

ORIGINAL

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1 IN THE COMMONWEALTH COURT OF PENNSYLVANIA
2 PENNSYLVANIA DEPARTMENT OF GENERAL: NO. 284 M.D. 1990

3 SERVICES, PENNSYLVANIA :

4 DEPARTMENT OF TRANSPORTATION, :

5 PENNSYLVANIA PUBLIC UTILITY :

6 COMMISSION, PENNSYLVANIA EMERGENCY:

7 MANAGEMENT AGENCY, and PENNSYLVANIA:

8 DEPARTMENT OF STATE :

9 Plaintiffs :

10 Vs. :

11 UNITED STATES MINERAL PRODUCTS :

12 COMPANY, CERTAINTED CORPORATION, :

13 COURTAULDS AEROSPACE, INC; :

14 CHEMREX, INC; PHILIPS ELECTRONICS :

15 NORTH AMERICA CORPORATION, :

16 ADVANCE TRANSFORMER COMPANY and :

17 MONSANTO :

18 Defendants :

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WATER_PCB-SD0000011626

1 Oral Deposition of
2 Dr. George J. Levinskas, taken pursuant to Notice,
3 held at the Ritz-Carlton, 100 Carondelet Plaza, St.
4 Louis, Missouri 63105, on Thursday, April 16, 1998, at
5 10:30 a.m., before John W. Begley, a Registered
6 Professional Reporter - Notary Public there being
7 present.

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1 THE COURT REPORTER: Usual
2 stipulations?

3 MR. ZIEGLER: That's fine.

4 MR. PENDERGAST: That's fine.

5 MR. TEDFORD: That's fine.

6 MR. GOUTMAN: That's fine, but I
7 would like the witness to read and sign the
8 transcript.

9 - - -

10 (It is hereby stipulated by and among
11 counsel for the respective parties that the
12 sealing, filing and certification are waived,
13 and that all objections, except as to the form
14 of the questions, be reserved until the time of
15 trial.)

16 - - -

17 Dr. George J. Levinskas, after having
18 first been duly sworn, was examined and
19 testified as follows:

20 - - -

21 EXAMINATION

22 - - -

23 BY MR. ZIEGLER:

24 Q. Could you state your full name and your

Jurist-Begley Reporting Services

1 address for the record, please.

2 A. My name is George J. Levinskas. I live at 526
3 Fairways Circle.

4 Q. Are you currently employed?

5 I'm sorry. What city is that in?

6 A. St. Louis, Missouri.

7 Q. Are you still employed by Monsanto?

8 A. No.

9 Q. And just so I know how to address you, do you
10 have your Ph.D.?

11 A. Yes.

12 Q. When did you retire from Monsanto, Dr.
13 Levinskas?

14 A. I think it was September of 1991.

15 Q. And how old were you when you retired?

16 A. 67.

17 Q. Was there some reason why you stayed on past
18 the age of 65? Was there a particular reason?

19 A. Yes, two reasons; one is that I felt good
20 about my work and my health, and I didn't mind
21 working an extra two years and the company was
22 willing to hire me for that time.

23 Q. And how long did you work for Monsanto?

24 A. Twenty years.

1 Q. And where did you get your -- you got a B.S.?

2 A. I have a B.A. degree.

3 Q. From what university?

4 A. Wesleyan University, Middletown, Connecticut.

5 Q. What year did you graduate?

6 A. 1949.

7 Q. And where did you do your graduate work?

8 A. University of Rochester, Rochester, New York.

9 Q. And when did you get your -- what degree did
10 you get from the University of Rochester?

11 A. Ph.D.

12 Q. What year did you get your Ph.D., Dr.
13 Levinskas?

14 A. 1953.

15 Q. What did you do your dissertation on?

16 A. The title was The Solubility Studies of
17 Hydroxylapatite, spelled A P A T I T E, (Synthetic
18 Bone Material), and that was it.

19 Q. That substance doesn't have to do with
20 chlorinated hydrocarbons?

21 A. No, it is a bone material.

22 Q. And who did you go to work for after you got
23 your Ph.D.?

24 A. I taught at the Graduate School of Public

1 Health at the University of Pittsburgh.

2 Q. What courses did you teach while you were
3 there?

4 A. I had a course that was called applied
5 toxicology. I lectured in courses given by other
6 faculty members, and that was it.

7 Q. Did you have any other employment between
8 your tenure at the Graduate School of Public Health,
9 University of Pittsburgh and your employment at
10 Monsanto?

11 A. I worked for the American Cyanamid Company.

12 Q. What year did you start with them?

13 A. 1958.

14 Q. What was your position while at American
15 Cyanamid?

16 A. I started off as their chief industrial
17 pharmacologist and I wound up being the director of
18 their environmental health laboratory.

19 Q. Did you do any animal studies with chlorinated
20 hydrocarbons while you were at American Cyanamid?

21 A. No.

22 Q. What was the nature of the research that you
23 did there?

24 A. It was predominantly on Cyanamid products and

1 it covered everything that the company had an
2 interest in except for the drugs at the Lederle
3 Laboratory division.

4 Q. Health studies?

5 A. Animal studies.

6 Q. I'm sorry. Animal studies.

7 And in what year did you finish your
8 employment with American Cyanamid?

9 A. 1971.

10 Q. At that point you went to work for Monsanto;
11 is that correct?

12 A. That's right.

13 Q. And what was your official title when you
14 first started with Monsanto?

15 A. I think it was something like manager of
16 product evaluation or some similar title.

17 Q. Can you recall, can you tell me what you
18 understood your job responsibilities to be when you
19 started with Monsanto?

20 A. Monsanto was attempting to pull together,
21 coordinate, and centralize the various activities
22 that had been going on in the area of environmental
23 safety with their products, and I came in to start
24 heading up a new group in the medical department that

1 would take over those duties.

2 Q. One of your concerns, when you began with
3 Monsanto concerning the environment, had to do with
4 PCBs; is that correct? Generally.

5 A. I don't recall that PCBs were specifically
6 mentioned in any of the interviews leading up to my
7 employment. This was to look at new products, new
8 uses of existing products.

9 Q. How soon after you started working for
10 Monsanto did you become aware that the company was
11 concerned about PCB contamination in the environment?

12 MR. GOUTMAN: Objection to the form of
13 the question.

14 THE WITNESS: I'm not sure I could give
15 you a specific time.

16 BY MR. ZIEGLER:

17 Q. A week? A month? I don't want you to guess,
18 but your best estimate.

19 A. I'm not sure when I really became conscious of
20 the -- there were concerns being expressed generally
21 in the toxicology area about environmental
22 contamination, and I'm not really, I can't really say
23 whether I became aware of PCB contamination before I
24 came to Monsanto or afterwards. I can't recall the

1 first conscious recognition of it.

2 Q. And do you know who worked with you there at
3 the department that you talked with concerning PCBs
4 during your first year of employment?

5 MR. GOUTMAN: Objection. Overly broad.

6 You can answer.

7 BY MR. ZIEGLER:

8 Q. Give me an idea of who was there in the
9 department.

10 A. I probably talked to most of the people. It
11 was a fairly small department. I may have talked to
12 just about everybody in the department about PCBs in
13 the first year.

14 Q. And did somebody there at Monsanto bring you
15 up to speed on what the corporate knowledge was of
16 potential health problems of PCBs prior to your
17 employment with the company?

18 MR. GOUTMAN: Objection to the phrase
19 "corporate knowledge". I don't know what
20 that means.

21 You may answer if you know what that
22 means.

23 THE WITNESS: Well, I don't know what
24 you meaning by "corporate knowledge" either,

1 but I don't recall anybody briefing me,
 2 bringing me up to date on PCBs. As I indicated
 3 in the earlier response, I joined Monsanto with
 4 the view to looking at new products and new
 5 uses of existing products, so that existing
 6 products were essentially out of my purview.

7 BY MR. ZIEGLER:

8 Q. Really what I'm working my way toward is can
 9 you tell me what the company knew, in terms of health
 10 hazards and PCBs, prior to your employment with the
 11 company in 1971? Are you able to do that?

12 A. No.

13 Q. Did you consider as part of your job while at
 14 Monsanto to be familiar with the toxicology
 15 literature regarding the environmental and health
 16 effects of PCBs?

17 MR. GOUTMAN: Objection to the phrase
 18 environmental effects of PCBs.

19 You can answer.

20 THE WITNESS: My capacity, both before
 21 and after coming to Monsanto, was an attempt to
 22 keep some information or have some knowledge
 23 about what was happening with respect to health
 24 effects of chemicals that were being used.

1 Predominantly by Monsanto, but also by others
 2 and by reading literature and trying to keep
 3 abreast of things, so it is just hard to say
 4 when I became aware of this, that, or other
 5 specific items.

6 BY MR. ZIEGLER:

7 Q. Did you ever hear it expressed by any of your
 8 co-workers in the company that Aroclors had quite a
 9 history of skin troubles and liver troubles? Did you
 10 ever hear anything to that effect while you were
 11 working in the company?

12 A. I don't recall that anybody consciously came
 13 in and told me that there was a history of adverse
 14 effects that you just mentioned in the use of
 15 Aroclors. I don't recall being told that.

16 Q. Do you know whether, as of the time you
 17 started with the company, whether you were aware that
 18 Aroclors or PCBs had a history of skin problems?

19 MR. GOUTMAN: Objection to the form of
 20 the question.

21 You can answer.

22 THE WITNESS: I would have to go back to
 23 what I said before. PCBs, they have been
 24 studied in the past, they are listed in the so

1 called Threshold Limit Values by the American
2 Conference of Governmental Industrial
3 Hygienists. The fellow, Joe Trion, who had
4 done the studies that lead to the listing, I
5 knew quite well before I came to Monsanto, so I
6 go back and say I have an awareness of these
7 things, but I can't tell you just when I got
8 them, who gave them to me or how I got it.

9 BY MR. ZIEGLER:

10 Q. So you would agree, for example, that PCBs are a
11 potential cause of chloracne; is that correct?

12 MR. GOUTMAN: Objection to the form of
13 the question.

14 You can answer.

15 THE WITNESS: When you say I would
16 agree, I'm not sure what I would be agreeing
17 to. There are some reports in literature
18 attributing chloracne to PCBs. Some of the
19 early literature, however, shows that PCBs were
20 highly contaminated with chlorinated
21 naphthalenes and retrospectively it has been
22 hard to determine how much of this is
23 attributable to PCBs by themselves and how much
24 to the chloronaphthalenes, the so-called

1 Hallowax. So the literature is really not very
2 clear on that, but there are reports
3 attributing some chloracne to some PCBs.

4 BY MR. ZIEGLER:

5 Q. All right. Do you currently, as we sit here
6 today, would you dispute the literature that
7 attributes chloracne to PCBs? Would you dispute the
8 conclusions by the authors in those reports?

9 MR. GOUTMAN: What reports?

10 MR. ZIEGLER: The reports that he's
11 referring to.

12 THE WITNESS: I think my answer, which
13 would be a repeat of what I said, somewhat
14 repeat what I said earlier, that when people
15 did labor analysis of the materials that had
16 been called PCBs they found they were
17 contaminated with the chlorinated naphthalenes,
18 and retrospectively it is hard to determine how
19 much of that might have been due to PCBs and
20 how much was due to chloronaphthalenes. And so
21 it's not a question of disputing the
22 literature. When I look at the literature it
23 isn't clear to me. I can't draw a conclusion
24 as to how much came from this or that or from

1 either or both.

2 BY MR. ZIEGLER:

3 Q. And you worked for Monsanto for approximately
4 20 years; is that correct?

5 A. Yes.

6 Q. And during that time you were involved in
7 numerous toxicological studies involving PCBs;
8 correct?

9 MR. GOUTMAN: Objection to the form of
10 the question.

11 THE WITNESS: I would have to say no,
12 that's not correct. Virtually all of the
13 animal testing that Monsanto had done on PCBs
14 was completed before I joined the company.

15 BY MR. ZIEGLER:

16 Q. Virtually all of it?

17 A. Virtually all of it.

18 Q. Wasn't there testing going on up through 1975?

19 A. I say virtually all of it. There was some
20 monkey studies done, in which I was involved, but all,
21 the basic, much of the basic information on PCBs was
22 conducted before I joined the company, so I was not
23 involved with it.

24 Q. I see. And so during your 20 years with the

1 company you don't know of any attempts by the company
2 to determine whether chloracne is, in fact, caused by
3 PCBs; is that correct?

4 A. I guess there are two parts to that answer.
5 One is I did not do studies on people, so studies
6 that may have been done to look at workers or
7 employees or others with chloracne I would have no
8 knowledge, no participation in. There is an animal
9 test result called rabbit ear chloracne test that is
10 used to try to predict the probability of chloracne
11 from compounds. Monsanto did have some testing done
12 on various products, and I don't recall the specifics
13 of those details, of the nature of the compound, but
14 Monsanto had some tests done on the rabbit ear
15 chloracne test to see if it produced chloracne in
16 animals. I don't recall the specific compounds and I
17 can't give you the results of those tests.

18 Q. Who at Monsanto, if you know, at the time you
19 started with Monsanto would have had responsibility
20 for any studies having to do with PCB health effects
21 in humans?

22 A. I would not know.

23 Q. That was not your responsibility?

24 A. No.

1 Q. And just to clarify, it was not your
2 responsibility to evaluate the product in any fashion
3 for health effects, to evaluate Aroclors with respect
4 to their health effects in humans during the time
5 that you worked at Monsanto; is that correct?

6 A. That's correct.

7 MR. ZIEGLER: Off the record.

8 (Off the record discussion)

9 BY MR. ZIEGLER:

10 Q. Let's go back on the record.

11 Did you have any responsibility for any
12 warnings which Monsanto gave to customers or placed
13 on their product packages?

14 A. There was a distribution section that was
15 responsible for labeling of products. There was a
16 form that was used by Monsanto that would be
17 circulated and it contains spaces on it for inclusion
18 of animal data. Yes, I did see that form and I was
19 asked to fill in animal data which we had in our
20 possession on many products.

21 Q. We might get to one or more of those documents
22 today?

23 MR. ZIEGLER: Let's go ahead and mark
24 this as an exhibit. (Indicating)

1 (The above-referred to document was
2 marked as Levinskas Exhibit 1 for
3 identification)

4 BY MR. ZIEGLER:

5 Q. Dr. Levinskas, if you could look at what's
6 been marked as Exhibit 1, if you could read that very
7 quickly.

8 A. All right.

9 Q. Who is Elmer Wheeler? Can you tell me?

10 A. Elmer Wheeler was the man that I was reporting
11 to, my immediate supervisor when I came to work for
12 Monsanto. He was the head of the industrial hygiene
13 group in the medical department.

14 MR. PENDERGAST: For the record, can we
15 just get a date and author of the document?

16 MR. ZIEGLER: This document is by Elmer
17 Wheeler, W H E E L E R, and it is dated January
18 29, 1970 and entitled, "Status of Aroclor
19 Toxicological Studies".

