was
8 several weeks later.

9 Q Was it after this series of visits that you
10 had to Washington?

11 A Yes.

12 Q Those visits related in part to presenting
13 Monsanto's position to these various agencies and in
14 trying to influence them not to back the provisions in
15 the proposed Toxic Substances Control Act that would ban
16 the manufacture and sale of PCBs. Isn't that correct?

17 A I did not personally view it as that being
18 the objective. The objective here was to respond to the
19 findings of Dr. Renate Kimbrough and present
20 Dr. Calandra's and Dr. Poor's opinions regarding the
21 findings of the Industrial Biotest studies and their
22 interpretations.

23 Q Dr. Renate Kimbrough had done studies with
24 Monsanto PCB products on rats. Correct?

25 A She -- I don't know that she was -- many

1 product -- a product.

2 Q Okay. Dr. Kimbrough had taken a particular
3 Monsanto PCB and undertaken a study of its toxicity on
4 rats. Correct?

5 A Correct.

6 Q And the results of her study found that that
7 PCB caused cancer. Correct?

8 A I think it's more correct to say that the
9 pathologist who helped Dr. Kimbrough in the evaluation
10 of the tissue samples concluded that he observed
11 precancerous cells in the liver tissues.

12 Q To a layman, can you say that they caused
13 cancer? Or you don't agree that's what the bottom line
14 was?

15 A If in truth he saw precancerous cells, then a
16 layman could rightfully say that cancer could form.

17 Q Okay.

18 A The question is: Did he really see that?
19 And that's the discussion.

20 Q All right. Now, in that regard, Monsanto was
21 obviously as a manufacturer of PCBs not pleased with the
22 suggestion that its products caused cancer. Correct?

23 A Correct. Because it had no confirming
24 reports from anywhere to support that.

25 Q Well, the only studies that Monsanto had done

1 that related in any way to whether PCB compounds could
2 cause cancer in rats were the studies that Monsanto had
3 commissioned at IBT. Correct?

4 A At this point in time?

5 Q Yes.

6 A Yes.

7 Q And, of course, those studies had come back
8 giving PCBs a clean bill of health in that regard.
9 Correct?

10 A If by your expression "in that regard" in
11 terms of cancer findings. Otherwise they were not given
12 a clean bill of health.

13 Q The Industrial Biotech study reports that
14 were written, the final reports after revisions to the
15 drafts, concluded that PCBs were not carcinogenic.
16 Right?

17 A Correct.

18 Q Okay. And that was at odds with what
19 Dr. Kimbrough had found. Correct?

20 A Correct.

21 Q Obviously that creates some amount of
22 confusion and question in people's minds about what to
23 conclude and how to understand it. Correct?

24 A Correct.

25 Q And at this point in time the problems at

1 Industrial Biotest have not yet come to public light.
2 Correct?

3 A 1975. That is correct.

4 Q I mean you wouldn't have been taking Dr.
5 Calandra with you to influence government agencies after
6 he had been indicted for his conduct at Industrial
7 Biotest, would you?

8 A Probably not.

9 Q That wouldn't be very persuasive?

10 A That is correct.

11 Q In fact, after the indictment and the
12 conviction of certain principals in Industrial Biotest,
13 that work is of very questionable scientific
14 reliability. Correct?

15 A In some quarters, yes.

16 Q Well, can't you agree with me that work done
17 by a scientific laboratory where the principals have
18 been convicted of falsifying test results and submitting
19 false reports to the government would not be the type of
20 material that scientists would ordinarily rely on in
21 forming opinions about matters?

22 A It would certainly cast a doubt on the data.
23 But if the data were reviewed, audited for flaws, it's
24 conceivable that some of these studies were not affected
25 by whatever the individuals were accused of.

1 Q Well, if the falsification involved
2 substituting new animals in place of dead animals,
3 writing down measurements that did not exist and the
4 like, then that would make the entire body of the matter
5 suspect, would it not?

6 A Suspect, yes.

7 Q Okay. And the mere fact that a laboratory's
8 work has subsequently resulted in the criminal
9 indictment and conviction and affirmance on appeal of
10 principals in that laboratory would be something that
11 scientists would take into account in reviewing and
12 relying on that literature, isn't it?

13 A I don't know.

14 Q Would you take it into account as you
15 evaluated the literature?

16 A As a layman? I would have to seek some
17 professional interpretation of the raw data. I would be
18 in no position to evaluate.

19 Q I see. And you have no opinion one way or
20 the other whether or not a scientist, person trained in
21 the sciences, would give any -- or in any way give any
22 less credibility to work done by a lab like that than a
23 lab that had no problems at all?

24 A There could be less credibility but with
25 further review that credibility could be confirmed,

1 supported or the data be thrown out altogether. It
2 depends on the re-evaluation.

3 Q Okay. At a minimum, those facts would call
4 for re-evaluation and careful reconsideration?

5 A Correct.

6 Q Now, at this point in time, when you are
7 taking Dr. Calandra to Washington with you, there is no
8 such pall over Industrial Biotech's work, because this
9 hasn't yet happened?

10 A Correct.

11 Q Now, before Dr. Calandra and you and
12 Dr. Roush went to Washington to talk about the proper
13 interpretation of the Kimbrough work, Monsanto arranged
14 for Industrial Biotech personnel to review
15 Dr. Kimbrough's slides, pathological slides, did it not?

16 A Yes.

17 Q And that was done in order to determine
18 whether or not the pathologist's reading of those slides
19 that was associated with Dr. Kimbrough's work was a
20 reading that was accurate or inaccurate. Correct?

21 A I don't know that this type of science lends
22 itself to a black and white accurate/inaccurate
23 interpretation.

24 Q Let me rephrase it.

25 MR. HALL: I don't think he's quite through.

1 THE WITNESS: Just based on what I know, the
2 individuals asked to review the slides so that they
3 could confirm that in truth the pathologists that looked
4 at them originally was interpreting the way they, too,
5 would interpret them. Dr. Kimbrough's pathologist was
6 also permitted to look at Monsanto tissue slides. The
7 FDA in the meantime had been given Monsanto Industrial
8 Biotest slides long before this point in time, but for
9 reasons unbeknownst to me had not reviewed them. And
10 this is the situation that we faced at that visit.

11 MR. LACEY:

12 Q Okay. Well, I take it you are not in
13 agreement that one can be correct or incorrect about
14 pathological results, then.

15 A I was privileged to look through a microscope
16 set up in my hotel room when some of these slides were
17 reviewed. I'm not a toxicologist. But it strikes me as
18 a very subjective distinction of various shades of pink
19 that the pathologist tries to interpret. I can readily
20 see where a difference of opinion can easily exist.

21 Q Let me try to ask it this way: After the
22 Industrial Biotest personnel or whoever they arranged to
23 have review the slides reviewed Renate Kimbrough's
24 slides, did they conclude that the pathologist who had
25 done the work for Dr. Kimbrough's study reached a

1 conclusion that they, too, would reach?

2 A No.

3 Q And from whom did you get that report?

4 A I believe Elmer Wheeler described to me the
5 findings of those discussions.

6 Q Did Monsanto receive a report from Industrial
7 Biotest pathologists that gave their review of those
8 slides?

9 A I recall a report signed by Dr. Calandra
10 which summarized the findings. I do not recall seeing a
11 report where slide by slide the evaluation was
12 described, nor did I see a summary of all those
13 observations.

14 Q Was Dr. Calandra a pathologist?

15 A Yes, I understand he's a medical doctor
16 majoring in pathology.

17 Q Was it Dr. Calandra who reviewed those slides
18 of Dr. Kimbrough and concluded that there was no
19 evidence of cancer?

20 A I don't know.

21 Q Were you present at the meetings where
22 Dr. Calandra presented the Industrial Biotest view on
23 the Renate Kimbrough study?

24 A Yes.

25 Q But you don't recall whether Dr. Calandra

1 indicated it was his own work as a pathologist that he
2 was reporting on or the work of others?

3 A I recall it's the work of several. I don't
4 know if Dr. Calandra is one of the pathologists
5 involved.

6 Q I see. Did he report that all of those
7 several pathologists were in agreement that the slides
8 did not show anything that we as laymen would call
9 cancer?

10 A That is correct.

11 Q And were people within the medical department
12 at Monsanto aware of the opinions that Dr. Calandra was
13 going to render on behalf of Monsanto in these meetings
14 with the various government agencies?

15 A Yes.

16 Q Did anyone in the medical department advise
17 you of any concern about Dr. Calandra rendering the
18 opinion that the pathologist who had reviewed those
19 slides on behalf of Monsanto were of the opinion that
20 they did not show any cancer or precancer or anything
21 that we as laymen would refer to as cancer?

22 A That is correct.

23 Q And that had been approved by the appropriate
24 people within the medical department?

25 A Yes.

1 Q On how many occasions did Dr. Calandra go
2 with Monsanto people to various meetings and groups in
3 an attempt to support Monsanto's position that PCBs
4 could not cause cancer?