20 MR. GOUTMAN: Note my objection that
21 this letter does not refer to Dr. Levinskas and
22 indeed preceded his employment at Monsanto.

23 BY MR. ZIEGLER:

24 Q. Did you ever have an occasion to discuss with

1 Dr. Wheeler whether the PCBs were exhibiting a
2 greater degree of toxicity in the chronic studies
3 than he had anticipated?

4 MR. GOUTMAN: When?

5 MR. ZIEGLER: At the time he started
6 his employment or really any time thereafter.

7 THE WITNESS: Well, first, I repeat what
8 my attorney just said. This document is dated
9 before I joined the Monsanto Company.

10 BY MR. ZIEGLER:

11 Q. I understand.

12 A. I have never seen this document before.
13 (Indicating).

14 Q. Let me ask you this.

15 A. Nor have I ever had or recall Elmer Wheeler
16 ever telling me what you just said. I don't recall
17 Elmer Wheeler ever saying that they exhibited greater
18 toxicity than he expected.

19 MR. ZIEGLER: This will be Exhibit 2.
20 (Indicating).

21 (The above-referred to document was
22 marked as Levinskas Exhibit 2 for
23 identification).

24 MR. GOUTMAN: While the witness is

1 reading that, can you just identify for the
2 record what he's looking at?

3 BY MR. ZIEGLER:

4 Q. I'll be happy to.

5 Exhibit 2 is correspondence from Elmer
6 P. Wheeler dated May 25, 1970.

7 I would ask you if you could read that,
8 Dr. Levinskas. I have a couple of questions for you.

9 A. All right.

10 Q. My question has to do with the second
11 paragraph. Are you aware of your department ever
12 duplicating tests on any animals because you were not
13 satisfied with the results of the original tests?

14 MR. GOUTMAN: Just note the same
15 objection, the use of this document, as the
16 previous one.

17 MR. ZIEGLER: Sure. I understand.

18 MR. GOUTMAN: Sorry to interrupt.

19 THE WITNESS: Well, this is a document
20 which predates my time with Monsanto. I can
21 only speak for my own experience. I cannot
22 recall ever redoing a test because I was not
23 happy with the results. Tests have been redone
24 if there seemed to be a reason why the result

1 was aberrant and Tests have been done on
2 occasion to confirm a finding which we may not
3 have anticipated, but wherever I have been
4 involved that that has been done, both test
5 results have been presented.

6 BY MR. ZIEGLER:

7 Q. Are you aware of Monsanto ever redoing a test
8 and using cleaner samples in the hope that they might
9 find higher no effect levels with respect to the PCB
10 at issue?

11 A. I would stand by the answer that I just gave.
12 I, personally, have never done that. I'm not aware
13 that Monsanto has done it, but, then, I can't speak
14 as convincingly for Monsanto because I don't know.

15 MR. ZIEGLER: Let's mark this as
16 Levinskas Exhibit 3. (Indicating)
17 (The above-referred to document was
18 marked as Levinskas Exhibit 3 for
19 identification)

20 BY MR. ZIEGLER:

21 Q. For the record, Exhibit Levinskas 3 is a paper
22 by, I can't read the first name --

23 MR. GOUTMAN: M A T H A, it seems like.
24 Matha Berlin.

1 BY MR. ZIEGLER:

2 Q. Berlin, spelled B E R L I N, taken from PCB
3 conference Stockholm dated September 29, 1970 and
4 entitled, "PCB - effects on mammals".

5 I'm not going to ask you about the
6 entire document; just some items on the first page
7 and a few on the second page.

8 MR. GOUTMAN: I have the same objection
9 as I made to Levinskas Exhibits 1 and 2.

10 MR. ZIEGLER: Sure.

11 THE WITNESS: Do you want me to read the
12 entire paper?

13 MR. GOUTMAN: Yes, I want you to read
14 the entire paper.

15 BY MR. ZIEGLER:

16 Q. Sure. If you could.

17 A. Okay.

18 Q. We got this document from Monsanto. Do you
19 know if this was a document that was maintained in
20 your office or in your department?

21 A. I do not recall seeing this document before.
22 I would not know whether it had been retained.
23 Certainly I did not have it in my office.

24 Q. You don't know the author or you have not

1 heard of the author of this particular paper?

2 A. I don't know who wrote it. As I say, I
3 haven't seen it before and I don't see a signature
4 unless this person at the beginning here, it says by
5 Matha Berlin from the Institute of Hygiene at the
6 University of Lund in Sweden.

7 Q. Do you know why Monsanto would maintain it in
8 its files?

9 A. I would have no idea.

10 Q. Do you know what potential uses that Monsanto
11 may have made of this paper?

12 A. I would have no idea what they would have done
13 with it.

14 Q. Would you agree that chlorinated biphenyls and
15 naphthalenes can be absorbed by the skin by
16 inhalation or by ingestion, as indicated by the
17 author?

18 MR. GOUTMAN: This is in animals you
19 are talking about?

20 MR. ZIEGLER: Yes.

21 THE WITNESS: I would go back to what I
22 had said earlier, when I indicated and I say so
23 here, that these effects are caused by
24 chlorinated biphenyls or chlorinated

1 naphthalenes. As I said earlier, when you look
2 back at the older literature animal studies
3 show adverse effects in exposure to compounds
4 which at one time were called chlorinated
5 biphenyls and later chemical analysis showed
6 that they were mixtures of chlorinated
7 biphenyls and chlorinated naphthalenes, but
8 retrospectively I don't see how you could sort
9 out which are which.

10 BY MR. ZIEGLER:

11 Q. So you are saying that you couldn't rule out
12 that the toxic effects were caused by chlorinated
13 naphthalenes; is that correct?

14 MR. GOUTMAN: Objection to the form of
15 the question.

16 THE WITNESS: I don't think I said that.
17 I said that the chemicals, materials, which
18 were studied were mixtures, so that when you
19 report effects in animals it is hard to
20 attribute how much of it came from the
21 naphthalenes and how much came from the
22 biphenyls. This is the point that I find
23 difficult.

24 BY MR. ZIEGLER:

1 Q. The author indicates on the first page in the
2 third paragraph, "A comparison between the
3 chlorinated naphthalenes and the biphenyls based on
4 existing studies indicates that the biphenyls are
5 more toxic."

6 Do you have any reason for disputing
7 that conclusion?

8 A. I see the statement, but I don't see anything
9 that -- I wish I could see what that statement is
10 based that I could draw, that I could evaluate. I
11 don't see any basis that I have for evaluating that
12 statement.

13 Q. My question is just a little bit different,
14 though. My question to you is sitting here today do
15 you have any information upon which you would dispute
16 this particular statement?

17 A. I don't have any information from which I
18 could evaluate that statement, so I would not be in a
19 position to dispute it or to accept it.

20 Q. During your time working at Monsanto do you
21 know if Monsanto developed any data upon which to
22 evaluate, in your lab, developed any data upon which
23 to evaluate this particular statement?

24 MR. GOUTMAN: Again, the statement being

1 the relative toxicity between biphenyls and
2 naphthalenes?

3 MR. ZIEGLER: Yes.

4 THE WITNESS: I don't recall ever
5 working with a chlorinated naphthalene, so I
6 would have no data of my own to make such a
7 comparison.

8 BY MR. ZIEGLER:

9 Q. And Monsanto, as far as you know, didn't
10 develop that kind of data?

11 A. I'm not aware that Monsanto developed any such
12 data.

13 Q. Now, going back to the statement we talked
14 about earlier, you would not dispute that chlorinated
15 biphenyls and naphthalenes can be absorbed by the
16 skin, inhalation or by ingestion. You would not
17 dispute that, would you?

18 A. I think the attached table, tables, that they
19 have show the animal results of skin application, of
20 oral studies and of vapor exposure, and they do have
21 reported effects in different animals by those routes
22 of exposure, so the question is the animal species,
23 the amount, the duration, all enter that.

24 Q. And during your employment with Monsanto this

1 proposition, in terms of the absorption of
2 chlorinated biphenyls, this is something that you
3 would have understood while you were employed by
4 Monsanto?

5 MR. GOUTMAN: Objection to the form of
6 the question. I'm not sure I know the meaning
7 of it.

8 THE WITNESS: I guess the question isn't
9 very clear to me either. Could I have the
10 question read back to me?

11 BY MR. ZIEGLER:

12 Q. Yes. During your employment with Monsanto you
13 understood that PCBs could be absorbed by the skin,
14 by inhalation or by ingestion?

15 MR. GOUTMAN: You are talking about
16 animals.

17 MR. ZIEGLER: Yes.

18 THE WITNESS: I think that is a somewhat
19 different emphasis than I thought was the first
20 time, but based on animal data, and as I just
21 said, the three tables at the end of this
22 report, show effects in animals that were those
23 by mouth, by skin, and by inhalation, so I
24 would say yes.

1 BY MR. ZIEGLER:

2 Q. I'm talking about while you were employed with
3 Monsanto you understood what is stated in this
4 particular passage.

5 MR. GOUTMAN: What particular passage
6 are we on now?

7 MR. ZIEGLER: The one concerning how
8 PCBs are absorbed through the skin, inhalation,
9 and by ingestion.

10 BY MR. ZIEGLER:

11 Q. You understood that while you were employed by
12 Monsanto, didn't you?

13 A. You say you understood how? I don't know that
14 I understand how they were absorbed. I was aware
15 that they could be absorbed because Joe Treon, who
16 did the inhalation studies on PCBs when he was with
17 the Kettering Institute in Ohio, I knew Joe quite
18 well before his death and I was aware of the work he
19 had done, so, yes, I was aware that PCBs can be
20 absorbed, but I go back. I say when did I become
21 aware of it?

22 Q. When?

23 A. I don't know. I may have known this before I
24 came to Monsanto. I may have learned more about it

1 when I came to Monsanto. I can't pinpoint when I
2 received or became aware of specific information.

3 Q. With respect to the degree of toxicity of
4 PCBs, you understood while you were employed by
5 Monsanto that the toxicity of PCBs is proportional to
6 their degree of chlorination, did you not?

7 MR. GOUTMAN: Objection. Overly broad.
8 You may answer.

9 THE WITNESS: As a rough generalization,
10 the higher the degree of chlorination they
11 generally tend to be somewhat more toxic, yes.

12 BY MR. ZIEGLER:

13 Q. And you also understood, during your
14 employment with Monsanto, that PCBs could be
15 associated with liver atrophy and necrosis; isn't
16 that correct?

17 MR. GOUTMAN: Again, in laboratory
18 animals?

19 MR. ZIEGLER: Yes.

20 BY MR. ZIEGLER:

21 Q. We are talking about laboratory animals.

22 A. I'll go back to what I have said before. I'm
23 not sure, when you say when I was working, I may have
24 known it when I came to Monsanto, I may have learned

1 more about it when I got to Monsanto, but as a
2 general rule chlorinated hydrocarbons tend to produce
3 adverse liver effects such as you described, so that,
4 yes, I was aware of that.

5 Q. Also while you were employed at Monsanto, and
6 I'm looking at the conclusion of the study right
7 now --

8 A. Which study?

9 Q. Exhibit 3.

10 MR. GOUTMAN: This is not a study.

11 BY MR. ZIEGLER:

12 Q. All right. This paper. You were also aware,
13 while you worked at Monsanto, that the scientific
14 community suspected that PCBs could be retained and
15 accumulated in the body with chronic exposure; is
16 that correct?

17 MR. GOUTMAN: Objection to the phrase
18 "the scientific community".

19 You may answer if you understand the
20 question.

21 THE WITNESS: This document is dated
22 before my employment with Monsanto.

23 BY MR. ZIEGLER:

24 Q. Yes.

1 A. And so when you make statements about when I
2 worked for Monsanto, I go back to what I have said
3 earlier. There are many things that I have learned
4 over the years or I have been informed of over the
5 years, and I can't say when they come into
6 consciousness. When Rachel Carson in "Silent Spring"
7 put the emphasis on DDT accumulation I think that
8 many scientists at that time would begin to suspect
9 that there's a potential for accumulation of any
10 chlorinated hydrocarbon in an animal, and so these
11 things sort of come into consciousness, but it is
12 hard to say when, so when you say when you worked for
13 Monsanto you knew or you learned, I can't say when I
14 knew or learned, but, yes, some chlorinated
15 hydrocarbons will accumulate. I'm not sure when I
16 became aware of the accumulation of PCBs in animals.
17 Q. Can you give me a year when you became aware
18 of that?

19 MR. GOUTMAN: He just said he couldn't
20 tell you when.

21 THE WITNESS: There are many --

22 MR. GOUTMAN: Objection to the question.

23 THE WITNESS: There are many items of
24 information that I accumulate over the years.

1 My mind is not such that I can tell you when I
2 learned about them.

3 BY MR. ZIEGLER:

4 Q. Can you tell me if it was before or after
5 1975?

6 A. I talked earlier about PCBs and Joe Treon. I
7 knew Joe Treon and I knew the work that he done on
8 PCBs long before I came to Monsanto. I knew they had
9 a TLV and I learned information on PCBs over the
10 years. So when did I become aware of the specific
11 item? I can't tell you.

12 Q. Can you tell me if it was before or after
13 1975?

14 MR. GOUTMAN: He's answered the
15 question. Do you want another answer?

16 THE WITNESS: I think I said I was
17 aware of certain things about PCBs before I
18 came to Monsanto and that I accumulated more
19 information. I can't tell you the time frame
20 in which I picked up specific items.

21 BY MR. ZIEGLER:

22 Q. In terms of the statement that we have been
23 discussing about the accumulation of PCBs, you would
24 not dispute that statement, would you?

1 MR. GOUTMAN: What statement?

2 Objection. I would like to know what
3 statement.

4 MR. ZIEGLER: The statement that we have
5 been talking about, Tom, on page three.

6 MR. GOUTMAN: Could you read it for the
7 record so that the record is clear?

8 BY MR. ZIEGLER:

9 Q. "There is a strong suspicion that chlorinated
10 biphenyls can be retained and accumulated in the body
11 with chronic exposure."

12 We have been discussing it for five
13 minutes.

14 A. I think I addressed that. I think I said that
15 Rachel Carson, when she said DDT, many scientists
16 began to wonder whether any chlorinated hydrocarbon
17 could accumulate, and this document says that there
18 is a strong suspicion. It doesn't say there is
19 evidence. So that ties in. When you have a
20 suspicion a scientist says I wonder if it could be
21 happening with this thing because this happened. By
22 analogy this may. That's what I think is a strong
23 suspicion. She doesn't say we have detailed evidence
24 of same.

1 MR. ZIEGLER: Let's mark this document
2 as Exhibit Levinskas 4. (Indicating).

3 (The above-referred to document was
4 marked as Levinskas Exhibit 4 for
5 identification).

6 MR. PENDERGAST: Can you just identify
7 the date and author, please?

8 MR. ZIEGLER: I will.

9 BY MR. ZIEGLER:

10 Q. Exhibit 4 is a memorandum from Elmer P.
11 Wheeler dated June 24, 1971. The subject is, "Status
12 of Aroclor Toxicity Studies".

13 MR. GOUTMAN: Let me just interpose an
14 objection that this particular document is
15 Bates stamped from the Scott litigation and I
16 believe those documents were subject to a
17 confidentiality order. I would just inquire as
18 to how you obtained the document. I'll object
19 to the use of it.

20 MR. PENDERGAST: This is Exhibit 4?

21 MR. ZIEGLER: Exhibit 4. We obtained
22 this document from, and I'm not -- we obtained
23 this document from a law firm in New Orleans,
24 Louisiana. I was not involved in obtaining, I

1 did have some involvement, but nothing was
2 expressed to us about any confidentiality
3 order. We are certainly unaware of any
4 confidentiality order, and if you want to
5 produce such an order, we are happy to consider
6 it.

7 THE WITNESS: Okay.

8 BY MR. ZIEGLER:

9 Q. Dr. Levinskas, what month did you start with
10 Monsanto in 1971?

11 A. July.

12 Q. So this -- July what? What day?

13 A. Actually the actual date was July 5th or 6th.
14 It was just after the fourth.

15 Q. So this document would have been written about
16 a week-and-a-half before you started with Monsanto;
17 is that correct?

18 A. That's correct.

19 MR. GOUTMAN: I also object on the same
20 basis as the other documents that predated his
21 employment and contain no indication that he
22 authored it, received it, or was otherwise
23 involved in its creation.

24 BY MR. ZIEGLER:

1 Q. Are you familiar with the studies that are
2 referred to in this particular document that were
3 underway at Monsanto in June of 1971?

4 A. I think the first paragraph says the studies
5 in rats and dogs completed two years of feeding test
6 diets in May. These studies were basically completed
7 when I joined the company. I'm aware that the
8 company has done these studies, yes.

9 Q. Did you interface at all with Industrial
10 Bio-Test Lab --

11 A. No.

12 MR. GOUTMAN: Excuse me. When? At
13 all? Is that the question?

14 MR. ZIEGLER: You cut me off before
15 I could finish my question.

16 MR. GOUTMAN: I am sorry. I thought you
17 were done.

18 BY MR. ZIEGLER:

19 Q. Did you interface with IBT with respect to any
20 of the studies that are described in this document?

21 A. I did not interface with IBT before they
22 issued their first reports on the studies. The first
23 awareness I had of these studies was basically when
24 they issued reports on them.

1 Q. At some point in time you did start
2 interfacing with IBT with respect to
3 the toxicity studies and discussing those studies
4 with IBT before they finalized their reports. Do you
5 recall what year you began doing that?

6 MR. GOUTMAN: Objection to the form of
7 the question.

8 You can answer if you can.

9 THE WITNESS: Well, as I indicated, when
10 I joined the company environmental assessments
11 of new products and new uses of products were
12 my concern. I had no more than peripheral
13 involvement with existing products. In about
14 August 1972 Dr. Bill Hunt, who was an older
15 toxicologist in the department, died. At that
16 point I was given responsibility for toxicity
17 testing which Dr. Hunt had been handling.

18 BY MR. ZIEGLER:

19 Q. And what were those responsibilities, if you
20 could give me a general description of them?

21 A. It was basically to keep an eye, if you will,
22 or to liaison, if necessary, with the laboratory that
23 was doing the studies.

24 Q. And what were your responsibilities as liaison

1 with IBT?

2 A. Well, in actuality, for quite some time I
3 never did any of those. At that time we had hired a
4 second person to work with me and he reported to the
5 department just after Bill Hunt's death, so he was
6 given the responsibility of liaison with the
7 laboratory, so it was another year or so before I
8 actually got much interaction with the laboratory.

9 Q. Can you give me -- are you talking about 1973?

10 A. I would say probably about late summer or
11 early fall of '73.

12 Q. And your main contact at IBT was Dr. Calandra;
13 is that right?

14 A. Dr. Calandra was the head of the laboratory.
15 Initially, Dr. Otis Fancher was the second in command
16 whom we dealt with mostly, and then depending on the
17 nature of the study my direct contact was either the
18 director or it could be another person, persons.

19 Q. Did you have any interaction with IBT with
20 respect to toxicity tests of Aroclors, Aroclor
21 1254's, in rats, dogs, and chickens?

22 A. I don't recall anything of consequence with
23 the dogs or chickens. I did have some review of some
24 of their reports, I say, after they had been issued.

1 Q. What about rats?

2 A. Well, I should have specified. On the rat
3 reports is what I had some interaction with them on
4 reports.

5 Q. And those were the ones concerning the
6 carcinogenicity of PCBs.

7 A. The lifetime feeding studies of Aroclors 1242,
8 1254, and 1260?

9 Q. And was that your only involvement with
10 respect to the rat studies, your only involvement
11 with IBT and the rat studies?

12 MR. GOUTMAN: Objection to the form of
13 the question.

14 THE WITNESS: Within the context of the
15 studies on this memo, I'd say my contact was on
16 the rat studies for the 1242, 54, and 60, yes.

17 BY MR. ZIEGLER:

18 Q. If I understand you correctly, you didn't have
19 any contact with IBT with respect to toxicity studies
20 for dogs and chickens.

21 MR. GOUTMAN: That's what he said twice
22 now.

23 THE WITNESS: I don't recall having any
24 contacts. I may have made a comment to

1 somebody, but I don't recall any specific
2 detailed review or examination, or so forth.

3 BY MR. ZIEGLER:

4 Q. Who is Dr. Kimbrough?

5 A. Dr. Kimbrough is a woman physician who has
6 some special training, I believe, in pathology. She
7 used to work at the Center for Disease Control in
8 Chamblee, Georgia outside of Atlanta. The last time
9 I saw her and was aware of it, she was working at the
10 EPA in Washington, DC.

11 Q. And Dr. Kimbrough had conducted a study with
12 respect to the carcinogenicity of Aroclors in mice.
13 Is that not correct?

14 A. Yes, she did do a study on mice. I'd sort of
15 forgotten that. Yes, she did do a study on mice. I
16 don't recall the findings on that. I think it was
17 essentially negative with respect to carcinogenicity.

18 Q. Really?

19 MR. GOUTMAN: Is that a question?

20 MR. ZIEGLER: Let's mark this document
21 as Exhibit 5. (Indicating).

22 (The above-referred to document was
23 marked as Levinskas Exhibit 5 for
24 identification)

1 BY MR. ZIEGLER:

2 Q. Exhibit 5 is correspondence to Dr. Calandra
3 from George J. Levinskas dated February 4, 1975.

4 MR. GOUTMAN: This refers to a rats
5 study. You were talking about mice.

6 MR. ZIEGLER: I'm not sure what
7 difference that makes.

8 MR. GOUTMAN: I think it did to this
9 witness and that's why, perhaps --

10 THE WITNESS: I think I said that I had
11 forgotten, but she did do a study in mice and I
12 think the results were essentially negative.

13 BY MR. ZIEGLER:

14 Q. Did she do a study in rats?

15 A. Yes, she did.

16 Q. What did the study for rats show?

17 A. She did a study in female rats fed for just
18 under two years and she reported finding liver cancer
19 in those rats. In some of those rats.

20 Q. And you had a chance to review that work, did
21 you not?

22 A. Dr. Kimbrough came to Monsanto to inform
23 Monsanto of her findings, and I was present at the
24 meeting at which she told us about those findings.

1 Q. And you made three conclusions with respect to
2 that particular study, which you placed in Exhibit
3 Number 5; is that not correct?

4 MR. GOUTMAN: Objection to the form of
5 the question.

6 BY MR. ZIEGLER:

7 Q. You made three conclusions on her study which
8 you put in this exhibit; is that correct?

9 A. Let me have time to read the memo to refresh
10 my memory.

11 MR. GOUTMAN: I would just object
12 because it is a summary of a meeting; not a
13 summary of a study. Subject to that objection
14 he can answer.

15 THE WITNESS: I would reiterate
16 counsel's statements. You said -- I do not --
17 I did not review her study. This is a report
18 of a meeting that was held and these are the
19 conclusions that I drew from the meeting.

20 BY MR. ZIEGLER:

21 Q. And as you state in the memorandum, the
22 purpose of your meeting was to review sections of
23 liver tissue from Dr. Kimbrough's two year study in
24 which female rats were fed 100 ppm of Aroclor 1260;

1 correct?

2 A. That's correct.

3 Q. And you made three conclusions in that regard,
4 did you not?

5 A. Let me clarify two points. The review of the
6 liver sections was made by pathologists, one of which
7 is Dr. Kimbrough, one of which was a Ward Richter,
8 who is mentioned here, and another one is Dr. Squire,
9 and another one whom is Dr. Levitt. They were the
10 people reviewing the slides and they were drawing the
11 conclusions. I am not a pathologist; I am an
12 observer at this meeting trying to summarize what
13 these people decided. That's one point.

14 And as I said earlier, I did not review
15 Kimbrough's data.

16 Number three, when Kimbrough came to
17 Monsanto and reported finding tumors in rats fed
18 Aroclor 1260 and Monsanto had a study that said
19 Aroclor 1260 did not produce cancers in rat livers,
20 then I was given the task of trying to resolve, find
21 out -- at that point I was to find out what is the
22 basis for the difference in the findings. There
23 could be many, many reasons for differences in
24 findings, and this is one of the steps that we took

1 to try to resolve or understand why two different
2 studies gave somewhat different results, and this was
3 the conclusion drawn from my listening to the
4 pathologists comparing slides.

5 Q. As you stated, three conclusions can be drawn.
6 One of those conclusions --

7 A. Conclusions drawn from the meeting; not from
8 the study.

9 Q. And one of those conclusions was that in your
10 earlier study the severity of liver lesions was
11 greater in females than in males; is that correct?

12 A. That's correct.

13 Q. And the second conclusion was that, to a large
14 extent, substantially the same type of lesions were
15 observed in both studies, except that the lesions
16 seemed to be more advanced in Kimbrough's study.

17 A. That's correct.

18 Q. And in addition, although there was some
19 variation in terminology, the findings were
20 reasonably close; correct?

21 A. Yes.

22 Q. And the third conclusion was that there were
23 definite liver adenocarcinomas in Kimbrough's study;
24 is that correct?

1 A. That's correct.

2 Q. And during that meeting -- who did Dr. Richter
3 work for?

4 A. Dr. Richter was at one of the medical schools
5 in the Chicago area and he also worked as a
6 pathologist for Industrial Bio-Test which had done
7 the studies. I don't know the nature of his
8 relationship with IBT, but he was on the faculty of
9 one of the area medical schools.

10 Q. And he expressed to you that two of the
11 animals in your study approached the same type of
12 lesions that Dr. Kimbrough had observed; isn't that
13 correct?

14 MR. GOUTMAN: You misread that.

15 THE WITNESS: He said that -- he
16 expressed a view that two of the animals in the
17 Monsanto study approached the type of lesion
18 Kimbrough observed, but had not quite, had not
19 developed into the same lesion observed in
20 Kimbrough's studies.

21 BY MR. ZIEGLER:

22 Q. And he expressed that to you.

23 A. Yes.

24 I might add that, related to the first

1 conclusion, in our earlier studies the severity of
2 liver lesions was greater in females than in males,
3 Kimbrough's study was done only in female rats, so as
4 part of the information package, in assessing those
5 findings, we pointed out that the males were less
6 severely affected than females. Since Kimbrough had
7 done only females she would have seen the most severe
8 lesions, so we were beginning to try to reconcile
9 these diverse findings into an understandable
10 situation.

11 Q. And we will talk about that shortly.

12 Let's mark this as Exhibit 6.

13 (Indicating)

14 Levinskas Exhibit 6 is correspondence
15 from D.E. Gordon to Dr. Levinskas dated March
16 24, 1975. (Indicating).

17 (The above-referred to document was
18 marked as Levinskas Exhibit 6 for
19 identification)

20 MR. GOUTMAN: I take it, Jim, that you
21 got this also from the lawyer, Mr. Murdock, in
22 Louisiana?

23 MR. ZIEGLER: Perhaps. I don't know.

24 MR. GOUTMAN: Do you know that we did

1 produce this in this litigation as well? Do
2 you have some preference for illicitly obtained
3 documents?

4 MR. ZIEGLER: This is your
5 representation, that it is illicitly obtained.
6 If that's the case, I don't know why it would
7 have a confidentiality order over it. It seems
8 to serve no purpose for that.

9 MR. GOUTMAN: Then you can question the
10 judge who entered the order, but, in any event
11 --

12 MR. ZIEGLER: Why Monsanto would be
13 voluntarily producing these documents in one
14 litigation and seek protection in another
15 escapes me, but you can take that up with the
16 judge in the Louisiana case.

17 BY MR. ZIEGLER:

18 Q. I would just ask if you could read that,
19 please, Exhibit Number 6.

20 A. All right.

21 A. Okay.

22 Q. All right. Can you identify this document for
23 us, please.

24 A. This is a letter from Don Gordon, who was a

1 pathologist at IBT. It is his trip report, if you
2 will, for the same trip that the previous exhibit
3 referenced.

4 Q. And had you requested a copy of Dr. Gordon's
5 trip report from Dr. Gordon?

6 A. What I had done was summarize what I thought
7 had happened at the meeting, and I sent a copy of
8 that to Don Gordon for his comments to see whether he
9 agreed or disagreed, or did I misquote him or
10 misunderstand him. And this specific sequence
11 escapes me now, but this is his reply or his comments
12 on the meeting.

13 Q. And do you recall that Dr. Squire, Robert
14 Squire, who was the head of the Tumor Pathology
15 Branch of the National Cancer Institute concurred in
16 Dr. Kimbrough's findings that there was a high
17 incidence of hyperplastic and neoplastic lesions in
18 the liver of the test animals?

19 A. I would turn the comment around. I believe
20 Dr. Kimbrough went to seek Dr. Squire's opinion as to
21 the lesions she had seen. And as stated in this memo
22 here, Dr. Squire had proposed a new classification
23 scheme and he applied his classification scheme,
24 which includes these references that you made to the

1 hyperplastic and neoplastic lesions, so that if she
2 was using Squire's classification scheme, I don't see
3 that he has to agree with it. Of course he would
4 agree with it.

5 Q. The fact of the matter is that they both
6 agreed that carcinomas, cancer, was found in the test
7 rats; isn't that correct?

8 A. Using their criteria for diagnosis they found
9 carcinomas, that's correct.

10 Q. And you recall at the meeting that they both
11 expressed the opinion that the test rats showed a
12 high incidence of cancer?

13 A. I would not put the word "high" in there.
14 There was an incidence of cancer. There was a series
15 of lesions including cancer. My recollection is of
16 the 200 or so rats that Dr. Kimbrough had on study
17 there was something on the order of 20 or 40, no more
18 than 20 or 40, that had cancers, so the bulk of the
19 animals, the large number, did not have cancer.