5 A I personally don't know all the meetings that
6 Dr. Calandra may have attended with Monsanto personnel.

7 Q How many are you aware of?

8 A I am aware of the series of meetings
9 described in the last exhibit and he also made a
10 presentation before the symposium on PCBs held in
11 Chicago later in November of 1975.

12 Q That was at Monsanto's request?

13 A I don't know that it was Monsanto's request.
14 The organizers, the EPA organizers of the meeting wrote
15 to Monsanto asking for speakers. And Dr. Calandra was
16 suggested as a speaker on this animal study subject.
17 And he -- the suggestion was accepted and he appeared on
18 the program. I believe I recall an additional session
19 where Elmer Wheeler and Dr. Calandra and I went to
20 Washington EPA to discuss the status of the animal
21 studies that were not yet completed but approaching
22 completion. I believe that would -- that was about --
23 that would have to be in 1971. Other than those three
24 meetings with government officials, I don't know what
25 other meetings Dr. Calandra might have been involved

1 with.

2 Q When Dr. Calandra went and met with
3 governmental officials on behalf of Monsanto, was IBT
4 compensated for his work and time?

5 A I don't know.

6 Q You don't know if when you asked him to
7 accompany you to Washington in 19 -- November of 1975 he
8 was going to be paid for his time?

9 A I don't know.

10 Q Did Monsanto compensate IBT for performing
11 studies for them?

12 A Oh, yes.

13 Q And the question in your mind, I take it, is
14 whether this business of making presentations was
15 included in the price you paid for the studies.

16 A That I don't know.

17 Q But I mean is that the question whether he
18 was compensated or not is whether or not it was a
19 separate compensation for each specific thing he went to
20 versus being covered in the overall price?

21 A That is right.

22 Q But in any event he was paid for what he did?

23 A His company was paid.

24 Q Yes.

25 A Yes.

1 Q And whether paid as part of the price for the
2 study or paid individually, that went into the hundreds
3 of thousands of dollars IBT got over several years in
4 doing work for Monsanto. Correct?

5 A It very likely did. Dr. Roush's department
6 approved the invoicing and the pay -- pay arrangements
7 and the contractual arrangements that were developed.

8 Q That was one of the things that was excluded
9 from that proposed job description was the budgeting for
10 things like this?

11 A Yes.

12 Q And you didn't have to worry about what it
13 cost?

14 A That is correct.

15 Q Okay.

16 Let me show you a letter dated June 2nd,
17 1970, from you to a Mr. Sprouse with -- I guess it's
18 with the TVA. It's not quite clear. Document 16741,
19 16742.

20 A I have read it.

21 Q Do you recall writing that letter?

22 A Yes, sir.

23 Q As part of your job and responsibilities at
24 Monsanto?

25 A Yes.

1 system so that the conclusion would be that the
2 current -- then current, 1972 program of Monsanto with
3 regard to PCBs should not result in further regulation?

4 A That was Monsanto's conclusion that we shared
5 with the audience, yes.

6 Q And the net result of that was, then, that
7 this was a document suggesting by its presentation of
8 the facts as Monsanto saw them an argument for
9 nonlegislative action and nonregulatory action on PCBs?

10 A Yes.

11 Q Okay. Now let me just show you the document
12 that was the presentation to the interdepartmental task
13 force marked 817 through 886 and ask if that isn't in
14 fact the presentation that was made.

15 A This appears to be a copy of the presentation
16 made in May of 1972.

17 Q And in fact included in that presentation to
18 this interdepartmental task force was a summary of the
19 IBT work for Monsanto. Correct?

20 A I didn't see that.

21 Q I thought there were some charts -- maybe I'm
22 mistaken. I thought there were some charts and the like
23 that presented information on those animal studies.

24 A There are charts here that show the analysis
25 of animal tissues for PCB content. The animal tissues

1 were obtained from the test animals at IBT. But there's
2 a sort of a corollary study in the analytical chemistry
3 laboratory as distinguished from a health effects study
4 on the animals.

5 Q But that was based on what would be found in
6 animals that had been fed PCBs in a certain quantity for
7 a certain period of time, was it not?

8 A That is correct.

9 Q Now, not everyone who asked for information
10 from Monsanto got the information they wanted. Correct?

11 A Probably not.

12 Q Let me show you a letter that you wrote dated
13 June 27th, 1972, to Ms. Vicki Roper with the EPA,
14 Document 19813.

15 A I have read it.

16 Q She asked for some specific information
17 bulletins about PCBs and was told that those were not
18 available. Correct?

19 A That is correct.

20 Q Now, was that because Monsanto no longer had
21 any copies of those bulletins?

22 A They had a reserve copy in the central
23 library in the -- sort of the historic vaults, but they
24 did not have copies to issue freely at request.

25 Q Was it a problem to make a photocopy of one

1 Q In that letter you talk about the disposal of
2 PCB-containing dielectric fluids. Correct?

3 A Correct.

4 Q You sent that letter to the TVA because you
5 recognized that they used PCB-containing dielectric
6 fluids. Correct?

7 A Correct.

8 Q Did the fact that they got that letter
9 indicate that Monsanto had previously sold
10 PCB-containing dielectric fluids directly to the TVA?

11 A [No reply]

12 Q I guess another way of asking that is: Did
13 you send that to everybody who was on your customer
14 list?

15 A No. This particular memo was sent at the
16 request of our sales representative, Mr. Randall Graham,
17 who called me and asked me, "Would you write to Mr.
18 Sprouse? They've got some Askarel units, they've got
19 some leaks there and he wants to know what to do with
20 the leaks."

21 Q I see. So the letter was sent to the TVA
22 because Monsanto was aware of a problem of leaks of PCB
23 dielectric fluid in and among the electrical equipment
24 they had?

25 A Yes.

1 Q And the letter discusses the disposal
2 opportunities that Monsanto could make available or how
3 it could be disposed. Correct?

4 A Correct.

5 MR. LACEY: Bob, may I see the letter?

6 MR. HALL: Sure.

7 MR. LACEY:

8 Q The letter discusses the fact that Monsanto
9 itself had built some type of incinerator or disposal
10 facility that could be used by paying three cents a
11 pound to Monsanto to get rid of the PCBs?

12 A It does.

13 Q It also indicates that it could be
14 incinerated at temperatures exceeding 800 degrees
15 centigrade. And that would be if they wanted to
16 incinerate it themselves?

17 A Yes.

18 Q And the reason we have the 800 degrees
19 centigrade is another way of saying in a different
20 temperature scale high enough to have complete
21 combustion?

22 A Correct.

23 Q Because at lower temperatures incomplete
24 combustion may form, at least in your mind, chlorinated
25 dibenzofurans. Correct?

1 A At least. And other unknowns.

2 Q Okay. But not dioxin?

3 A Highly unlikely.

4 Q Okay. In this letter did you provide any
5 information to the TVA about what measures it should
6 take to protect its workmen from exposure to these
7 leaking PCB dielectric fluids?

8 A No.

9 Q Do you know whether or not technical
10 bulletins and the like had previously been supplied by
11 Monsanto to the TVA which would contain that
12 information?

13 A No.

14 Q So it is possible that at the time you wrote
15 this letter TVA had no information from Monsanto about
16 how to safely handle PCB-containing dielectric fluids.
17 Correct?

18 A Possible, but highly unlikely.

19 Q What you would expect is that they would have
20 had such technical bulletins and written information
21 from Monsanto available to them?

22 A Certainly. Or from the supplier of the units
23 that they purchased.

24 Q Well, I'm particularly interested in whether
25 or not you would expect that they would have materials

1 from Monsanto itself relating to PCBs.

2 A I would expect that Mr. Graham would have
3 supplied them as part of his job.

4 Q And is one of the reasons that you didn't
5 supply any information in that letter about the safe
6 handling of PCBs by workmen that you assumed that those
7 materials had already been supplied by Mr. Graham?

8 A Yes, sir.

9 Q Did you ask Mr. Graham whether he had
10 supplied those materials?

11 A I don't recall the question just in those
12 words, but the discussion over the phone was one of,
13 "How about people exposures?"

14 "Everything looks good."

15 I was reassured by Mr. Graham's words that
16 things were in order.

17 Q Mr. Graham led you to believe that they
18 already had the information from Monsanto about personal
19 exposure?

20 A That is correct.

21 Q You provided a lot of information to a lot of
22 people over time as you held this job from 1970 to 1976,
23 did you not?

24 A Yes, sir.

25 Q And just by way of example, and we don't have

1 enough time if we had several days here to go over every
2 letter you wrote in that three-year period or six-year
3 period; I don't think, but let me hand you a group of
4 documents that I think consist exclusively of one-page
5 transmittal letters dated in the summer of 1972,
6 Documents 517 through 550, and ask if these are the
7 sorts of letters you would write providing Monsanto
8 documents or documents that Monsanto thought might be of
9 interest to people about PCBs.

10 A This particular group of letters signed by me
11 address a specific report that we had made in Washington
12 and sent copies to the recipients as shown here. But as
13 typical of the kinds of things we were trying to do in
14 covering customers, laboratories, regulatory agencies.