20 Q. So to the extent that Dr. Gordon believed that
21 Dr. Kimbrough had found a rather high incidence of
22 cancer, you would not agree with his characterization
23 of high incidence.

24 MR. GOUTMAN: Objection. That isn't

1 what the report says.

2 THE WITNESS: I was going to say,
3 reading the report, "In summary, Dr. Kimbrough
4 found a rather high incidence of hyperplastic
5 (nodular hyperplasias) and neoplastic
6 (hepatomas, carcinomas), lesions in the liver",
7 so that the aggregate of all of those lesions
8 was a high incidence, but that doesn't mean
9 that there was a high incidence of the
10 carcinomas.

11 MR. ZIEGLER: I see the distinction that
12 you are making.

13 MR. GOUTMAN: It is the distinction that
14 the author of that report made.

15 BY MR. ZIEGLER:

16 Q. And Dr. Gordon attempted to give you two
17 possible explanations for the differences in the
18 findings of Dr. Kimbrough's study and the findings in
19 the IBT studies, is that not correct, with respect to
20 the incidence and severity of the liver lesions?

21 MR. GOUTMAN: In this document?

22 MR. ZIEGLER: Right.

23 THE WITNESS: I would say within this
24 document Dr. Gordon was doing -- what we were

1 trying to do is to try to understand why we
2 were seeing different results, yes.

3 BY MR. ZIEGLER:

4 Q. And what did you learn from Dr. Gordon from
5 this document when you received it?

6 A. I guess I have a little difficulty with the
7 question. I can't recall what I learned from the
8 document that I hadn't already learned by being at
9 the meeting. It confirmed the conclusions I had
10 written earlier in the previous item to Dr. Calandra.
11 It uses some different phraseology but I don't think
12 there's any basic disagreement between what Gordon is
13 saying here and what I had said in the previous
14 exhibit, so I'm not sure what I learned from the
15 document except that he is doing the same thing we
16 are doing. He's trying to question whether the
17 difference in the rats, and he points out the sex
18 difference, which I had indicated she had only one
19 sex, the female rats, and we had done both males and
20 females, and the males show a less effect than
21 females, so that's one reason why she showed more
22 effects.

23 Q. So the two reasons that were postulated at the
24 meeting for the differences in the results of the two

1 studies, one was the strain of rat and two was in the
2 fact that Dr. Kimbrough used only female rats; is
3 that correct?

4 A. Those are among the possibilities that could
5 be considered in trying to rationalize or explain the
6 differences, understand the differences.

7 Q. And Dr. Gordon did not postulate any other
8 reasons for the differences that I can see
9 immediately in this document. Can you recall any
10 others that were discussed at your meeting?

11 A. It's not listed as a point, but they do make,
12 I should add that there's also attached to this
13 document a report by Dr. Richter, but they both talk
14 about the fact that they are using somewhat different
15 terminology, different classification scheme. That's
16 another factor that should be considered.

17 Q. So you think that Dr. Kimbrough is using a
18 different classification scheme than the IBT, than
19 what was used in the IBT test; is that correct? Is
20 that what your testimony is?

21 A. No, I'm saying that the pathologists at IBT,
22 and you can look at Ward Richter's memo, which is
23 the next to last page, in item four it says, "Dr.
24 Squire and Dr. Kimbrough are using a new and revised

1 terminology for the categories and list them as
2 follows." He has a column "My Terminology" and Dr.
3 Squire's, and "My Terminology" is listed as classical
4 use, this is Dr. Richter's, and then Dr. Richter says
5 that Dr. Squire's is revised terminology, so they are
6 pointing out the definitions they are using are
7 different.

8 As I indicated earlier, I'm not a
9 pathologist. I sat in on the meeting and I listened
10 and I tried to report what was happening, but I was
11 not a participant in the evaluation of it. I'm a
12 scientist trying to understand what is going on.

13 Q. I understand that. What page are you reading
14 from?

15 A. It is the next to the last page of the
16 exhibit. It starts off with the February three date,
17 1975. And Dr. Donovan Gordon, IBT, and it is signed
18 on the last page by Ward Richter.

19 Q. Do you see there on point number three on that
20 same page where the author states, "If we both read
21 the same slides there might be a little variation in
22 numbers of lesions in the different categories but no
23 difference"?

24 A. Yes.

1 Q. Does that indicate to you that the author
2 is -- strike that.

3 Who is Dr. Richter with? Was Dr.
4 Richter with IBT?

5 A. I indicated earlier that he was teaching at
6 one of the medical schools in the Chicago area. And
7 he also was doing pathology work for IBT. I don't
8 know the nature of the relationship he had as a
9 consultant or part-time or whatever. I have no
10 knowledge of that. But he was -- he did pathology
11 work for IBT.

12 Q. But Dr. Richter indicates, even as you state,
13 even if they are using different classification
14 schemes, on point number three on the second to last
15 page he indicates that there might be a little
16 variation in the numbers of lesions in the different
17 categories, but no major difference.

18 A. Yes.

19 Q. Does that change your mind as to whether or
20 not the classification schemes may have been
21 responsible for the different findings of the two
22 studies?

23 A. From my experience, I would take that to mean
24 that you recognize that when you are looking under a

1 high power microscope section and you have got a
2 piece of tissue no bigger than your fingernail, and
3 you are focusing on something that is like no bigger
4 and perhaps smaller than a grain of salt, so that
5 when you look at the slide, if you try to look at the
6 whole slide and look at a grain of salt time and time
7 again, of course that whole piece of tissue, this
8 could be an endless chore, so a pathologist will sort
9 of look at it and scan back and forth and get an
10 overall impression of that tissue. Now, a big thing
11 like a cancer or a benign tumor, a hepatoma, that
12 will stand out in its characteristics, but when you
13 are talking about vascularization, you are talking
14 about some degeneration of cells, you are talking
15 about some of the peripheral observations apart from
16 tumors and you start counting them, you are not going
17 to count the whole section because it is an endless
18 chore, so depending on which field, which area, the
19 pathologist focuses on and looks at he may see
20 something a little bit different than somebody who
21 looked at the other corner, so I think what he's
22 saying there is he's not talking about the tumors,
23 he's talking about other kinds of lesions that he has
24 recorded in the liver, and if you tabulate them, some

1 guys say that there's 17 and some guys say that
2 there's 12.

3 Q. So he is not talking about the classification
4 scheme in terms of carcinomas or non carcinomas.

5 A. No, I think in number two he says, "My
6 evaluation tends to be a little more conservative
7 than theirs. For example: They would call some of
8 my hepatomas carcinomas but with some question."
9 That's where he is talking to the cancer. I think he
10 is talking other differences in number three.

11 Q. Do you know why they would call some of the
12 hepatomas carcinomas?

13 A. I go back to point four where he puts the
14 terminology in there. The second item. What Richter
15 would call nodular hyperplasia and hepatoma in
16 mixture, Squire would call nodular neoplasia or
17 neoplastic nodule, and earlier comments about Gordon
18 saying that the hyperplastic and neoplastic lesions
19 in the liver, that's this. (Indicating).

20 Q. So as I understand you, the reason why Dr.
21 Richter called these hepatomas and not carcinomas was
22 simply by virtue of, if I understand this correctly,
23 simply by virtue of his nomenclature of what he was
24 seeing; is that correct?

1 MR. GOUTMAN: Objection to the form of
2 the question.

3 You can answer as to why Dr. Richter,
4 if you know, why Dr. Richter did what he did.

5 THE WITNESS: Well, my understanding of
6 pathologists, from working with them, is that
7 there is some subjectivity in determining how
8 abnormal and what -- the borders between normal
9 and abnormal aren't always that clear. Normal
10 tissues, cells, have some variation. They get
11 to be changed, altered, more bizarre, and
12 finally they get to be full blown cancer.
13 People don't have any difficulty defining full
14 blown cancer, they don't have difficulty
15 describing normal, reasonably normal tissue,
16 but somewhere in that area, it's not an
17 overnight change, it is a gradual change,
18 distortion, changing, and many say it is going
19 over the hill and we now call it a cancer.
20 Where you look at that slide, section, how you
21 look at it, what your own experience is there's
22 a certain degree of subjectivity there, and I
23 think we are seeing that reflected in the
24 opinions of these different people.

1 BY MR. ZIEGLER:

2 Q. And in terms of their subjective evaluations,
3 doctor, what you are saying is that Dr. Richter was
4 more conservative than Dr. Kimbrough.

5 A. No, I'm quoting Dr. Richter, who says he may
6 be more conservative.

7 Q. Okay. Would you agree with his assessment of
8 his subjective evaluation, that he was more
9 conservative than Dr. Kimbrough?

10 A. I have indicated that I do not look at slides,
11 I am not a pathologist; my attempt is to gather the
12 information that I can and to try to make some sort
13 of sense out of it. Some attempt to understand it.

14 Q. Do you remember corresponding with Dr.
15 Calandra in regard to the Aroclor 1254 studies
16 dealing with carcinogistic properties of PCBs in
17 rats?

18 A. Yes.

19 Q. Okay. And do you recall that Aroclor 1254
20 study found that that particular type of Aroclor was
21 slightly tumorigenic at levels of 100 ppm when fed
22 continuously in the diet of the rats for two years?
23 Do you recall that?

24 A. I would have to look at the reports. I cannot

1 claim to recall precise wording of reports over the
2 years.

3 MR. ZIEGLER: This will be seven.

4 (Indicating).

5 (The above-referred to document was
6 marked as Levinskas Exhibit 7 for
7 identification)

8 BY MR. ZIEGLER:

9 Q. What I'm handing you is a copy of Bio-Test
10 Lab, I think report, to Monsanto Company entitled,
11 "Two Year Chronic Oral Toxicity Study With Aroclor
12 1254 In Albino Rats" dated March 24, 1975.

13 I will tell the witness that this is
14 not the final draft of the report.

15 A. I would add to your description that it also
16 says, "Histopathological Evaluation of Additional
17 Liver Sections". This is not the complete chronic
18 oral toxicity report, which if memory serves me right
19 is probably about three to five inches of paper.

20 Q. But Dr. Gordon concluded in this particular
21 draft that Aroclor 1254 appeared to be slightly
22 tumorigenic; is that not correct?

23 A. The wording says that the 1254 appears to be,
24 appears to be slightly tumorigenic at levels of 100

1 ppm, 100 parts per million, when fed continuously in
2 diet for two years. That was in the summary of the
3 report.

4 Q. And do you remember talking with Dr. Calandra
5 about changing the language "slightly tumorigenic".
6 Do you recall discussing that with him?

7 A. I never talked to Dr. Calandra about it. I
8 did write to him.

9 Q. You corresponded with Dr. Calandra in that
10 regard then; correct?

11 A. Yes.

12 Q. Do you know if these tests were ever produced
13 to any governmental agency, this particular test?

14 A. I have no personal --

15 MR. GOUTMAN: Objection.

16 THE WITNESS: I have no personal
17 knowledge of whether these were given to
18 government agencies because there was no
19 regulatory requirement for us ever to give a
20 PCB report to a government agency that I'm
21 aware of.

22 MR. GOUTMAN: I think you are operating
23 under a fundamental misunderstanding. This is not
24 a test. The tests was completed in 1971 and a

1 report was issued about that. This is going
2 back and taking sections of the liver and
3 reinterpreting them.

4 MR. ZIEGLER: I understand. Exactly.

5 MR. GOUTMAN: This is not a test. I
6 think your questions have been phrased as
7 though it is and it's not a test.

8 MR. ZIEGLER: It is a report.

9 MR. GOUTMAN: It's not a report of a
10 test; it is a report of going back and looking
11 at histopathologic sections of rat tumors.

12 BY MR. ZIEGLER:

13 Q. With that clarification, are you telling me
14 that this report, that you believe this was, this
15 report, was not produced to any governmental agency
16 or you don't know whether the report was produced to
17 a governmental agency?

18 A. I said I'm not aware that there was any
19 requirement to produce it. I did not, personally,
20 give it to them. Now, I presume, but I have no basis
21 for documenting, that it was made available to many
22 people, including government agencies, who asked for
23 them.

24 Q. Do you know what the purpose, do you know what

1 Monsanto's purpose was in making those, in this
2 particular report, available to governmental
3 agencies?

4 A. I have indicated I don't know -- I was not
5 involved in the dissemination of this report and I
6 really can't tell you.

7 Well, the --

8 Q. There's no question pending.

9 A. Okay.

10 Q. There's no question pending.

11 A. No comment.

12 MR. ZIEGLER: Let's mark this as
13 Levinskas Exhibit 8. (Indicating).

14 (The above-referred to document was
15 marked as Levinskas Exhibit 8 for
16 identification).

17 MR. PENDERGAST: Was this identified?

18 MR. ZIEGLER: No, I will identify it.
19 Exhibit Number 8 is a transmittal from W.B.
20 Papageorge, P A P A G E O R G E, dated 4/6/75.

21 BY MR. ZIEGLER:

22 Q. Going back -- I'm sorry. Have you had a
23 chance to read Exhibit 8?

24 A. Okay.

1 Q. Going back to this meeting at which you
2 attended and Drs. Kimbrough, Squire, Gordon, and
3 Richter attended, did you express any opinions at
4 that meeting with respect to the validity of, the
5 accuracy, of Dr. Kimbrough's findings?

6 A. I have never expressed an opinion on the
7 accuracy. She had findings that she reported and I
8 felt those -- that was information that we had to
9 somehow contend with. We had to understand it.
10 Whatever. That was my thought. I never questioned
11 the validity of her data.

12 Q. That's what I'm getting to. At that meeting
13 Dr. Kimbrough expressed the opinion that her work
14 showed that PCBs cause cancer in those rats; is that
15 correct?

16 A. She came to Monsanto and told us that. We
17 were talking about that same study.

18 Q. And Dr. Squire agreed with her; is that
19 correct?

20 A. Dr. Squire reviewed the slides on his
21 terminology and he said yes, I agree there's cancer
22 in there.

23 Q. And from Dr. Richter's comments to you after
24 the meeting you were not satisfied with Dr.

1 Kimbrough's and Dr. Squire's opinions or conclusions
2 with respect to her study?

3 MR. GOUTMAN: Objection to the form of
4 the question.

5 THE WITNESS: I don't know where the
6 inference came that I was not satisfied or
7 unhappy with it. I don't see that anywhere in
8 what's been going on.

9 BY MR. ZIEGLER:

10 Q. Exhibit Number 8 shows that you requested the
11 Eppley Institute For Research In Cancer to review
12 some of Dr. Kimbrough's work; is that correct?

13 A. The exhibit you are referring to, we are
14 sending to Dr. Philippe Shubik at the Eppley
15 Institute For Cancer in Omaha, Nebraska, and we are
16 asking him to look at the totality of the information
17 we had, which includes the Monsanto data and the
18 Kimbrough data, and asking him for his advice and
19 opinion as to what suggestions he may make for us to
20 understand or to come to understand the data that was
21 on the table.

22 Q. Well, my question is if you already have the
23 opinions of these two doctors from the Center for
24 Disease Control and the National Cancer Institute,

1 why were you looking for another opinion as to the
2 correctness of Dr. Kimbrough's findings?

3 MR. GOUTMAN: Objection. He didn't say
4 that.

5 THE WITNESS: I would repeat what I
6 said. We were not disputing Kimbrough's
7 findings, we were not denying the Monsanto
8 findings; we are trying to understand why
9 supposedly similar experiments came up with
10 different results. We are asking Dr. Shubik,
11 who was a prime, long time researcher in the
12 field of chemical carcinogenesis, was a
13 recipient of many, many grants from the
14 National Cancer Institute, he is a top notch
15 expert and we are asking him for any
16 suggestions that he can offer us to help
17 understand the situation, so we are not asking
18 to disprove Kimbrough's data and we are not
19 asking him to do anything else with the
20 Monsanto data except to consider them and see
21 what we can do to resolve the differences or
22 understand the differences.

23 BY MR. ZIEGLER:

24 Q. Do you know if it was -- well, it was

1 Monsanto's policy to challenge wherever possible
2 findings with respect to health effects of PCBs where
3 they were shown to have an adverse effect on animal
4 health; isn't that correct?

5 MR. GOUTMAN: Objection.

6 THE WITNESS: I'm not aware that it was
7 a Monsanto policy. I can say with conviction
8 that it was not my perspective to challenge
9 data. My goal is to try to understand data and
10 to give what I consider technically valid
11 interpretations of the data.

12 BY MR. ZIEGLER:

13 Q. Have you ever seen any reports, Monsanto
14 reports, called Report of the Aroclor Ad Hoc
15 Committee? Have you ever seen anything like that?

16 A. I may have. I really can't say.

17 Q. It contains company recommendations for
18 actions with respect to PCBs?

19 A. I would have to say again I may have seen
20 them. I see lots of things, but I don't specifically
21 recall any particular event.

22 MR. ZIEGLER: Let's mark this as
23 Levinskas 9. (Indicating).

24 (The above-referred to document was

1 marked as Levinskas Exhibit 9 for
2 identification)

3 BY MR. ZIEGLER:

4 Q. Exhibit Number 9 is correspondence by
5 George J. Levinskas dated July 18, 1975 regarding the
6 Aroclor two year rat feeding studies.

7 A. I'm ready.

8 Q. You knew the report on the Aroclor two year
9 rat feeding study was going to be produced to
10 government agencies, didn't you?

11 A. It had been produced to government agencies.

12 Q. You knew that the latest draft of the report
13 would be produced to government agencies; isn't that
14 correct?

15 A. No, we are talking --

16 MR. GOUTMAN: Objection.

17 THE WITNESS: The two year rat feeding
18 studies had been produced to agencies, at least
19 the Food and Drug Administration and I think
20 the EPA. We are now talking about additional
21 liver sections from that same study that were
22 evaluated.

23 If I may go back a step, when the
24 question of carcinogenicity came up we went and

1 had slides made of all available livers from
2 the Monsanto studies to see if the tumors were
3 there, the cancers were there. Those slides,
4 they are selected portions of those slides
5 because there are too many in total, were taken
6 down to Dr. Kimbrough and Dr. Squire, and
7 Gordon, Richter, Squire, and Kimbrough looked
8 at Monsanto slides and at Kimbrough slides and
9 they went back and forth. I think there was
10 general agreement, when we talk about the
11 lesions were more severe in the females than
12 males, that there were cancers in Kimbrough's
13 data and there were no cancers in IBT data,
14 Monsanto data. I think that was a consensus of
15 the four pathologists, so now we are talking
16 about those liver sections only; not the
17 complete two year rat study that this is
18 referring to. (Indicating)

19 BY MR. ZIEGLER:

20 Q. That wasn't my question.

21 A. Well --

22 MR. GOUTMAN: Objection. It was your
23 question and he gave you an answer. Your
24 question was misleading in that it misstated

1 what happened.

2 BY MR. ZIEGLER:

3 Q. You knew that when this report was given to
4 the government that the phrase "slightly tumorigenic"
5 would be bothersome, and so for that reason you had
6 them amend the report to it "does not appear to be
7 carcinogenic".

8 MR. GOUTMAN: Objection to the form of
9 the question.

10 MR. ZIEGLER: Isn't that correct?

11 MR. GOUTMAN: Objection to the form of
12 the question.

13 THE WITNESS: I do not agree with that
14 statement.

15 BY MR. ZIEGLER:

16 Q. Let me ask you this, and I'm not going to have
17 this marked immediately. Do you know whose
18 handwriting this is? (Indicating)?

19 A. No, I don't, and I can only say with
20 conviction that it's not mine.

21 MR. ZIEGLER: This will be Levinskas 10.
22 (Indicating).

23 (The above-referred to document was
24 marked as Levinskas Exhibit 10 for

1 identification)

2 MR. GOUTMAN: What do you want him to
3 look at now?

4 THE WITNESS: I have got nine and ten.

5 MR. GOUTMAN: What is it that you want
6 to direct his attention to?

7 MR. ZIEGLER: I want to direct your
8 attention to Exhibit Number 10.

9 THE WITNESS: Ten.

10 MR. ZIEGLER: You can take a look at
11 that.

12 MR. GOUTMAN: Note my objection. This
13 is not this witness's writing. He's never seen
14 it before and it is undated.

15 MR. ZIEGLER: It is a Monsanto document.
16 I'm going to ask him about it.

17 MR. GOUTMAN: I don't know that it is a
18 Monsanto document. It doesn't have any Bates
19 stamp that I would be familiar with. Where did
20 you get it?

21 MR. TEDFORD: Louisiana, probably.

22 BY MR. ZIEGLER:

23 Q. Exhibit Number 10 the author states that the
24 tumor incidences in females with 1254s is

1 bothersome; 82 percent at ten ppm and 100 percent at
2 100 ppm. If one tabulated and reported these data,
3 it would probably raise questions even though most of
4 these are benign."

5 MR. GOUTMAN: That's what it says.

6 BY MR. ZIEGLER:

7 Q. And the fact is, Dr. Levinskas, you knew, and
8 it was discussed in your department, that if these
9 findings were presented to the government or if it
10 was concluded that PCBs were slightly tumorigenic,
11 that it would probably raise questions with the
12 government; isn't that correct?

13 MR. GOUTMAN: Objection.

14 THE WITNESS: I think you made
15 statements that I certainly do not agree to. I
16 have not seen this document before. I don't
17 know its origin or its purpose. I don't recall
18 hearing about it. And I challenge and I
19 disagree with the view that I knew something,
20 and I have no objections to the phraseology in
21 reports that people make provided the
22 phraseology, the data, the phraseology is
23 consistent with the data in the report. So I
24 disagree wholeheartedly with your comments.

1 BY MR. ZIEGLER:

2 Q. You don't disagree with --

3 MR. GOUTMAN: Excuse me.

4 A. And I --

5 MR. GOUTMAN: Wait for a question.

6 BY MR. ZIEGLER:

7 Q. You don't disagree with the data in the report that
8 shows that the PCBs were slightly tumorigenic?

9 A. I have never disagreed with that statement.

10 Q. So that was an accurate statement --

11 A. It is consistent with the data.

12 Q. And that was an accurate statement which you
13 had deleted from the report?

14 A. No, I did not delete it.

15 Q. You didn't have that deleted?

16 A. No.

17 Q. Do you have Exhibit Number 9 in front of you?

18 A. All right.

19 Q. Didn't you suggest to Dr. Calandra that he
20 take that language out of that report?

21 A. I think we are getting things confused again.
22 The original two year reports, I believe, I would
23 have to go back and double check, but I think the
24 original two year reports talked about hepatomas in

1 the 1242, 1254, 1260 rats. The hepatomas were
2 discussed between Squire and Kimbrough and Richter
3 and Gordon as we have said before. Those original
4 two year reports were sent to government agencies.
5 The tumorigenic statements, which I think the
6 originals went to the government agencies. That's
7 true.

8 Now, with respect to Exhibit

9 8 --

10 MR. GOUTMAN: This one. (Indicating).

11 THE WITNESS: With respect to Exhibit 9,
12 if you will look at the last table, last page,
13 what I recall on this one, and it is all I
14 recall, is that I was given two sets of reports
15 which had been issued by Bio Test which
16 discussed the observations on the liver
17 sections from all of the rats. That's why I
18 made the earlier distinction that we are
19 talking about the liver sections and not the
20 full two year report. And I was asked to
21 compare, to take a look at those reports, and I
22 think I can check the report quite easily
23 because if you tell me that you did something
24 in the procedures I look to see in the tables

1 if the data is there to support what you said
2 you did or did you do what you said you did.
3 When I got through I put together the table
4 that is the third page of Exhibit Number 9.
5 And I said when I look at what you have
6 written, in one set of reports which I label as
7 "Supplemental Report #1", (mailee) you said
8 three times slightly tumorigenic, slightly
9 tumorigenic, slightly tumorigenic for three
10 reports. When I look at the second
11 supplemental report #2, and I have the
12 identified, I put "JCC delivered", I presume
13 that I was told that JCC had delivered, and I
14 say in the second version you say "does not
15 appear to be carcinogenic", "slightly
16 tumorigenic", and "does not appear
17 carcinogenic", you have changed the wording in
18 two out of three reports from one version to
19 the other. I did not ask him to make those
20 changes. All I know is that I had two sets of
21 reports with two different sets of terminology.
22 And I said as long as you are finding the same,
23 basically the same findings in both sets of
24 reports, your conclusions are similar, you have

1 changed the phrasing two out of three times, I
2 would prefer that you change the third one to
3 be consistent, for one thing, and since we are
4 now talking specifically on cancers, not on
5 tumors in general, I would like the report to
6 reflect as accurately as possible the issue of
7 concern, so I asked, I think I said I asked, I
8 say second paragraph, "In two instances, the
9 conclusion of 'slightly tumorigenic' was
10 changed", I don't know who changed it, I
11 didn't, "to 'does not appear to be
12 carcinogenic.' The latter phrase is
13 preferable. May we request that the Aroclor
14 1254 report be amended to say 'it does not
15 appear to be carcinogenic'", and this is my
16 tabulation of the basis for the request.

17 So I'm saying if you are talking to a
18 specific subject -- if you can use -- if you are
19 comfortable and you think the term "does not
20 appear carcinogenic" is valid in two times out
21 of three, why not make it three out of three
22 since we are talking about the same thing all
23 three times. That's what is behind that
24 statement and behind that table.

1 BY MR. ZIEGLER:

2 Q. So the conclusion "slightly tumorigenic" was
3 never placed in the final report, was it?

4 A. I believe "slightly tumorigenic" is in the
5 final report which has details of the two year rat
6 feeding studies. It appears in each of those three
7 reports, I believe. I would have to go back and
8 double check the reports.

9 The supplemental information, which we
10 are talking about, which is like in your Exhibit 7,
11 we are talking now about the changes to be made only
12 on the reports of liver sections which were the
13 supplemental reports, one of which is your Exhibit 7,
14 because we are talking every time about the Aroclor
15 two year rat studies. People keep talking about the
16 two year rat study, but the two year rat study report
17 is done. We went back and did additional work to try
18 to get at this question of the carcinogenicity, so
19 the slightly tumorigenic statement went to the
20 agencies. If this second report went to the agencies
21 it also would have said, it would have the new
22 phraseology.

23 Q. So the supplemental report that went to the
24 government omitted the phrase "slightly tumorigenic".

1 That's my question.

2 MR. GOUTMAN: Objection to the form of
3 the question. There's been no foundation laid
4 as to whether the supplemental report was ever
5 submitted to the government, whatever that
6 means.

7 Go ahead. You can answer.

8 THE WITNESS: I was going to say that
9 this supplemental report drew a conclusion
10 based on the data which in my professional
11 judgment, opinion, was not inconsistent with
12 the conclusions, was not contradictory to what
13 we had said earlier, was a more specific
14 enumeration of a specific point, which was of
15 certain concern to people.

16 BY MR. ZIEGLER:

17 Q. You testified earlier that you sent
18 Monsanto's data and the results that it had generated
19 in its two year rat study and Dr. Kimbrough's study,
20 you sent those along to the Eppley Institute, and
21 could you tell us what the Eppley Institute concluded
22 from their review?

23 A. There were two things that happened. One is
24 that Dr. Shubik suggested that you get a pathologist,

1 Dr. Peter Pour, that we use him to look at the
2 Kimbrough slides and the IBT slides. And that was
3 done.

4 And then at a later date he had an
5 epidemiologist and a suggestion was made that we use
6 his epidemiologist to look at the health status of
7 the employees at Monsanto who were making Aroclors.

8 Q. And what were the results of the Eppley
9 Institute's reevaluation of Dr. Kimbrough's study?

10 A. Dr. Pour was the only person who looked at all
11 of Kimbrough's slides and all of the IBT slides. He
12 concluded that he did not see any cancer. I think he
13 saw one cancer in the liver, but that was a
14 metastasis that had come from some other source. It
15 wasn't primary. But he concluded that he saw no
16 liver terms. I shouldn't say that. No liver cancer.

17 MR. PENDERGAST: How do you spell the
18 last name?

19 THE WITNESS: P O U R. It is really
20 Pour, I guess, but they pronounce it Pour.

21 He did say something to the effect that,
22 I don't recall a number, he saw something like
23 20 or 30 slides in Kimbrough's data that he
24 said were -- things were happening. There were

1 some things that were happening. But he says I
2 have a piece of static tissue under the
3 microscope and I don't know whether it is
4 getting better or getting worse, but he
5 concluded that there were no tumors. Whatever
6 the epidemiology studies were done I was not
7 involved in taking a look at the Monsanto
8 workers or not. I really have no knowledge of
9 how it was done or -- I can't add anything to
10 it.

11 BY MR. ZIEGLER:

12 Q. And you were pleased with Dr. Pour's
13 findings, weren't you?

14 A. I have difficulty with your adjectives. I
15 accepted Dr. Pour's findings as another piece of
16 information to use to try to unravel or understand
17 what we had on the table.

18 Q. It was actually more than that. You accepted
19 Dr. Pour's findings as Monsanto's position on the
20 differences in Kimbrough's study and the IBT study;
21 isn't that correct?

22 MR. GOUTMAN: Objection to the form of
23 the question. No foundation as to whether this
24 doctor was responsible for forming "Monsanto's

1 position" or what that phrase could possibly
2 mean in this context.

3 In any event, you can answer the
4 question if you understand it.

5 THE WITNESS: Well, I don't recall
6 specifics now, but I would disagree with the
7 characterization.

8 BY MR. ZIEGLER:

9 Q. Didn't you write a press release or help draft
10 a press release for Monsanto making a Monsanto
11 Company announcement about Dr. Pour's results?