15 Q Were letters like that sending out
16 information sent only to those who had asked for the
17 information?

18 A No. This is an example of none of these
19 people -- to the best of my ability to peruse this
20 document -- asked for a copy.

21 Q They were all getting this on an unsolicited
22 basis, then?

23 A That is correct.

24 Q And you selected those people, I guess maybe
25 among others, because you thought it might be important

1 for those people to know Monsanto's position and somehow
2 might be influenced by it?

3 A The primary reason for sending to these
4 people is because these individuals, from my vantage
5 point, were the most active and the most interested.
6 And I would meet them at meetings and they would call me
7 on the telephone. So I developed a list of those people
8 who seemed to be genuinely interested in the subject and
9 would not be disinterested in what I might have mailed
10 them.

11 Q You certainly didn't just pick up the phone
12 book and start copying down names and mailing them off
13 that way?

14 A That is correct.

15 Q But my question, I guess, is: You mailed
16 them to people who might be able to understand the
17 information and who would at least know what PCBs were?

18 A True.

19 Q The point of mailing this unsolicited
20 information was to provide these people with Monsanto's
21 view on PCBs.

22 A Correct.

23 Q And that view, of course, was somewhat
24 different than views espoused by others, like, for
25 example, Congressman Ryan, who thought they ought to be

1 banned?

2 A I don't know that that fits this particular
3 item discussed in these letters.

4 Q That's the presentation to the
5 interdepartmental task force?

6 A Yes. This presentation centered on the
7 apparent ability for some PCBs to biodegrade and brought
8 up to date the task force -- to the task force
9 Monsanto's program for limiting sales. It really did
10 not, in my opinion, try to establish in any concrete way
11 what should be banned and what should not be banned. It
12 just reported the status of things in May of 1972.

13 Q Well, didn't the presentation -- strike that.
14 Wasn't the presentation designed to present
15 the view that the most environmentally persistent
16 homologs or congeners, whatever the appropriate word is
17 of PCBs had been removed from mass use by the use of
18 1016 and the plan to have lower average weight
19 chlorinated PCBs in transformers to present the picture
20 of the closing of the loop, as Monsanto referred to it,
21 in order to ensure that PCBs would not in the future be
22 getting into the environment and therefore -- and also
23 to present information on the position that it was
24 necessary to continue to sell PCBs for dielectric use
25 from a standpoint of having a satisfactory electrical

1 of those documents and send it to the Environmental
2 Protection Agency?

3 A No, there's no problem. It's just that the
4 volume or the bulletin I offered to send her covered the
5 same information.

6 Q She asked for two specific bulletins and got
7 neither one.

8 A That is correct.

9 Q Those bulletins existed within Monsanto?
10 Correct?

11 A Yes, yes, we had a copy.

12 Q They could have been copied and sent to her
13 but were not?

14 A That's right.

15 Q Okay. There were other people who wanted
16 information from Monsanto. For example, there was an
17 interest in sales figures. Correct?

18 A Yes.

19 Q Monsanto refused to supply that information.

20 A Yes.

21 Q There were people who were interested in the
22 names of the customers to whom Monsanto had sold PCBs.
23 Correct?

24 A Correct.

25 Q And Monsanto refused to supply that.

1 A Yes.

2 Q In both cases the request for that type of
3 information came from governmental agencies. Correct?

4 A Correct.

5 Q But that was not forthcoming from Monsanto?

6 A Monsanto offered the data. What was not
7 forthcoming was the agency's willingness to accept this
8 data as confidential material and used for their
9 purposes without divulging it publicly.

10 Q Monsanto wanted some way to keep it under
11 wraps, in other words?

12 A Well, the proper terminology is keep it
13 confidential. We even sent a copy to a government
14 agency registered, certified mail, which was returned
15 unaccepted.

16 Q Because it had a confidentiality agreement
17 associated with it?

18 A Correct.

19 Q And said you couldn't use it unless you sign
20 this?

21 A Correct.

22 Q There was correspondence back and forth
23 between Monsanto and Congressman Ryan about PCBs, were
24 there not?

25 A Yes.

1 Q The correspondence -- let me just show you
2 first a letter from Congressman Ryan to Mr. Edward Bach,
3 who in April of 1970 was the president and chief
4 executive officer of Monsanto. Correct?

5 A Correct.

6 Q Dated April 9th, 1970, Document 43921 through
7 43927. And it has attached as a part of that package
8 a -- what appears to be a draft response.

9 A I have reviewed it.

10 Q You received a copy of that letter from
11 Congressman Ryan before Monsanto sent its response to --
12 him, did you not?

13 A I don't recall whether I received a copy or
14 was shown a copy. But I was aware of it.

15 Q Okay. Let me show you another document,
16 42849 through 42852, and ask if that isn't a draft
17 response which was reviewed by you for your comments.

18 A Yes. This is a draft response reviewed by
19 me.

20 Q Then let me show you what I believe is the
21 actual response, a letter dated April 28th, 1970, signed
22 by John Mason, Document 43907 through 43910, and ask if
23 that isn't the actual response that was provided.

24 A This appears to be a draft of the response --
25 the final version of the response to Congressman Ryan.

1 Q Do you recall that Congressman Ryan found the
2 response unsatisfactory?

3 A Yes.

4 Q And he wrote another letter to Monsanto in
5 response to its response to his initial letter, did he
6 not?

7 A He did.

8 Q Let me show you a letter dated June 18th,
9 1970, No. 43928 through 43930.

10 A I have reviewed this document.

11 Q There are certain things that he points out
12 were requested in his initial letter that were not
13 addressed in the Monsanto response. Correct?

14 A Correct.

15 Q One of the things that he asks for are copies
16 of technical bulletins. And he's still asking for that
17 in his second letter. Correct?

18 A Correct.

19 Q He also inquires about whether Monsanto has
20 advised people of the uses that have been discontinued
21 and the uses for which PCBs are no longer thought to be
22 satisfactory. Correct?

23 A Correct.

24 Q Did you review that second letter and provide
25 a draft response to it?

1 A I did not provide a draft response. I
2 reviewed a draft of a response prepared by Mr. Mason,
3 John Mason.

4 Q The letter that was sent to Congressman Ryan
5 on April 28th, 1970, by Monsanto specifically rejected
6 his suggestion that Monsanto provide a complete list of
7 the uses for PCBs that had been recommended by Monsanto
8 and the names of the products and manufacturers who had
9 used PCBs in their products. Is that correct?

10 A That is correct.

11 Q In fact, Monsanto had a policy of refusing to
12 disclose to even its customers the specific blends in
13 products that it sold, did it not?

14 A Yes.

15 Q And in fact even here as we are in May of
16 1987, almost ten full years since Monsanto has last
17 manufactured and sold a PCB-containing product, that
18 policy is so strong in your mind that you had doubt
19 about whether to reveal the constituents in one of the
20 PCB-containing Pydraul products. Correct?

21 A Correct.

22 Q It was the -- that type of policy by Monsanto
23 that made it difficult for customers to fully know what
24 was in Monsanto products. Correct?

25 A Yes.

1 Q And could lead to the type of confusion or
2 misunderstanding that was demonstrated, for example, by
3 Mr. Richards at Texaco, who didn't appreciate the fact
4 that the Aroclor trade name was a trade name under which
5 many PCB products were sold. Correct?

6 A Well, Mr. Richards, if he had read the
7 literature, would have known that Aroclors contain
8 polychlorinated polyphenyls, because even the labels
9 contained, or the literature. Or at least he would know
10 that they were chlorinated hydrocarbons.

11 Q There's a difference between being a
12 chlorinated hydrocarbon and being a PCB, isn't there?

13 A Well, one term covers the whole family of
14 chlorinated hydrocarbons.

15 Q I understand. But to say we have a
16 chlorinated hydrocarbon is not the same thing to say we
17 have a PCB?

18 A No, they are not the same.

19 Q All PCBs are chlorinated hydrocarbons?

20 A Correct.

21 Q But the family of chlorinated hydrocarbons is
22 made up of literally thousands of different chemicals?

23 A Correct.

24 Q And PCBs are only a very small part of that
25 family?

1 A Correct.

2 Q So to know that one has a product that
3 contains chlorinated hydrocarbons is not to know that
4 one has a product containing polychlorinated biphenyls.
5 Correct?

6 A Correct.

7 Q So again, this Monsanto policy of not
8 disclosing the chemicals that went into compounds, of
9 not disclosing the names of products that had PCBs would
10 contribute to confusion not only by customers and the
11 public generally but even by -- even to chemical
12 companies who purchased Monsanto products. Correct?

13 A It's correct only if you designate -- if you
14 are describing the situation long ago. But the letters
15 as similar to Dr. Richards from Texaco in 1970s
16 indicates to me that Dr. Richards has not read his mail
17 or has not read the labels, because the labels say:
18 This product contains chlorinated biphenyls which
19 studies have found, and on and on. So the presence of
20 PCBs was not hidden once Monsanto was aware of the
21 problem.