12 A. I would like to see the document. I don't
13 recall writing press releases.

14 Q. Sure.

15 You helped draft this, didn't you?
16 This will be Exhibit Levinskas 11. (Indicating).

17 (The above-referred to document was
18 marked as Levinskas Exhibit 11 for
19 identification)

20 BY MR. ZIEGLER:

21 Q. And Levinskas Exhibit 11 is correspondence
22 dated November 17, 1975, by George Levinskas and it
23 has some attachments to it.

24 Look at the second page of that, Dr.

1 Levinskas, if you could.

2 MR. GOUTMAN: Excuse me. He's going to
3 read the exhibit that you put before him.

4 MR. ZIEGLER: Okay.

5 THE WITNESS: I would go back to my
6 original statement --

7 MR. GOUTMAN: There's no pending
8 question.

9 BY MR. ZIEGLER:

10 Q. The pending question is, if he can go over to
11 the second page, D.R. Bishop states, in his
12 memorandum, that the press release incorporates your
13 comments. Do you disagree with what Mr. Bishop
14 states there?

15 A. I would make two observations on that. One is
16 for various reasons I would, I may on occasion
17 summarize or write up or put together information,
18 sort of a status report, and Dan Bishop may have
19 gotten one of those statements and taken sections of
20 it to put in a news release. Dan was in public
21 relations.

22 I would like to go back to the first
23 page --

24 Q. Well --

1 MR. GOUTMAN: Finish your answer,
2 doctor.

3 He's going to finish his answer.

4 MR. ZIEGLER: I move to strike the rest
5 of his answer as being nonresponsive.

6 MR. GOUTMAN: Finish your answer.

7 THE WITNESS: I was going to go back to
8 the first page, the second paragraph I say,
9 "The news release prepared by Dan Bishop which
10 accompanied his memo of November 17, 1975
11 should not be released. It should be destroyed
12 to prevent its inadvertent use or misuse."

13 I would take that as an interpretation
14 that I did not agree with what Dan Bishop was
15 saying.

16 BY MR. ZIEGLER:

17 Q. My question to you is on the second page Dan
18 Bishop states that the second draft of the news
19 release summarizing Dr. Pour's reevaluation of Dr.
20 Kimbrough's study incorporates comments from Dr.
21 Levinskas. Are you challenging that particular
22 statement?

23 MR. GOUTMAN: He just answered that
24 question, that he prepared a memorandu --

1 MR. ZIEGLER: No, I want an answer to
2 that question.

3 MR. GOUTMAN: You did get an answer.
4 You may give it again, Doctor, if you
5 want.

6 MR. ZIEGLER: Did you make comments on
7 the news release?

8 MR. GOUTMAN: No, he didn't say make
9 comments; it incorporates comments. That's
10 what it says.

11 THE WITNESS: I'll go back and reiterate
12 what I said. For various reasons at different
13 times with different products I would put
14 together summaries or status of information and
15 so forth, and I may well have done this in
16 respect to PCBs including Dr. Pour's
17 evaluation. Dan Bishop says it incorporates
18 comments. He could have taken one of those
19 statements and taken sections and put them in
20 his news release. That does not mean that I
21 prepared a news release or that my intention of
22 preparing a document was that it should be a
23 news release. When I say information, it is an
24 internal summary for people, to let people know

1 where things stand, what is going on, where our
2 status is.

3 BY MR. ZIEGLER:

4 Q. My question is a little bit different than
5 that. My question is not whether or not he took
6 something that you had previously done, but my
7 question to you is that he gave you a draft copy of
8 his news release announcing Monsanto's position on
9 these issues and you made comments to him in that
10 regard.

11 MR. GOUTMAN: Objection.

12 THE WITNESS: My comment was don't use
13 it.

14 MR. GOUTMAN: Excuse me.

15 Objection to the form of the question.
16 He's already answered that question twice now.
17 He said he doesn't recall ever making any
18 comments on drafts. He says that it is his
19 belief that Mr. Bishop would have taken
20 memoranda that he prepared for internal
21 consumption and incorporated that in the press
22 release. Now, you can ask that question five
23 more times and I suspect that you will get the
24 same answer that you got the first two times

1 you asked it.

2 BY MR. ZIEGLER:

3 Q. Why don't you turn back a few pages to D.R.
4 Bishop's memorandum to you, if you could, please, and
5 read that.

6 MR. GOUTMAN: It is D.R. Bishop's
7 memorandum to six different people.

8 MR. ZIEGLER: Yes.

9 BY MR. ZIEGLER:

10 Q. Stating, "Please let me have your comments
11 and/or approvals as soon as possible by next Monday."

12 Did I read that correctly, Dr.
13 Levinskas?

14 A. That's what he says.

15 Q. He was asking you for your comments; isn't
16 that correct?

17 MR. GOUTMAN: Was asking for comments
18 or approval, and three days later Dr.
19 Levinskas says you can't send it out.

20 MR. ZIEGLER: Listen, we are going to
21 get to the bottom of this.

22 MR. GOUTMAN: I hope we do. It is a
23 very, very difficult issue here, about a press
24 release that was never sent out.

1 BY MR. ZIEGLER:

2 Q. On November 14 he asked you for your comments;
3 isn't that correct, Dr. Levinkas?

4 MR. GOUTMAN: Objection. That isn't
5 what it says. Comments and/or approvals.
6 That's what it says.

7 You can answer the question.

8 BY MR. ZIEGLER:

9 Q. He asked you for your comments, doesn't he?

10 MR. GOUTMAN: Objection to the form of
11 the question.

12 You can answer.

13 BY MR. ZIEGLER:

14 Q. On November 14.

15 A. Dan Bishop's memo is addressed to several
16 people, one of whom is me.

17 Q. That's right. And he asked for your comments.

18 A. And he asked for comments and approval.

19 MR. GOUTMAN: And/or approval.

20 THE WITNESS: And I don't recall what I
21 specifically said to him, what, if anything, I
22 said to him on that. I don't recall.

23 BY MR. ZIEGLER:

24 Q. And that brings me back to my original

1 question. He says in his memorandum three days later
2 that it incorporates your comments.

3 A. Well --

4 Q. And you made comments to him. You helped him
5 prepare this latest draft, didn't you?

6 MR. GOUTMAN: Objection to the form of
7 the question.

8 You can answer if you have anything
9 additional to say in answer to that question
10 that's now been posed five or six times.

11 THE WITNESS: He says it incorporates
12 comments from me and others. It does not say
13 that the comments were specifically in
14 reference to his November 14th memo. They
15 could have been earlier comments. I do not
16 recall making specific comments on this
17 document. I do recall, it refreshes my memory,
18 causes me to recall, that I felt that this
19 should not be released.

20 BY MR. ZIEGLER:

21 Q. That was after you made your comments?

22 MR. GOUTMAN: Objection.

23 Don't answer the question. That's been
24 asked now six or seven times.

1 He's not going to answer it again.

2 THE WITNESS: Can I take a short break?

3 MR. ZIEGLER: Sure.

4 (Deposition recessed).

5 MR. GOUTMAN: Levinskas 11, again, is a
6 document produced from the Scott litigation.
7 It was subject to a protective order and I pose
8 that objection as well.

9 MR. ZIEGLER: Did you produce that to
10 us?

11 MR. GOUTMAN: I can't tell you off the
12 top of my head.

13 MR. ZIEGLER: This will be Exhibit
14 Levinskas 12. (Indicating).

15 (The above-referred to document was
16 marked as Levinskas Exhibit 12 for
17 identification)

18 BY MR. ZIEGLER:

19 Q. Exhibit Number 12 is a memorandum to Dan and
20 it is entitled, "Explanation of the Levinskas IBT
21 Tabulation". It contains typewritten and handwritten
22 statements.

23 MR. PENDERGAST: What is it dated?

24 MR. ZIEGLER: It appears to be signed by

1 an O'Neill, O N E I L L, and dated 5/16/83.

2 MR. GOUTMAN: Just same objection as to
3 another document produced in the Scott
4 litigation.

5 MR. ZIEGLER: Did you produce this to
6 us in the PennDOT case?

7 MR. GOUTMAN: I don't know. I produced
8 48 boxes of documents and I cannot at present
9 recall each and every one.

10 THE WITNESS: I wrote the document. I
11 don't know if it makes an awful lot of sense.

12 MR. GOUTMAN: Wait for a question.

13 BY MR. ZIEGLER:

14 Q. Tell me why was Monsanto validating IBT
15 studies required by the government?

16 A. IBT inspectors, I guess, raised questions
17 about some of the IBT data, and my recollection is
18 that somebody in Monsanto got a letter from one of
19 the agencies, whether it was EPA or FDA I'm not sure,
20 and it was a listing of studies by number and some by
21 name. It was addressed to someone else in Monsanto,
22 it was given to me, and we were asked to identify the
23 studies on that list which were Monsanto studies that
24 had been submitted to a regulatory agency. And so I

1 went through all of the available records that I
2 could find to identify all of the studies, and these
3 were a variety of products from very short term to
4 relatively long term studies, identify all that I
5 could that were Monsanto items.

6 Q. And you identified 277; is that correct?

7 A. I don't recall the number -- of that list. And
8 then there were one or two that I raised questions about.
9 There are a few, probably more than one or two, but a
10 half dozen or so that I raised questions about them,
11 I couldn't identify based on the data and so forth,
12 and that was sent back to the government.

13 Q. And there were additional studies which were
14 not sent to the government which Monsanto attempted
15 to validate; is that not correct?

16 A. Well, you are getting a little ahead of me.

17 So we went back to IBT to try to get
18 the data, to check on some of these studies, and
19 apparently many other people who had used IBT had
20 similar situations because there were so many people
21 going up to IBT trying to get records, including some
22 government agencies, I guess. Basically the
23 government shut down IBT. And then they kept some
24 people on to send the data out to the companies that

1 had sponsored the studies. So what we did
2 internally, and this sort of suggests, I don't know
3 who wrote this memo, I haven't seen this document
4 before that I recall, but what we did in the medical
5 department was we looked at everything that we had
6 done at IBT, every study of any kind, and put them
7 into three categories. Category one, the high
8 priority, were items that we had sent to a regulatory
9 agency asking them to take regulatory action, that if
10 we made that request we wanted to know whether the
11 information that we had given them was valid or
12 invalid or questionable, that if we had made a
13 request for agency action it was our obligation to
14 tell them how good that data was.

15 The second category was items that had
16 not been submitted to a regulatory agency, but were
17 of great interest to Monsanto's commercial products
18 and if we had information that we were using to
19 evaluate safety or handling of them, we wanted to
20 know how good that data was.

21 The third category was items that had
22 either been experimental samples or products that
23 were no longer commercially viable and for whatever
24 reason those got the bottom category, so we had three

1 categories of products. That's what this suggests to
2 me, because it says we validated. It says 277 IBT
3 studies. I can't vouch for the number. I don't know
4 who put this together. Another 80 studies for our
5 own information. And a third category, this is a
6 little different, this talks about cyanurate, which
7 is a product that Monsanto owned, other people, FMC,
8 made, and it talks about three of the companies
9 working on that.

10 Q. Do you know -- strike that.

11 IBT, would you agree with me that IBT
12 did many of the studies for Monsanto concerning PCB
13 toxicity in animals?

14 MR. GOUTMAN: Objection to the form of
15 the question.

16 You can answer.

17 THE WITNESS: Of the studies that I'm
18 aware of IBT did a fairly large number of the
19 studies. Not just on PCBs, but for Monsanto
20 and for many other companies.

21 BY MR. ZIEGLER:

22 Q. And at some point in time, approximately 1975
23 or 1976 -- when was it that you discovered that IBT
24 had gross deficiencies in some of the studies that it

1 had done for Monsanto?

2 MR. GOUTMAN: Objection to the form of
3 the question. No foundation as to what this
4 witness ever found.

5 THE WITNESS: Well, first, I'm not sure
6 of the time. I gave you a recital of how we
7 got into the business of validating and why we
8 were validating studies.

9 BY MR. ZIEGLER:

10 Q. You were validating because the IBT studies,
11 some of the IBT studies that were done for Monsanto
12 had some serious problems; isn't that correct?

13 MR. GOUTMAN: Objection to the form of
14 the question.

15 THE WITNESS: No, I wouldn't agree with
16 serious problems.

17 BY MR. ZIEGLER:

18 Q. You wouldn't agree.

19 A. Questions were raised about the reliability of
20 IBT data and it was our purpose to look at those
21 studies in so far as we could to try to resolve the
22 question as to whether the data were available to
23 support the conclusions that were drawn in the
24 reports, and I might add that I had some outside

1 experts, retirees, old timers, who were asked not
2 only to review the data and to see if the data
3 supported the conclusions, but in their judgment were
4 the conclusions correctly drawn and would they agree
5 with the conclusions, so we started reviewing and
6 validating, attempting to validate, many studies. I
7 think the characterization with respect to the
8 deficiencies through operations is invalid.

9 Q. Let me ask it to you this way. Would you
10 agree with me that falsification of records, such as
11 the recording of observations which were not actually
12 made, is a serious problem in an IBT study?

13 A. I would agree with that statement that
14 falsification of data for observations which were not
15 made is a serious problem in any study.

16 Q. Would you agree that lack of written SOPs
17 would be a serious problem in a rat study?

18 MR. GOUTMAN: Objection to the form of
19 the question.

20 THE WITNESS: I would have to take that
21 statement in two different parts. At the time
22 that we are talking about with respect to IBT
23 there were no standards, there were no
24 reference points, there was nothing against

1 which you could evaluate such a thing, so it
2 was either done or not done depending on the
3 laboratory.

4 BY MR. ZIEGLER:

5 Q. But if they claimed to follow unwritten SOPs,
6 but this was found not to be true, that would result
7 in a serious problem with their studies; isn't that
8 correct?

9 MR. GOUTMAN: Objection to the form of
10 the question.

11 THE WITNESS: I have difficulty with
12 that statement. I don't see how you can
13 evaluate compliance with an unwritten SOP.
14 This is what I tried to say earlier.

15 BY MR. ZIEGLER:

16 Q. So you don't agree with the statement.

17 MR. GOUTMAN: Excuse me. Don't
18 interrupt the witness.

19 Please continue.

20 THE WITNESS: I said the statement how
21 can you evaluate compliance with an unwritten
22 SOP? If there's no written document how do you
23 check the compliance -- if there's no written
24 procedure?

1 MR. ZIEGLER: Would animal substitutions
2 be a serious problem in an IBT study?

3 MR. GOUTMAN: Can you read back the
4 question.

5 (The last question was read back by the
6 Court Reporter).

7 MR. GOUTMAN: Objection. Overly broad.
8 Vague.

9 BY MR. ZIEGLER:

10 Q. Does that sound like a serious problem to you?

11 MR. GOUTMAN: Same objection.

12 THE WITNESS: I would have to object to
13 the question because there are -- no,
14 substitution has a lot of different meanings in
15 a study. There are times when studies have had
16 substitutions and were perfectly valid.