22 Q These labeling situations changed about 1970
23 or '71?

24 A 1970 was the first change relating to
25 environment and the reference to PCBs, yes.

1 Q Prior to that time one would not be able to
2 ascertain from any product label that it contained PCBs,
3 would they?

4 A There were some product labels that referred
5 to poly -- to chlorinated polyphenyls for a period of
6 time. Other than that, they just referred to
7 chlorinated hydrocarbons.

8 Q And Dr. Richards -- I'm sorry, not
9 Dr. Richards, Mr. Richards, the industrial hygienist at
10 Texaco, questioned -- you say indicates he hadn't been
11 reading his mail well. Is that correct?

12 A Yes.

13 Q And that's because you believe in his mail he
14 would have these technical bulletins and these other
15 things that Monsanto supplied to people like him?

16 A Or at least he would have a memo that says:
17 This could be an environmental problem, it contains
18 PCBs.

19 Q Is it also possible that the fault didn't lie
20 with Mr. Richards in failing to read the material
21 Monsanto supplied but instead the fault lay with
22 Monsanto in failing to get the material to him?

23 A That's a possibility, yes.

24 Q Let me show you a letter dated June 30, 1970,
25 Document 28970 through 28975, and ask if that isn't

1 Monsanto's response to Congressman Ryan's second letter
2 to Monsanto.

3 A This appears to be a copy of the response to
4 Mr. Ryan's second letter.

5 Q And in that letter Monsanto still did not
6 provide all the information that Congressman Ryan was
7 requesting. Correct?

8 A That is correct.

9 Q Did Monsanto ever supply Congressman Ryan
10 with all the information that he requested about PCBs?

11 A No.

12 Q That second letter went to several people at
13 Monsanto, including the lawyers that were part of this
14 policy team that you were involved with. Correct?

15 A It's a single person. The lawyer.

16 Q One person? The lawyer?

17 A Yes, sir.

18 Q Mr. Park?

19 A Yes.

20 Q What was Mr. Park's role on this matter? Was
21 there some legal proceeding that he was involved in?

22 A No, Mr. Park was part of the task force that
23 addressed PCB issues of all types, and he was a regular
24 member and no particular issue legally was involved. He
25 was our legal consultant for all matters.

1 Q And that involved in the committee's work
2 many general business considerations of a nonlegal
3 nature?

4 A Oh, yes.

5 Q And he participated in all of those matters?

6 A Not all. Some. Many times he would excuse
7 himself from the meeting.

8 Q To take care of other matters?

9 A Presumably so, yes.

10 Q I guess what I'm trying to find out is
11 whether Mr. Park only appeared when there were legal --
12 questions and limited his comments and observations to
13 legal matters.

14 A Mr. Park was invited to all sessions. He
15 would try to attend. And he would comment on legal
16 matters when appropriate.

17 Q Did he comment on nonlegal matters? Did he
18 have an input into the business decisions of the
19 company?

20 A No. He would avoid those.

21 Q I see. Was it thought that the policies that
22 the company was developing had legal implications for
23 the company?

24 A That's a constant thought.

25 Q Okay.

1 A Every decision can have legal implications.

2 Q Did Mr. Park keep the committee advised of
3 lawsuits that were being brought against the company as
4 a result of PCBs?

5 A When Mr. Park was actively involved, I don't
6 recall any lawsuits relating to PCBs being filed.
7 Later, when they were filed, I don't recall Mr. Park
8 being actively involved. There were other attorneys
9 involved.

10 Q Well, was the committee, the business group
11 on the committee, familiar with lawsuits being filed -
12 against the company related to PCBs?

13 A Yes.

14 Q And were they generally familiar with the
15 types of claims being raised in those lawsuits?

16 A In a general way, yes.

17 Q So they would be familiar with whether or not
18 an individual who was a plaintiff in a lawsuit was
19 claiming their health had been adversely affected by
20 PCBs?

21 A Yes.

22 Q Did the committee take the claim of people
23 that they had been injured by PCBs into account in its
24 policy making? Or were those simply rejected as
25 unmeritorious claims that would ultimately be proven

1 false?

2 A The committee existed through about -- and I
3 don't recall the exact date when it sort of disbanded
4 informally -- through maybe 1972. There were, to my
5 recollection, no lawsuits filed claiming human health
6 effects. Therefore, the subject never came up.

7 Q Okay. And after that time when the committee
8 was disbanded, in about 1972, were you during the
9 remainder of your work for Monsanto kept aware of
10 lawsuits that were filed in which people were claiming
11 to have been injured because of PCBs?

12 A I was kept aware of some. I don't know if
13 that represents all.

14 Q And did you take the fact that those lawsuits
15 were filed into account in trying to assess whether PCBs
16 might be causing human injuries and the type of injuries
17 they might be causing?

18 A Certainly.

19 Q So you did not reject out of hand, then, the
20 claims being made by the plaintiffs in those lawsuits
21 about the types of injuries they had sustained?

22 A That is correct.

23 Q And did you in your role advise others in the
24 company that they ought to be cognizant of the
25 possibility that PCBs might be causing injuries of the

1 type claimed by those people?

2 A Certainly.

3 Q You took an active role on behalf of the
4 company in trade associations and industry groups
5 dealing with the PCB-related matters, did you not?

6 A Yes.

7 Q For example, the National Electrical
8 Manufacturers Association came out with standards on PCB
9 electrical equipment, did it not?

10 A They came up with handling guidelines, yes.

11 Q And those handling guidelines were proposals
12 that would permit the continued use of PCBs in
13 dielectric equipment, capacitors and transformers?

14 A Yes.

15 Q And they contemplated the continued
16 manufacture by Monsanto of PCBs and its sale for
17 dielectric purposes?

18 A Yes.

19 Q You were an active participant in the group
20 that came up with that proposal?

21 A Yes.

22 Q And that was something that was a part of
23 your regular work with Monsanto?

24 A It became a part. Monsanto is not a member
25 of that association.

1 Q And yet for this particular situation
2 Monsanto was involved in coming up with the NEMA
3 proposals on PCB transformers?

4 A Monsanto did not come up with those.

5 Q I said Monsanto was involved in coming up
6 with them.

7 A Yes.

8 Q And made specific proposals consistent with
9 its continued production and sale of PCBs.

10 A We made no proposals. I was chairman of the
11 committee.

12 Q Okay. Well, that's some level of
13 involvement, isn't it?

14 A Certainly. I assigned two teams of
15 individuals to subcommittees who then worked on the
16 guidelines. My role was to call for the meetings, to
17 make certain that progress was being made, and to keep
18 the members of these two committees up to date on
19 developments in the governmental arena, in the
20 analytical arena and in the animal testing arena.

21 Q You were on both committees?

22 A I would go from one room to the other as
23 they -- as they wrestled with how to word the
24 guidelines.

25 Q Mr. Benignus was also an active participant

1 in that, was he not?

2 A He was a member of the steering committee,
3 yes, sir.

4 Q And the National Electrical Manufacturers
5 Association concluded that it would be well to have
6 standards actually promulgated by the American National
7 Standards Institute. Is that correct?

8 A That is correct.

9 Q And so at the request of the National
10 Electrical Manufacturers Association, which was made up
11 primarily of Monsanto's customers for PCBs -- correct?--

12 A Primarily, yes.

13 Q In fact, was there anybody who was a part of
14 the National Electrical Manufacturers Association who
15 hadn't bought PCBs from Monsanto at one point in time or
16 another?

17 A I don't know of any.

18 Q Okay. So the National Electrical
19 Manufacturers Association group, consisting at least
20 generally, if not exclusively, of Monsanto PCB
21 customers, went to the American National Standards
22 Institute and asked them to set up a committee to deal
23 with standards for PCB transformers. Correct?

24 A Correct.

25 Q And that did happen, did it not?

1 A Yes.

2 Q And there was another committee to work on
3 the American National Standards situation, was there
4 not?

5 A Well, it's the same people with a new name.

6 Q And lo and behold you're chairman again.
7 Right?

8 A Yes, sir.

9 Q And in that particular group Mr. Benignus was
10 also involved?

11 A Yes.

12 Q And the two of you take part in the efforts
13 that lead up to the ANSI standards on handling and
14 disposing of PCB dielectric fluids?

15 A Yes.

16 Q Let me show you a Document 34704 through
17 34719 and ask to whom that information was presented.

18 A This appears to be the -- a copy of the
19 presentation that I made before the NEMA-ANSI group at
20 its organizational meeting back in 1971.

21 Q Now, did those two groups work exactly at the
22 same time and reach their conclusions at exactly the
23 same time?

24 A One of the two, I have forgotten which, met
25 more often or longer than the other. But they would

1 schedule their meeting in such a way that the two groups
2 could have a joint session to conclude that particular
3 cluster of meetings and then agree to meet again.

4 Q So basically the ANSI standards were the NEMA
5 standards developed by the same group for all practical
6 purposes?

7 A Yes.

8 Q And --

9 A Let me comment.

10 Q Certainly.

11 A The NEMA guidelines, you will note, are
12 referred to as proposals. And they're deliberately
13 stated as such. Because they were proposed to ANSI for
14 consideration and adoption.

15 Q And then ANSI appointed a committee to
16 consider them and recommend them. Correct?

17 A I don't claim to know the entire workings of
18 ANSI. But it does have a board of directors, it's a
19 very small group in terms of numbers of people. It's my
20 understanding that their board of directors reviewed the
21 NEMA proposal and accepted it as an ANSI standard. It
22 was not a group of knowledgeable people in the
23 dielectric equipment manufacturing community.

24 Q The board was not?

25 A That is correct.

1 Q It would be very difficult for it to make any
2 technical changes other than just accept what's
3 proposed?

4 A Correct.

5 Q And that's what they did?

6 A That's correct.

7 Q Let me ask you with regard to the business
8 changes -- and I'm talking now about contractual
9 business changes that Monsanto engaged in in the early
10 Seventies where it modified the contracts with its
11 customers to whom it sold PCBs and required the
12 execution of indemnity agreements, who was responsible
13 for developing that idea? Was that you?

14 A No.

15 Q Who within Monsanto came up with that idea?

16 A I don't know.

17 Q Did you review the proposed language of the
18 indemnity agreement form?

19 A No.

20 Q You have no knowledge about where it came
21 from or what it was there for?

22 A I know what it was about. After it had been
23 completed and accepted.

24 Q What was it about?

25 A I'd have to read the exact words, but it had

1 to do with --

2 - Q Okay. Let me assist you. I'll provide you
3 with a copy of what appears to be the actual indemnity
4 agreement executed by Westinghouse as a letter agreement
5 dated January 15th, 1972, Document 15117 through 15119.

6 A I don't know what I can add to the words in
7 the document, which I believe speak for themselves, if I
8 may use that expression.

9 Q You can use it. You told me you knew what it
10 was about. I was hoping we could get a layman to help
11 us understand what it was about.

12 A Well, I can express to you my understanding.

13 Q Feel free to do that.

14 A The intent on Monsanto's part was to continue
15 the sales of PCBs to those customers who had exhibited
16 the right attitude and understanding the issues related
17 to the environment and PCBs and were capable of
18 conducting the necessary programs and whatever is
19 required to make certain the PCBs do not become an
20 environmental contaminant and if there are any problems
21 arising they have the resources to correct those
22 problems. Otherwise Monsanto didn't want to deliver
23 these materials to parties who did not exhibit that
24 appropriate attitude and ability.

25 Q What did the indemnity agreement have to do

1 with the appropriate attitude with regard to safe
2 handling of PCBs? \

3 A Well, the attitude would eventually result in
4 a problem. If you didn't have the right attitude, you
5 would not implement the right programs, you would have
6 loss to the environment --

7 Q I didn't ask my question very well. I'm
8 trying to find out what about the indemnity agreement
9 assured that somebody had the right attitude so you
10 wouldn't have those problems?

11 A Well, there's no assurance of attitude other
12 than if something is in writing it makes a different
13 impact on the listener and how he performs later.

14 Q I see. There were other contractual
15 modifications that also took place in addition to the
16 indemnity contract, were there not?

17 A I don't know of any.

18 Q Are you familiar with the addition of clauses
19 that permitted Monsanto to stop selling to customers in
20 the event that there was some problem with the PCBs in
21 the mind of Monsanto?

22 A I have seen copies of those documents
23 recently. I have not seen them until recently. I was
24 not aware of them.

25 Q You in your role at Monsanto were not aware

1 of the fact that the sales contracts would permit
2 Monsanto to cease selling PCBs for dielectric purposes
3 if they were being misused by the customer in such a way
4 as to pose a threat to the environment or to health?

5 A That is correct.

6 Q Did you ever see any use of PCBs by
7 Monsanto's dielectric customers after you came to your
8 position in 1970 which you thought presented a threat to
9 the environment?

10 A In early 1970 I saw evidences of situations
11 that needed improvement. And the customers appeared to
12 me to be taking steps for improvement. And my criteria
13 was one of if a true effort is being made for
14 improvement that's going a long way toward achieving
15 what we all wanted.

16 Q Did you find customers who didn't make
17 sufficient improvement, in your opinion?

18 A There were times when improvement was, in our
19 opinion, too slow and we would make that known. And we
20 saw evidence that there was a response and we pursued
21 it.

22 Q Did Monsanto, to your knowledge, ever stop
23 selling PCBs to any customer because of their use in
24 such a way as to bring a hazard to the environment?

25 A Not to my knowledge.

1 Q Did Monsanto ever stop selling PCBs to a
2 customer because of their use of the product in such a
3 way as to cause a hazard to health?

4 A Not to my knowledge.

5 Q What role did you have with regard to the
6 worldwide PCB problem?

7 A The role was similar to the U. S. role,
8 working through Monsanto representatives in Europe and
9 in Japan.

10 Q What sort of contact did you have with people
11 in Japan?

12 A My primary contact was through the Monsanto
13 U. S. representative in Japan. I would mail him and
14 share with him documents that I would have in my
15 possession and he in turn either personally or through
16 his staff would send me reports, special reports as
17 needed, or a monthly summary of their activities for a
18 period of time until they terminated their operations
19 totally.

20 Q Was there any effort to make sure that the
21 information that was given out in England or the United
22 Kingdom and Japan was consistent with that given out in
23 the United States?

24 A Yes.

25 Q What effort was taken in that regard?

1 A Oh, it took many forms. Primarily one of
2 sharing with both Europe and Japan representatives
3 copies of documents used in the United States, with the
4 suggestion that they might need revision which would
5 make them more suitable for the local situations. That,
6 in my opinion, was the -- the principal method of
7 assuring some semblance of consistency.

8 Q What type of modifications would make
9 information more suitable for the local situation?

10 A Well, the obvious one is the listing of some
11 products that are or are not marketed in that area. The
12 use of different trade names. The use of different
13 termination dates. The references on disposal, for
14 example, when Europe and Japan did not have a Monsanto
15 unit they would have to refer to a commercial unit.
16 It's that kind of thing that had to be considered in
17 making revisions.

18 Q Who was the Monsanto representative in Japan?

19 A Do you mean the individual person?

20 Q Well, was there one person that was the
21 representative or --

22 A I worked with one, Dr. John Durland.

23 Q Okay. And what was Dr. Durland's role?

24 A I don't know his formal assignment, but I
25 would describe it as being the Monsanto U. S. presence

1 in Tokyo.

2 Q Okay. And was he a Monsanto employee?

3 A Yes.

4 Q Who did you work with in England or the
5 United Kingdom?

6 A I worked initially with Don Cameron,
7 C a m e r o n, who was a marketing representative. And
8 on some technical matters I worked with Ron Lidgett.
9 And eventually it narrowed down to where I was working
10 primarily with Dr. Richard Baxter and Hal Vodden,
11 V o d d e n.

12 Q Is it Hal that's his first name or Alf?

13 A Well, his initials are HA. I think he went
14 by both.

15 Q Okay.

16 A Depending on how long you've known him.

17 Q But Alf Vodden is the same person?

18 A Yes.

19 Q Let me show you a document entitled
20 Management Plan for the Polychlorinated Biphenyl
21 Environmental Problem, Document 25699 through 25707, and
22 ask you who developed that plan.

23 A This appears to be a copy of a plan that I
24 put together from information supplied by the members of
25 this task force we referred to earlier.

1 Q So that plan is the plan that was developed
2 by the task force pursuant to the assignment from
3 Monsanto management?

4 A Yes. That assignment really was: Prepare a
5 presentation to be given before the top management of
6 Monsanto.

7 Q What group are we talking about there, the
8 corporate administrative committee or the --

9 A I believe at that time it was referred to as
10 the corporate administrative committee.

11 Q That group has gone by different names, the
12 corporate management committee the corporate
13 administrative committee, the corporate development
14 committee.

15 A Yes, sir.

16 Q It's all the same group?

17 A That's the way I perceived them.

18 Q Okay. And so your group developed a proposal
19 to be presented to that group?

20 A Correct.

21 Q And did you actually participate in the
22 presentation of the proposal?

23 A Yes, sir.

24 Q And was the proposal adopted by that
25 committee?

1 A No.

2 Q What was it that you proposed that they
3 refused to adopt?

4 A They were anxious that the business groups
5 involved speed up the timetable so that the actions
6 proposed were acceptable but the target dates for
7 completion of the different elements were not acceptable
8 to the committee. They wanted quicker action.

9 Q They wanted to get out of all the PCB
10 businesses other than the dielectric business more
11 rapidly than your group proposed?

12 A Yes.

13 Q And their instructions to the businesspeople
14 were: Take whatever efforts are necessary to speed up
15 that process, including the development of alternative
16 products for our customers.

17 A Yes.

18 Q And it was in response to that urgency that
19 there were very accelerated development efforts, for
20 example, with the replacement for PCBs and carbonless
21 carbon paper?

22 A Yes.

23 Q There was, however, no directive from that
24 committee to have accelerated research efforts on the
25 replacement of PCBs as dielectric fluids, was there?