17 BY MR. ZIEGLER:

18 Q. Is having unreported extra animals used in an
19 IBT study, is that a serious problem to you?

20 MR. GOUTMAN: Objection. Overly broad.

21 THE WITNESS: Again, I would have to
22 have specific details on it because there are
23 times when things such as that were done.

24 MR. ZIEGLER: What about poor

1 accountability in handling of test substances?

2 Is that a serious problem?

3 MR. GOUTMAN: Objection. Overly broad
4 and vague.

5 THE WITNESS: Define "poor
6 accountability".

7 BY MR. ZIEGLER:

8 Q. What about this one? The preparation of
9 records reporting observations which were not made
10 and the issuance of final reports known to be false?
11 Does that sound like a serious problem to you?

12 MR. GOUTMAN: Let me just interpose an
13 objection. What you are referring to has never
14 been charged against IBT PCB studies. You are
15 taking that out of a context, out of the
16 context in terms of allegations against IBT
17 with respect to other substances and tests and
18 it is completely unfair and misleading. In
19 fact, as you know, there was never any criminal
20 indictment with respect to IBT's conduct in the
21 PCB studies.

22 MR. ZIEGLER: Thanks for the speech, but
23 I'm asking you whether this sounds to you like
24 a serious problem.

1 MR. GOUTMAN: I'm telling you that you
2 are going through a litany of allegations made
3 against IBT that has absolutely nothing to do
4 with the PCB studies and you know it, and I
5 don't know why you are doing it other than to
6 mislead the witness and mislead the record.

7 THE WITNESS: I would have to say that
8 at the time this was going on there were no
9 such things as good laboratory practices which
10 were instituted later; there was no requirement
11 for standard SOPs, and today the difficulty is
12 that we look at yesterday's issues with today's
13 eyesight, and that in the absence of records,
14 in the absence of SOPs, in the absence of
15 laboratory practices against which to judge
16 compliance it is difficult to evaluate
17 statements taken out of context. From what I
18 know of IBT's operation, I would say that their
19 operation, from what I saw of it, was not
20 significantly different from that which were in
21 many other laboratories at the time, and even
22 the government agencies used IBT.

23 BY MR. ZIEGLER:

24 Q. Let me go back to my original question. The

1 issuance of a final report known to be false is a
2 serious problem, isn't it?

3 MR. GOUTMAN: Objection. Same
4 objection as before.

5 THE WITNESS: I say it is a statement
6 taken out of context. Yes, if you are writing
7 down things as a scientific conclusion that are
8 obviously and knowingly false, then I think
9 that's true. If we are having disagreements
10 over the interpretation of data, it's not
11 necessarily false and misleading. So I think
12 taking isolated statements, allegations, out of
13 context and saying yes, no, maybe, I think is
14 really not very helpful.

15 BY MR. ZIEGLER:

16 Q. Concealment of circumstances relating to
17 animal mortality.

18 MR. GOUTMAN: How long are you going to
19 go through this list because it is not
20 probative of any issue in this case?

21 MR. PENDERGAST: I want to join in that
22 objection. I think the record on this is
23 pretty clear with respect to what happened to
24 IBT. This is completely irrelevant, as far as

1 I can tell, to any issue in this case, so
2 whether reading a report relating to an
3 investigation of IBT or reading a published
4 decision on a conviction resulting from that
5 investigation doesn't matter because Attorney
6 Goutman is absolutely accurate in saying it has
7 nothing to do with the PCB studies.

8 MR. ZIEGLER: I'm afraid I don't agree
9 with that.

10 MR. GOUTMAN: Are you representing for
11 the record that the indictment and those
12 allegations pertained to the PCB studies? Is
13 that your representation?

14 MR. ZIEGLER: That's my argument, yes.
15 That's right. And you can live with that.

16 MR. GOUTMAN: I think that's
17 interesting. That's interesting. We will deal
18 with that with our judge.

19 BY MR. ZIEGLER:

20 Q. Did you have an opportunity to validate, we
21 were talking, if I could see, are you telling me that
22 after Monsanto found out about the circumstances at
23 IBT it was not at all concerned about the validity of
24 any of the Aroclor animal studies?

1 MR. GOUTMAN: Objection. He just said
2 at length that --

3 MR. ZIEGLER: I don't want your
4 testimony.

5 MR. GOUTMAN: I'm going to make an
6 objection because you have a tendency to ask
7 questions over and over and over again until
8 you get an answer that you can live with. He's
9 already said that they attempted to validate
10 these studies. Now, are you looking for some
11 other additional information?

12 MR. ZIEGLER: Actually he didn't say
13 that, at least that's not how I understood his
14 testimony.

15 If that's correct I want to hear it.

16 MR. GOUTMAN: You heard it once.

17 THE WITNESS: Let me reiterate. When
18 questions were raised about IBT studies
19 Monsanto was interested. It was decidedly
20 interested.

21 BY MR. ZIEGLER:

22 Q. And that included the Aroclor studies, didn't
23 it?

24 A. I'm talking about IBT's studies --

1 Q. Didn't you --

2 MR. GOUTMAN: Excuse me. You are not
3 going to interrupt this witness again. Please
4 complete your answer.

5 THE WITNESS: We then reviewed all, I
6 said all of the studies that we had done at
7 IBT, and we gave the priority to those studies
8 which we had submitted to a regulatory agency
9 with the request for regulatory action because
10 we felt that they acted on something that we
11 had told them. We wanted to be sure that that
12 information was valid.

13 Category two, things that were of
14 interest to Monsanto that we felt we had an
15 obligation, either our own interest was such
16 that we would validate, and the third category
17 was discontinued products, sample materials
18 that never got to be commercialized and so
19 forth. I do not recall saying one way or the
20 other where PCBs were in those three
21 categories.

22 MR. GOUTMAN: Let's take a break.

23 (Deposition recessed).

24 MR. ZIEGLER: This will be Levinskas

1 Exhibit 13. (Indicating).

2 (The above-referred to document was
3 marked as Levinskas Exhibit 13 for
4 identification)

5 BY MR. ZIEGLER:

6 Q. Exhibit 13, I'm going to ask the witness for
7 some assistance in identifying the author of Exhibit
8 13.

9 MR. PENDERGAST: Is it an IBT document?

10 MR. ZIEGLER: IBT document dated January
11 14, 1972.

12 THE WITNESS: You know, I really don't
13 know. It is on IBT letterhead. It has got an
14 address in the corner, Green Valley, Arizona.

15 BY MR. ZIEGLER:

16 Q. Do you recognize the signature on page two?

17 A. There was a guy named Otis that used to work
18 at IBT.

19 Q. Otis?

20 A. Yes.

21 Q. Do you know what Otis' last name was?

22 A. There was an Otis Fancher.

23 Q. Can you spell that for me, please?

24 A. F A N C H E R, but I'm not familiar with this

1 handwriting to say that this was his.

2 Q. Were there any Dons or Dans who worked in your
3 department at the time you came on board with
4 Monsanto?

5 A. Not in the department.

6 Q. Do you know who this person might be writing
7 to, assuming that it is at Monsanto?

8 MR. GOUTMAN: Objection.

9 THE WITNESS: I don't know whether it
10 was at Monsanto. As I say, I don't know. I
11 haven't seen it before that I can recall. And
12 I don't know who; all I can say with certainty
13 is that I don't recall a Don or Dan in the
14 medical department while I was there.

15 BY MR. ZIEGLER:

16 Q. When he states on the second page, "I am
17 ashamed to publish the work done in these studies",
18 do you know if he is referring to the Monsanto PCB
19 toxicity studies in animals?

20 MR. GOUTMAN: Objection. Calls for
21 speculation.

22 You can answer.

23 THE WITNESS: Well, I'm not sure what
24 study he is talking about. And I'm not aware

1 that he was -- I shouldn't say that. I don't
2 know what he's planning to publish and I don't
3 know what studies he's referring to.

4 BY MR. ZIEGLER:

5 Q. When he says, "Some of my conclusions are not
6 in agreement with those of the reports or with
7 statements which have been made by Kip and by
8 Monsanto in discussions with the FDA", does that help
9 you in determining what reports he's talking about?

10 MR. GOUTMAN: Do you want him to read
11 the mind of someone who he doesn't even know,
12 in fact, who this author is? Is that the
13 question?

14 BY MR. ZIEGLER:

15 Q. Did Otis ever come to you and discuss his
16 feelings that he was ashamed to publish the work in
17 those studies?

18 A. I said I have not seen this memo before. I
19 have never discussed PCBs with FDA. I don't know who
20 he says when he says "and by Monsanto", I don't know
21 what, when he says -- when he says, "my conclusions
22 are not in argument with those", and so forth, the
23 reports, I have no basis for knowing what his
24 conclusions were or what the basis of his agreement

1 is. I have never been a Monsanto participant in
2 discussions with FDA on PCBs, so I can't really add
3 anything to the -- I'm even at a loss to try
4 speculating.

5 MR. GOUTMAN: Don't.

6 THE WITNESS: I'm not going to.

7 BY MR. ZIEGLER:

8 Q. Did anyone from Bio-Test ever come to you and
9 state to you that they had a notion that much of the
10 data are either fudged or collected with carelessness
11 or incompetence, particularly the data for the
12 supplemental studies with 1242?

13 MR. GOUTMAN: We are talking about the
14 chicken study; right? I don't want the record
15 and I'm sure you don't want the record to be
16 misleading, that this letter is discussing the
17 study with chickens; not rats.

18 MR. ZIEGLER: I mean, if that's what the
19 witness is interpreting this, that's fine.

20 MR. GOUTMAN: The witness didn't say
21 anything about it. The document, itself, is
22 talking about the chicken studies, of course,
23 and you know that and I just want the record to
24 be clear on that issue.

1 MR. ZIEGLER: The document speaks for
2 itself and I will let it, as opposed to having
3 you sit here and interpret it.

4 THE WITNESS: Well, what I see is he's
5 talking about chickens. I have never had
6 anybody in IBT come up to me and make any
7 statements about the lack of quality or
8 integrity or the validity of the data, and I
9 have never seen this document that I can recall
10 before. I have no basis for agreeing or
11 disagreeing with the statements in there. I
12 just can't comment on them.

13 MR. ZIEGLER: Do you know if you
14 produced this?

15 MR. GOUTMAN: I doubt it. It's not our
16 document; it is Bio-Test's. It wasn't sent to
17 us.

18 MR. ZIEGLER: Are you claiming that
19 Monsanto never received this document?

20 MR. GOUTMAN: I'm not claiming anything.
21 I think you are going to have to do some
22 discovery on that.

23 MR. ZIEGLER: These problems at Bio-Test
24 that we were discussing, how did those problems

1 first come to your attention?

2 MR. GOUTMAN: Objection. What do you
3 mean by "these problems"?

4 BY MR. ZIEGLER:

5 Q. Problems such as falsification of data,
6 substituting animals, those sort of things that we
7 have been discussing for the past 45 minutes.

8 MR. GOUTMAN: Has it been established
9 that this witness was aware of the problems
10 that you just enumerated? Because that
11 question --

12 MR. ZIEGLER: I'm asking.

13 MR. GOUTMAN: That question presumed
14 that this witness had stated that he was aware
15 of those problems at IBT and as such it was a
16 very misleading question, I'm sure you would
17 recognize, and therefore I object to the
18 question.

19 BY MR. ZIEGLER:

20 Q. Thank you for coaching the witness. I don't
21 agree with your characterization.

22 How did it first come to your
23 attention?

24 A. I know I said this once in detail and once

1 less detailed earlier, somebody in Monsanto, I don't
2 recall who it was addressed to, had a letter from a
3 regulatory agency, one of the government agencies,
4 asking us to identify studies that had been submitted
5 to them. And that that lead to an attempt to
6 identify those studies and to --

7 Q. I'm sorry. Go ahead.

8 A. And to do that we had to get information.

9 Q. Do you know what year that was?

10 A. I would say probably about the mid '70's. I
11 don't recall specifically.

12 Q. Was it '75? '76?

13 MR. GOUTMAN: Don't guess. If you don't
14 know, say you don't know.

15 THE WITNESS: I don't know. Unless
16 there's something fantastic that happens, my
17 chronology is very bad; all I know is that
18 sequentially we do things and go along.

19 BY MR. ZIEGLER:

20 Q. If Monsanto had received a report in 1972 that
21 IBT was fudging data or collecting it with
22 carelessness or incompetence, or if you had received
23 that sort of report in 1972, would you have begun the
24 sort of investigation that you began in the mid '70's

1 earlier?

2 MR. GOUTMAN: Objection. It is
3 hypothetical. I can represent to you that that
4 document was not sent to Monsanto and Monsanto
5 got that document only when it was subpoenaed
6 from IBT by the government as part of their
7 investigation.

8 THE WITNESS: I have said I have not
9 seen the document before. If I can give you my
10 personal reaction, and I will go back to what I
11 have been trying to say all along, as a
12 scientist my purpose is to try to get
13 information and to evaluate the information
14 that has been used. It should be obvious that
15 if somebody came to me with an allegation that
16 something was not perfectly in order, I would
17 have gone after it to find out what was going
18 on. I do not recall anybody raising questions
19 in Monsanto or my associates among the
20 toxicology fields with IBT prior to that letter
21 that we received that I mentioned earlier from
22 the regulatory agency.

23 BY MR. ZIEGLER:

24 Q. When you started going through your validation

1 process in the mid 1970's how did you determine
2 whether or not data was falsified in the IBT reports?

3 A. We could not determine whether data was
4 falsified. Let me make two comments on that. I had
5 the retired director of Carbide's laboratory, a
6 toxicologist for many, many years, and two
7 successfully retired directors from Kodak's
8 laboratory. I got them to help me. And we went
9 through a procedure. We took the available records
10 that we could get from IBT on the study and I asked
11 them to check the data against the report. In other
12 words, was it in the report. Do records exist to
13 support the data. If they found some discrepancies,
14 would they assess whether the discrepancies were
15 significant and could alter the effects, the
16 conclusions drawn, or were they relatively
17 insignificant. For instance, if they said we weigh
18 animals once a month and they missed one or two body
19 weights, that's sort of insignificant. Then I asked
20 them were the records there to support the statements
21 that were in the report. If they were there would
22 they look at it and then let me know or offer their
23 comments as to whether not only were the data there
24 to support the conclusion, but did they agree with

1 the conclusion that was drawn from the report.

2 We put together a volume on every
3 report that we looked at. And EPA had requested
4 three states: Valid, invalid, or partially valid,
5 and I added a fourth category. I said valid,
6 invalid, partially valid, and no information, unable
7 to draw conclusions. Because there were some cases
8 we could not get any records. And then each of these
9 individuals, these retired, respected senior
10 toxicologists, signed off on his report. We
11 submitted a copy of the report, a marked up copy,
12 showing the things we discussed, the toxicologists'
13 conclusions and so forth to the agency. The EPA
14 accepted ours and they accepted our validation
15 procedure to the extent that they recommended it to
16 the rest of the industry.