1 A That is correct.

2 Q That research proceeded at a normal pace?
3 Correct?

4 A I would not call it a normal pace. It was
5 accelerated compared to normal research activities.

6 Q But --

7 A But not at the pace devoted to the copy paper
8 application.

9 Q And that was a response to the fact that your
10 group had recommended getting out of all the other uses
11 and they wanted to get out of those uses as quickly as
12 possible, but your group had not recommended getting out
13 of the dielectric uses of PCBs. Correct?

14 A That is correct.

15 Q The decision of that committee was to get out
16 of whatever it was that was recommended to be given up
17 in PCB use as soon as possible?

18 A Correct.

19 Q And the only reason that there wasn't a
20 similar effort with regard to dielectrics is because
21 your group didn't recommend it?

22 A Correct.

23 Q And it was not until you yourself personally
24 reached the decision in November of 1975 that the wheels
25 started rolling at Monsanto on getting out of the PCBs

1 as dielectrics. Correct?

2 A Well, the timing was such that it coincided
3 with my discussions with Mr. Fitzgerald. I have no way
4 of knowing if Mr. Fitzgerald and others had also arrived
5 at the same decision more or less coincidentally.

6 Q To your knowledge, you were the first person
7 at Monsanto to say: We ought to get out of the PCBs as
8 dielectric business?

9 A Yes.

10 Q And it's conceivable to you that maybe your
11 statement of that and the action that followed very
12 shortly thereafter was coincidental because others were
13 working on the same approach?

14 A That was possible.

15 Q Have you ever heard of anybody else who was
16 working on that same conclusion?

17 A No.

18 Q As far as you know, you were the moving
19 factor in that?

20 A Yes.

21 Q And as far as you know, had you made that
22 same recommendation two or three years earlier
23 Mr. Fitzgerald would have taken that recommendation to
24 the management committee and they would have acted to
25 get out of the PCB business two or three years earlier?

1 A No, I don't know that.

2 Q What I'm saying is: You don't have any
3 reason to believe they wouldn't have one way or the
4 other?

5 A True.

6 Q I mean if there is some reason you believe
7 that your recommendation, had it been made two or three
8 years earlier, would not have been accepted by Monsanto,
9 I'm interested in whatever you may know about that.

10 MR. HALL: I think he's just reluctant to
11 speculate on something like that, David.

12 THE WITNESS: That is speculation. The
13 reason I said that wouldn't have happened,
14 Mr. Fitzgerald was not involved three years earlier. A
15 whole new set of Monsanto people were now involved.

16 MR. LACEY:

17 Q Well, were the people who preceded
18 Mr. Fitzgerald less sensitive to needs to get out of the
19 PCB business?

20 A I didn't mean to imply that.

21 Q Well, that's what I was trying to find out.

22 A You had indicated if I had told
23 Mr. Fitzgerald three years earlier. I could not have
24 done it. He was not involved.

25 Q Okay. Let me see if I can get the question

1 clarified. Had you gone to the appropriate person two
2 or three years earlier and recommended that Monsanto get
3 out of the business of using PCBs as dielectrics, do you
4 have any reason to believe that those recommendations
5 would not have been acted upon favorably by the company?

6 A Yes.

7 Q And what is the basis for that belief?

8 A Monsanto's strong understanding was that the
9 electrical industry, manufacturers, distributors of
10 electrical power and the like, just could not tolerate
11 an absence of PCBs. That belief was so strong in
12 Monsanto's thinking that any proposal to ban the sale of
13 PCBs to that use would not have been acceptable or even
14 conceivable. The understanding was too strong in the
15 other direction.

16 Q Did you also understand that there were
17 strong financial incentives to Monsanto to stay in that
18 business and it would not conceive of getting out of
19 that business as long as those financial incentives were
20 there?

21 A No, I've never felt that PCBs were that
22 strong a product.

23 Q Let me show you a memo dated July 14th, 1970,
24 written by you to Messrs. Bergen, Mason -- is it Mason?

25 A Mason.

1 Q Mason and Springate, Document 25625. Take a
2 moment to review that, if you would.

3 A I have read the document.

4 VIDEO OPERATOR: We're off the record.

5 [Recess]

6 VIDEO OPERATOR: We're back on the record.

7 MR. LACEY:

8 Q Do you see the next-to-last paragraph in that
9 document?

10 A Yes.

11 Q It discusses a portion of a conversation you
12 had with an employee of one of Monsanto's competitors in
13 the PCB business, does it not?

14 A Yes.

15 Q And in that memo you report to the recipients
16 what you had advised that representative about
17 Monsanto's position.

18 A Yes.

19 Q And that paragraph deals with Monsanto's
20 position on ceasing to supply PCBs as dielectric fluids,
21 does it not?

22 A Paragraph 4? I don't -- I don't see any
23 reference to dielectric fluids.

24 Q I see. In this document, in Paragraph 4,
25 you, in discussing with Mr. -- is it Schwindt?

1 A That's the way I would pronounce it.

2 Q Okay. You were talking with Mr. Schwindt --

3 A Yes.

4 Q -- about certain uses of PCBs that the
5 company had decided to get out of. Correct?

6 A Correct.

7 Q And those were the uses other than dielectric
8 uses. Correct?

9 A Correct.

10 Q You also discussed or talked with him about
11 the fact that Monsanto would not abandon the dielectric
12 market. That's the market you were going to continue to
13 sell in, isn't it?

14 A At that time, in 1970, the heat transfer
15 application was still considered acceptable.

16 Q Okay. So you had two markets then,
17 dielectrics and heat transfer?

18 A Right.

19 Q Those were the only two markets that Monsanto
20 intended to continue to sell in at the time that memo
21 was written?

22 A That is right.

23 Q And what you report that you told
24 Mr. Schwindt was that Monsanto would not voluntarily
25 abandon this business without some protection by proper

1 authorities regarding imports. Isn't that right?

2 A Yes.

3 Q Isn't that what you told Mr. Schwindt?

4 A Yes.

5 Q Simply put, Monsanto was going to continue to
6 produce PCBs so long as other people produced PCBs and
7 would be prepared to sell to Monsanto customers if you
8 didn't. Isn't that right?

9 A We would be prepared to sell to Monsanto
10 customers?

11 Q Monsanto was going to continue to sell PCBs-
12 to its customers, would not voluntarily stop producing,
13 as long as other companies who made PCBs were prepared
14 to import it if Monsanto didn't sell it. Correct?

15 A All right. What this says is that if PCBs
16 are permitted in the dielectric and heat transfer
17 systems and someone is going to supply that need,
18 Monsanto would be the supplier. If we terminate the
19 sale of PCBs to those two principal and remaining uses,
20 we would do so if no one else would supply that PCB.
21 Because if somebody is going to supply it, we might as
22 well supply it. The problem is not solved.

23 Q Isn't it true that one of the reasons
24 Monsanto decided in December of 1975 to stop selling
25 PCBs for dielectric uses is that it knew that the Toxic

1 Substances Control Act was going to pass, they could see
2 the handwriting on the wall, and therefore finally it
3 had come to pass that there was going to be a
4 restriction on other companies selling PCBs in the
5 United States and thus Monsanto was finally prepared to
6 voluntarily abandon the market?

7 A I don't recall that our thought process was
8 that sophisticated.

9 Q Well, isn't that exactly what you were
10 suggesting right there? If Congress would pass a law
11 banning the import of PCBs in 1971, then Monsanto might
12 consider voluntarily ceasing production?

13 A Yes.

14 Q And the whole point of that was, Monsanto
15 didn't want to give up the competitive position it had
16 in the market voluntarily?

17 A That's true.

18 Q Let me show you a document labeled --

19 MR. HALL: David, we're about out of time.

20 MR. LACEY: I heard Mr. Papageorge indicate
21 earlier he had a backup flight possibly. I think we're
22 probably going to need to shoot for that. Do you want
23 to take a break, let my secretary confirm that?

24 A Don't worry about it. It's -- I'll get on
25 it.

1 Q Okay. Well, fine.

2 A We'll get another hour then, is what he's

3 saying:

4 MR. LACEY: Let me show you a document titled

5 Question-and-Answer Sheet on Polychlorinated Biphenyls,

6 Document No.25673 through 25682.

7 Mike, why don't you ask Dayle to --

8 What's that other flight, Mr. Papageorge? Is

9 it that Southwest flight?

10 THE WITNESS: Southwest flight at six

11 something.

12 MR. LACEY: Would you ask Dayle to check on

13 that, please, and make a reservation?

14 THE WITNESS: I have reviewed the document.

15 MR. LACEY:

16 Q Did you prepare that?

17 A No.

18 Q Do you know who prepared that?

19 A Mr. Ed John.

20 Q He was the publicity man?

21 A Yes.

22 Q Did you review that document before it was

23 provided to people for use?

24 A Yes.

25 Q What was the purpose of that document?

1 A There are two documents in this collection.

2 Q Oh, I'm sorry. 1

3 A There is a question-and-answer sheet,
4 accompanied by a three-page press release.

5 Q Is the press release referred to -- it's
6 referred to in the question-and-answer section, is it
7 not?

8 A I believe it is, yes.

9 Q So, actually, that made up one packet of
10 information to be supplied to various employees of
11 Monsanto?

12 A True.

13 Q Okay. Let me just say the question and
14 answer plus whatever attachments went with it so the
15 person would have it. What was the purpose of that
16 question and answer and attachment section?

17 A Monsanto was issuing this press release in
18 response to Congressman Ryan's comments to the press.
19 And in many instances, and this is one of them, the
20 public relations department prepares the question-
21 and-answer sheet that is sent to all of Monsanto's
22 plants and offices to equip the local Monsanto
23 representatives with enough information to respond to
24 any local telephone calls, inquiries from the local
25 press, to elaborate on the press release that is issued.

1 Q Was it the intention in preparing that that
2 there be a consistent story told by the various Monsanto
3 employees who might be contacted?

4 A That is one objective.

5 Q And was the intention that if a person got
6 inquiries from the press they would read those answers
7 verbatim?

8 A Well, I don't know if they would answer them
9 verbatim. It depends on the style of the person using
10 this sheet.

11 Q How quickly they can find it when the
12 telephone call comes in?

13 A True. That's one factor. The majority of
14 recipients have no knowledge at all of the subject. And
15 this is their first exposure.

16 MR. HALL: David, let's knock off for about
17 three minutes.

18 MR. LACEY: Sure, sure.

19 [Recess]

20 [Exhibit 9 marked]

21 VIDEO OPERATOR: We've been off the record
22 for a short break. This is the continuing deposition of
23 Mr. William B. Papageorge and it is 4:25 p.m.

24 MR. LACEY:

25 Q Mr. Papageorge, let me show you what the

1 court reporter has marked as Exhibit No. 9, ask you if
2 you recognize that letter. \

3 A Yes, I do.

4 Q That's a letter from Westinghouse asking for
5 your assistance in trying to solve a problem they were
6 having with state regulatory authorities about the
7 disposal of PCBs. Correct?

8 A That is correct.

9 Q And that was a function that was within the
10 scope of your job there at Monsanto. Correct?

11 A Correct.

12 Q You would actually assist customers in
13 dealing with disposal problems, including negotiating
14 with regulatory authorities?

15 A The negotiating to a limited degree.

16 Q Let me show you a document dated July 27th,
17 1970, Document 16411 through 16412, and ask if that is
18 the letter you wrote back to the Westinghouse
19 representative summarizing the results of your
20 negotiations.

21 A No. These two -- these two address the same
22 subject, but at different times. I received this
23 document you just handed me prior to the previous
24 document.

25 Q I see. So you had previously done some

1 negotiation and then they came back to you for
2 subsequent assistance? ^

3 A I don't know what you mean by negotiation.

4 Q Well, I'm trying to -- in the letter of July
5 27th, 1970, you discuss with Mr. -- is it Viland?

6 A Viland.

7 Q The problem of dealing with landfilling
8 materials. Correct?

9 A Correct.

10 Q PCB materials.

11 A Correct.

12 Q And Mr. Viland then writes you. When is the
13 letter, the subsequent letter?

14 A The subsequent letter is six weeks -- well,
15 three weeks later.

16 Q And Mr. Viland has apparently been attempting
17 to convince regulatory authorities there in Pennsylvania
18 to permit the landfilling of PCBs.

19 A Correct.

20 Q And for whatever reason he has been
21 unsuccessful.

22 A That is correct.

23 Q And looks to you to assist him in convincing
24 the regulatory authorities in Pennsylvania to permit the
25 landfilling of PCBs.

1 A That is correct.

2 Q Okay.

3 Let me show you another letter, dated
4 October 1st, 1970, to Mr. Viland, Document 25823 and
5 25824, and ask if that is the response to the letter
6 marked as Exhibit No. 9.

7 A Yes. This is a copy in response to Exhibit
8 No. 9.

9 Q Okay. And in that document you then
10 summarize the results of your negotiations on behalf of
11 Westinghouse with the regulatory authorities. Correct?

12 A Correct.

13 Q And essentially your failure in convincing
14 them that PCBs should be permitted for landfill in
15 Pennsylvania?

16 A Correct.

17 Q Do you know whether or not Mr. Viland came
18 back to you again for additional assistance in trying to
19 resolve that problem?

20 A I don't recall any.

21 Q Okay.

22 Do you recall any problems with contamination
23 of Monsanto's dielectric fluid products with chlorinated
24 naphthalenes?

25 A I've never heard that.

1 Q Okay. Would it be a cause for concern if PCB
2 products were contaminated with chlorinated
3 naphthalenes?

4 A Well, from my understanding of the toxicity
5 of chloronaphthalenes, studies which occurred, as I
6 remember best, in the 1930s, Forties, very early, I
7 would suggest the concern would be related to the levels
8 present and the potential for exposure and the concern
9 would be related to the chloracne symptoms that were
10 observed.

11 Q No concerns other than that?

12 A That's all I would have, yes.

13 Q Let me show you a document entitled PCB
14 Environmental Problem, July Status Report, dated August
15 18th, 1970, which is a document that was prepared by
16 you, I believe, Document 25599 through 25606, and ask if
17 that in fact is a report that you prepared.

18 A This looks like a copy of a report that I
19 prepared, yes.

20 Q Was it your custom to prepare such reports?

21 A There was a period of time starting in the
22 summer of 1970 when I decided that in order to
23 communicate the success of our withdrawal program more
24 effectively I would issue a monthly status report and
25 requested each of the task force members to make

1 contributions which I assembled and issued as a monthly
2 status report.

3 Q Let me show you a September 8th, 1970,
4 document entitled PCB Environmental Problem, August
5 Status Report, Document No. 42664 through 42676, and ask
6 if this was the report you prepared for the month of
7 August, 1970.

8 A This appears to be a copy of the August 1970
9 status report.

10 Q Let me take a look at this with you for just
11 a minute. This report deals entirely with PCBs, does it
12 not?

13 A Yes.

14 Q Let me ask you to look at the section on the
15 second page of the report, Document No. 42665, entitled
16 Aroclor Distillation.

17 A I have read it.

18 Q There's a reference there to Chocolate Bayou.
19 Is that the plant -- Monsanto plant located near Alvin,
20 Texas?

21 A Yes.

22 Q And what was the relationship between the
23 Chocolate Bayou plant and PCBs?

24 A They had a piece of equipment used for
25 distillation that was idle at the plant and available

1 for use elsewhere.

2 Q And was there a need in the Monsanto
3 production facilities for additional distillation
4 equipment?

5 A Yes.

6 Q Was that for further purification of the
7 Monsanto PCB products?

8 A Strictly speaking, yes.

9 Q Was that because Monsanto was increasing its
10 capacity at that time?

11 A No.

12 Q Well, what led to this need for additional
13 purification equipment?

14 A This was the replacement of Aroclor 1242 with
15 Aroclor 1016. And in order to make Aroclor 1016 we
16 needed an additional distillation unit. And we found
17 this idle unit at the Chocolate Bayou plant.

18 Q Let me direct your attention back to the
19 August report very briefly, Pages 25600 and 25601. Was
20 it customary for your reports to contain a report on the
21 status of legal matters?

22 A Whenever the legal representative on the task
23 force had something to contribute, yes, I would include
24 that.

25 Q This report involved or included all of the

1 matters that were brought to you by the task force.

2 Correct?

3 A Yes.

4 Q Let me show you the August report, Page
5 42666, and ask you if you just simply left a blank like
6 that when the legal group had nothing to report.

7 A No.

8 Q Let me show you another document, dated
9 November 10th, 1970, entitled PCB Environmental Problem,
10 October Status Report, Document 25792 through 25801, and
11 ask if that is the report that you prepared for the
12 month of October regarding the PCB problem.

13 A This appears to be a copy of the report I
14 issued to cover the October status.

15 Q How long did you continue to provide this
16 type of report?

17 A I don't recall exactly. I believe it's about
18 a year or so.

19 Q And these reports went to not only people in
20 the United States but also representatives of Monsanto
21 in Europe and representatives of Monsanto in Japan.

22 Correct?

23 A Correct.

24 Q So that all of the Monsanto organizations
25 that produced or were involved with PCBs were aware of

1 what was going on?

2 A Yes.

3 Q Did you make an effort to ensure that these
4 reports were accurate before they were made?

5 A Yes. As best as I could.

6 Q Certainly. Do you know to whom these reports
7 went? I'm particularly interested in whether or not
8 they ultimately went to the corporate development
9 committee or corporate administrative committee,
10 corporate management committee at the company.

11 A The only people that I know received it are
12 those specifically listed as addressees and carbon copy
13 recipients. I do not know if any of those individuals
14 shared their copy with anyone or made additional copies.

15 Q Okay.

16 Let me show you another document, dated
17 December 7th, 1970, entitled PCB Environmental Problem,
18 November Status Report, Document No. 42677 through
19 42687, and ask if that's the report that you prepared
20 for the November 1970 status of PCBs.

21 A This appears to be a copy of the report I
22 issued in December to report on the status November
23 1970.

24 Q Were each of the reports that you prepared
25 for the duration that you prepared them similar in the

1 format to the ones that we've just looked at?

2 A Yes.

3 Q What led to the decision to stop providing
4 those reports?

5 A Primarily one of decreased activity to the
6 point where it didn't require this effort to properly
7 communicate to all the interested members.

8 Q Did you have some other form of reporting or
9 recordkeeping with regard to what your group did?

10 A We did not keep a record, no.

11 Q So to know what your group did from the time
12 that these reports stopped it would be a matter of what
13 you can recall about it?

14 A Or searching each individual's files to see
15 what happened in research, what happened in marketing,
16 medical, et cetera.

17 Q At the time you left Monsanto did you still
18 have individual files you were holding with regard to
19 PCBs?

20 A No.

21 Q What happened to those files?

22 A They were transferred in 1976 to my
23 successor.

24 Q I see.

25 Let me show you a document dated

1 September 1st, 1970, a letter from you to Mr. Reinhardt
2 with Maloney Electric Company, and an attached page,
3 Document 25843, 25844, and ask if that is a letter that
4 you wrote along with the attachment that you wrote about
5 PCBs as dielectric fluids.

6 A Yes.

7 Q In that statement that you wrote for
8 inclusion in the ANSI document you reached the
9 conclusion or recommend that a statement be made that
10 the benefits of the uses of PCBs as dielectric fluids
11 far outweigh any problems associated with them.

12 Correct?

13 A Correct.

14 Q Did ANSI adopt your recommended position?

15 A Yes.

16 Q There never were found any products that were
17 nonPCB but had the specific benefits of PCBs you were
18 referring to there, were there?

19 A That is correct.

20 Q Ultimately the government reached the
21 conclusion that the environmental problems of PCBs
22 outweighed their benefits in the electric application.

23 Correct?

24 A Correct.

25 Q And the positions provided by ANSI and by

1 Monsanto were rejected?

2 — A Correct. |

3 Q Let me show you a letter dated March 18th,
4 1975, written by you to a Dan Albert with Westinghouse
5 which has attached to it certain questions that he
6 asked, along with answers to them, and some reference
7 material, Documents 16416 through 16423. Do you recall
8 that letter?

9 A Yes, I do.

10 Q You had received from Mr. Albert a list of
11 questions that dealt with the hazards to humans of PCBs.
12 Correct?

13 A Correct.

14 Q And he on behalf of Westinghouse was asking
15 for Monsanto's information with regard to the answer of
16 those questions. Correct?

17 A Yes.

18 Q Did you provide the answers to the questions?

19 A I provided them to Mr. Albert. But I got the
20 answers from Mr. Wheeler.

21 Q All right.

22 A Personally.

23 Q Did -- let me show you a document 25286
24 through 25297 and ask whether this contains within it
25 the answers or proposed answers that Mr. Wheeler

1 recommended. There's a collection of documents there
2 that appear to relate to this, and I'm trying to
3 understand them.

4 A I find in this collection of documents a
5 memorandum of transmittal signed by Mr. Wheeler,
6 addressed to me, indicating that attached are the
7 answers to the questions from Mr. Albert. The
8 attachment in this particular document precedes that
9 transmittal letter, consists of several pages.

10 Q Okay. Do the pages that precede the
11 transmittal letter appear to you to be the attachment --
12 that went with it?

13 A With Mr. Wheeler's note, yes, sir.

14 Q Okay. And did you supply verbatim to
15 Westinghouse the answers to the questions drafted by
16 Mr. Wheeler?

17 A Yes.

18 Q You didn't have any part in actually
19 developing the answers, then?

20 A That is correct.

21 Q And that again was consistent with the policy
22 of the company that questions about the adverse
23 consequences of PCBs on human health were to be answered
24 by the medical department?

25 A Correct.

1 Q Was there any thought on your part that it
2 was inappropriate for Westinghouse to look to Monsanto
3 as the manufacturer and seller of PCB-containing
4 dielectric fluids for answers to questions like that?

5 A No. I didn't consider it inappropriate.
6 This would be a step in the right direction, in my
7 opinion.

8 Q Okay. And certainly some evidence of the
9 fact that Westinghouse was looking to Monsanto for
10 information on the hazards of PCBs?

11 A Well, certainly. But it would also indicate
12 that their professionals would be playing a role in what
13 eventually is done at Westinghouse.

14 Q So you viewed what Monsanto knew as a part of
15 at least what Westinghouse would look to for their
16 decisions on health effects of PCBs?

17 A Very definitely.

18 Q And that's typical for a customer of a
19 chemical company to look to the chemical company for
20 information on the products that the company supplied?

21 A Certainly.

22 Q Let me show you a letter dated December 20,
23 1976, from you to Jerry Johnson with NIOSH and ask if
24 that's a copy of a letter you wrote in December of 1976.

25 A It is.

1 Q In that letter you discuss the issue of
2 whether certain documents that are being prepared by
3 NIOSH with regard to occupational exposure to PCBs
4 should refer to PCBs as being carcinogenic. Correct?

5 A Correct.

6 Q And one of the things that you point out is
7 that you have previously -- you and Industrial Biotest,
8 I guess, more correctly, have previously submitted
9 information indicating that there is a disagreement
10 based on Industrial Biotest's work with the reading
11 of -- the pathologist's reading of Dr. Kimbrough's work.
12 Correct?

13 A Correct.

14 Q And what you point out is that according to
15 Industrial Biotest's work Dr. Kimbrough's slides do not
16 show things that laymen would consider carcinogenic?

17 A That is correct.

18 Q Okay. And that's the same thing that you
19 went to Washington to tell people about in November of
20 1975. Correct?

21 A Correct.

22 MR. LACEY: Would you mark that, please, as
23 the next exhibit?

24 [Exhibit 10 marked]

25 MR. LACEY:

1 Q Let me direct your attention to Exhibit No.
2 10, in particular to the two pages that are attached to
3 that exhibit, and ask if you can tell me what those two
4 pages that are attached to that exhibit represent.

5 A The two pages attached to the exhibit appear
6 to be a listing of the plasticizers that Monsanto
7 Company was selling in October 1970, and it lists the
8 price per pound which is associated with the mode of
9 delivery and the amount of delivery.

10 Q Is that type of price list for products that
11 Monsanto sold a customary form of document that Monsanto
12 maintained?

13 A I do not know.

14 Q You've never seen a price list like that
15 before?

16 A That is true.

17 Q Are there any PCB products on that price
18 list?

19 A I see a reference to Liquid 1221, which would
20 be a monochlorobiphenyl.

21 Q Would all of that be monochloro or would
22 there be a mixture in the case of 1221?

23 A It's a mixture of the many monochloros that
24 are available. As you know, there are ten of them
25 possible.

1 Q Yes.

2 A There's some biphenyl in it. What I don't
3 know is if there is any dichlos in it. I don't recall
4 that.

5 MR. LACEY: Okay.

6 MR. HALL: David, we're going to have to
7 leave at 5:00 to make that airplane. So if you want to
8 cover this other business, you better not forget to do
9 it.

10 MR. LACEY: Why don't you run about a minute
11 of just leader on this thing.

12 MR. HALL: Good idea.

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SIGNATURE OF WITNESS

I, William Papageorge, solemnly swear or
affirm, under the pains and penalties of perjury, that
the foregoing contains a true and correct transcript of
the testimony given by me at the time and place stated,
with the corrections, if any, and the reasons therefor
noted on a separate sheet of paper and attached hereto,
and that I am signing this before a Notary Public.

William Papageorge

THE STATE OF

Subscribed and sworn to before me, the
undersigned authority, by the said William Papageorge on
this the day of , 1987.

Notary Public in and for
the State of

1 THE STATE OF TEXAS]

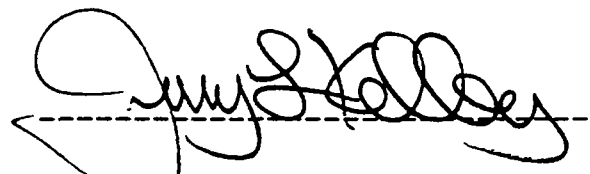
2 CERTIFICATE

3 I, Jerry Kelley, a Certified Shorthand
4 Reporter, hereby certify that the foregoing testimony
5 was given before me after the witness had been duly
6 sworn.

7 I further certify that the foregoing is a
8 true and correct copy of the transcript of the
9 proceedings.

10 I further certify that I am neither
11 attorney for, related to nor employed by any of the
12 parties or any attorney of record in this cause, nor do
13 I have a financial interest in the matter.

14 Witness my hand in Houston, Texas, on May
15 22, 1987.

16
17
18 
19

20 Jerry Kelley, Texas CSR 2004*

21 2900 Smith, Suite 104

22 Houston, Texas 77006

23 713/523-3767

24 *My Certificate Expires

25 December 31, 1988