17 Now, the second part of your question,
18 how do we determine if they were valid. Dr. Henry
19 Smyth, Dr. Henry Smyth, Jr., the retired director of
20 Carbide, he had a comment on one of his that I
21 thought was rather significant. He said everything
22 is there. And he says, you know, it all looks like
23 it fits. But the only way to determine whether it is
24 really valid would have been to take a movie of the

1 entire operation from the first day to the end of the
2 report. So with respect to validation, you can only
3 go on the basis that the records were available, the
4 records were examined, they were correctly reported
5 in the report, and the conclusions drawn were
6 supportable by the data. That's our basis for
7 validation.

8 Q. All right. And so that's my next question.
9 That was actually my question previously. The fact
10 is that you could not take a movie. There was no
11 independent way to know whether the data was fudged
12 or not when you went through your validation process.

13 A. There was no way to know whether data was
14 fudged or was not fudged. I'm describing the process
15 we used.

16 Q. That's right.

17 A. That's right.

18 Q. There's no way, no independent way to tell one
19 way or another is what you are saying. And there was
20 no way for the EPA to know one way or another whether
21 the data was fudged when they accepted your
22 validation of the report; isn't that also correct?

23 MR. GOUTMAN: I'm sorry. What report
24 are we talking about?

1 MR. ZIEGLER: Of the reports that you
2 submitted to EPA for validation. More
3 particularly, the Aroclor reports.

4 THE WITNESS: Let me go back on the
5 Aroclor reports. I'm describing a process that
6 we used to validate studies. In so far as I
7 know, no, there was never a requirement that
8 Monsanto should submit a PCB study to an
9 agency. We never asked an agency to take
10 administrative action and we never submitted a
11 report with that intent. When the PCBs, it's
12 my understanding, when the PCBs were getting to
13 be an environmental issue and the studies that
14 we talked about earlier, which were nearing
15 completion when I joined the company that data
16 was made available to the people in the
17 agencies as it was developed for their
18 guidance, for their information, and subsequent
19 work that was done I presumed was made
20 available, it was a continuation of that
21 information process, but we never asked the
22 regulatory agency to take administrative action
23 on something that we submitted with respect to
24 PCBs. So there's no requirement that we do

1 this; it was done voluntarily, and it is a
2 little different from, say, pesticides where a
3 registration is required from the agency.

4 BY MR. ZIEGLER:

5 Q. I think you said earlier, though, that the EPA
6 accepted the data as valid. Did I misunderstand that
7 comment?

8 A. No, the studies that we validated, because we
9 had asked an agency to take regulatory action, the
10 agency has accepted those that we said were valid.
11 We have no requirement, we did not request a
12 regulatory action on PCBs. We have never, as far as
13 I know, we have never requested a regulatory action
14 on PCBs. So the agency was not interested in our --
15 did not ask us to validate them. We did make the
16 information available to them as it was developed as
17 far as I know.

18 MR. ZIEGLER: I don't have any further
19 questions.

20 MR. TEDFORD: I don't have any
21 questions.

22 MR. PENDERGAST: I just have a couple.

23 - - -

24 BY MR. PENDERGAST:

1 Q. While you were at Monsanto were you aware of
2 anyone doing any work to determine whether PCBs could
3 migrate between substances?

4 A. I'm not aware of any specific studies in that
5 area. Like many chemicals, when PCBs get to be in
6 the headlines, they become a source of interest to
7 many people. Fund money becomes available and all
8 kinds of research studies spring up. And it would
9 not surprise me that such studies would be done, but
10 I have no awareness of them.

11 Q. My question was more specific to Monsanto.
12 Are you aware of anybody within Monsanto who would
13 have done any work along those lines?

14 A. I can't recall anything specifically looking
15 at migration studies. I can't speak for all of
16 Monsanto, but I don't have knowledge.

17 Q. I don't want you to speculate, but under whose
18 purview would that have been while you were with the
19 company?

20 A. Well, I have indicated in the beginning that
21 my initial interest was to look at new products and
22 new uses of existing products. For practical
23 purposes, except that they were still there, PCBs
24 were on their way out.

1 MR. GOUTMAN: He wants to know whether
2 you can name somebody who would have been
3 responsible for something like a migration
4 study. Can you name any such person?

5 THE WITNESS: I can't name an
6 individual, but at the time the existing
7 products were what we call a business group.
8 The unit, the chemical unit that had a
9 responsibility for the product, they would be
10 the ones who would do that sort of study. I
11 can't name individuals who might have done it.

12 BY MR. PENDERGAST:

13 Q. And with respect to the plasticizer
14 applications of the Aroclors who would have been the
15 head of that group?

16 MR. GOUTMAN: When? From '71 to --

17 BY MR. PENDERGAST:

18 Q. From when you started.

19 A. Oh, I really -- these people change and it is
20 some time before I find out about some of these
21 people. The plasticizer group was -- Monsanto had
22 many plasticizers, one of which was PCBs. The PCBs
23 were also used as functional fluids. So who had
24 responsibility for the plasticizers, was it the PCB

1 people?

2 MR. GOUTMAN: If you know tell him, but
3 if you don't know say you don't know.

4 THE WITNESS: I don't know.

5 MR. PENDERGAST: That's all I have.

6 - - -

7 BY MR. GOUTMAN:

8 Q. I have some follow-up questions, Doctor.

9 With respect to the IBT rat 1242, 1254,
10 and 1260 studies that were published in 1971, did
11 those studies show the development of tumors in some
12 of the rats' livers?

13 A. You said published.

14 Q. Reported. Issued.

15 A. I'm not aware that they had been published.

16 Q. I'm sorry.

17 A. I think I testified on this not too clearly
18 earlier. The results of the two year feeding studies
19 were reported, conclusions were drawn in the reports.
20 The two year rat feeding studies on each of the three
21 Aroclors and for practical purposes we can say that
22 those reports were finished. Practical purposes or
23 impractical. Subsequently when the questions came
24 up --

1 Q. I'm just asking you about the 1971 test. Did
2 those tests and that data show the development of
3 tumors in some of the livers of these rats --

4 A. They reported hepatomas in the rat livers.

5 Q. And was that data and those reports turned
6 over to the FDA in 1971?

7 A. I don't know when it was turned over, but I
8 presume it was turned over to FDA.

9 MR. ZIEGLER: I move to strike his
10 answer. It is pure speculation.

11 BY MR. GOUTMAN:

12 Q. Sir, do you know whether the FDA was made
13 aware of IBT test results?

14 A. I would have to assume they were because
15 somewhere along the line the additional liver
16 sections that we talked about in those supplemental
17 reports, those slides were made available to FDA
18 pathologists.

19 MR. ZIEGLER: Same objection. It is all
20 based on assumption. Conjecture.

21 BY MR. GOUTMAN:

22 Q. And you know that, sir?

23 MR. ZIEGLER: I object to the leading
24 nature of the question. Objection to the form

1 of the question.

2 MR. GOUTMAN: I'm sure you do.

3 THE WITNESS: My statement is based on
4 the fact that I can recall our getting a
5 package, I don't recall the details, but we got
6 a package of slides that were being returned to
7 us from FDA.

8 BY MR. GOUTMAN:

9 Q. Approximately when would that have been?

10 MR. ZIEGLER: Wait a second. I'm going
11 to interpose an objection and I move to strike
12 as non responsive.

13 MR. GOUTMAN: I don't think that's an
14 objection that you can make, but, in any event,
15 approximately when was that, sir?

16 THE WITNESS: I would say it is probably
17 mid or latter part, somewhere around the middle
18 '70's.

19 BY MR. GOUTMAN:

20 Q. And when you received the results of the
21 Kimbrough study, Dr. Kimbrough reported those directly
22 to you and to others at Monsanto; is that correct?

23 MR. ZIEGLER: Objection to the form of
24 the question. Leading.

1 BY MR. GOUTMAN:

2 Q. To whom did Dr. Kimbrough report those
3 results?

4 MR. ZIEGLER: You are leading your own
5 witness, counsel.

6 THE WITNESS: I think I have indicated
7 earlier that Kimbrough came to Monsanto and
8 she presented her results verbally.

9 BY MR. GOUTMAN:

10 Q. And --

11 A. And Elmer Wheeler, Dr. Kelly, and I, at least
12 the three of us in the medical department were there,
13 in addition, and I don't recall all of the people,
14 but several other people from Monsanto were in the
15 same room. There could have been ten or 12 of us.

16 Q. Now, did she indicate, during that
17 presentation, as to whether in her opinion her
18 studies showed the development of cancers as opposed
19 to just tumors?

20 MR. ZIEGLER: Objection to the form of
21 the question. That's another leading
22 question.

23 MR. GOUTMAN: No, it's not.

24 THE WITNESS: I think it has been said

1 earlier that she came to report that she had
2 found cancers in the livers of the rats that
3 she had studied.

4 BY MR. GOUTMAN:

5 Q. Now, based upon your understanding of IBT's
6 study completed in '71 did they report any cancers?

7 A. They reported hepatomas, which are considered,
8 at that time were considered by the pathologists as
9 benign tumors.

10 Q. My question was did they conclude that there
11 were any tumors in the rats studied in the IBT tests?

12 Excuse me. Cancers.

13 A. No, they did not conclude there were any
14 cancers. They reported the presence of benign tumors
15 only.

16 Q. When Dr. Kimbrough presented the results of
17 her studies did you find any inconsistencies between
18 her studies and IBT's studies in terms of the
19 conclusions reached?

20 A. Well, they had two opposite conclusions; one
21 said there are cancers and one said there are not.

22 Q. As a scientist, doctor, what are the ways in
23 which a scientist can resolve inconsistencies between
24 two studies of the same chemical?

1 A. There are a variety of ways that it could be
2 done. I think I have indicated several we attempted
3 to do. One is we went back and looked at all -- a
4 usual study they would take a select number of
5 animals from each group and look at them. Usually we
6 would not look at the rest of the tissues. So they
7 went back and looked at the additional liver sections
8 which had been stored but not examined
9 microscopically. That's what the supplemental
10 reports are. We went and talked to Dr. Philippe
11 Shubik, people who dealt with carcinogenicity all
12 their professional life, and asked them what
13 recommendation would they have for trying to resolve
14 these differences in results. And this is all part
15 of that.

16 Q. You looked at slides.

17 A. We looked at additional slides because they
18 were readily available. The animals had been fed for
19 two years and we could do that quickly without having
20 to spend more time with the animals.

21 Q. And you went to a physician at the Eppley
22 Cancer Institute.

23 A. Yes, Phil Shubik.

24 Q. And did you also go and visit the National

1 Cancer Institute with slides from both studies?

2 A. We took some representative slides from the
3 Monsanto studies and we went down to the National
4 Cancer Institute to meet with Dr. Squire and Dr.
5 Kimbrough to let the pathologists look at the tissues
6 from both sides of the fence, as it were, to see what
7 their agreement was.

8 Q. Now, Dr. Kimbrough was from the Center for
9 Disease Control?

10 A. Yes.

11 Q. Is that a federal agency?

12 A. Yes, it is a public health service agency.

13 Q. And the National Cancer Institute, is that a
14 federal agency?

15 A. It is one of the federal institutes of health.

16 Q. And I think you indicated that Dr. Kimbrough
17 and Dr. Squire had an opportunity to review the
18 slides of the IBT studies with their own two eyes; is
19 that correct?

20 A. Yes.

21 Q. And did they communicate any conclusions to
22 you as to whether their review of those IBT slides
23 showed cancer?

24 A. I don't recall that -- at the meeting they did

1 not see, they did not report seeing cancer in the IBT
2 slides. I do not recall having a written
3 communication from either of them. I believe I did
4 send a copy of some of the memos that are here to Dr.
5 Kimbrough summarizing my impressions of the meeting
6 with them.

7 Q. My question is during the meeting did Drs.
8 Kimbrough and Squire from CDC and NCI, respectively,
9 tell you whether they saw any cancers on the IBT
10 slides?

11 A. They did not address me directly, but during
12 the discussion they agreed with Gordon and Richter
13 that the IBT slides did not show cancer.

14 Q. Did you ever learn from Dr. Kimbrough as to
15 whether NCI around this time was doing its own two
16 year study of Aroclor 1254?

17 A. I'm not sure where we heard the information
18 first, but we did hear that the National Cancer
19 Institute was sponsoring a two year feeding study on
20 Aroclor 1254 in rats.

21 Q. And what were the results of that study?

22 MR. ZIEGLER: Objection to the form of
23 the question. Asking for hearsay.

24 THE WITNESS: There was such a study

1 done and the reports were issued by the
2 National Cancer Institute as part of the
3 National Toxicology Center.

4 BY MR. GOUTMAN:

5 Q. And you reviewed those reports?

6 A. I read the reports.

7 Q. And what did they say?

8 MR. ZIEGLER: Same objection.

9 THE WITNESS: My recollection is that
10 they concluded that Aroclor 1254 was non
11 carcinogenic in rats.

12 BY MR. GOUTMAN:

13 Q. When Dr. Kimbrough from the Center For Disease
14 Control and Dr. Squire from NCI reviewed the IBT
15 slides did they note the presence of tumors?

16 A. I can't recall specifically whether they used
17 that word "tumor" or not. Squire was using the term
18 "hyperplastic nodules" and so I don't know whether
19 they used the word "tumor" or not. I can't say. I
20 don't have a record that they did or didn't.

21 Q. Did the 1971 IBT Aroclor studies set forth in
22 the body of their reports the actual data showing
23 tumors?

24 A. There were summary tables showing the number

1 of, particularly on the liver pathology, showing the
2 number of animals and the various findings, including
3 hepatomas in the livers of those animals.

4 Q. Now, did you, when you asked IBT to go out
5 and get additional liver samples from the rats
6 involved in the 1971 study, was it your purpose --
7 what was the purpose of that?

8 A. Well, at the end of the study tissues from all
9 of the animals would have been preserved in
10 formaldehyde. A selected number would be looked at.
11 So if we are looking for something that is less than
12 100 percent incidence we may have missed it.

13 Q. What were you looking for?

14 A. We were going back specifically to see if
15 there were any liver tumors in those livers which
16 grossly, superficially did not appear to be normal.

17 Q. Sir, you already knew they were tumors?

18 MR. ZIEGLER: Objection to the form of
19 the question.

20 THE WITNESS: They were tumors --

21 MR. ZIEGLER: I'm sorry. I need to
22 interpose an objection.

23 MR. GOUTMAN: After he's finished his
24 answer.

1 MR. ZIEGLER: I object.

2 MR. GOUTMAN: You are going to interrupt
3 him any time you want.

4 MR. ZIEGLER: Objection to the form of
5 the question on the basis that not only is he
6 leading, but now, because he's not getting the
7 answer that he wants, he's arguing with his own
8 witness.

9 BY MR. GOUTMAN:

10 Q. Sir, what was the purpose of your asking IBT
11 to get additional pathological material from the
12 livers of those rats?

13 A. I think I started to say that since only a
14 limited number of livers were examined at the end of
15 the study, which was customary, the question was
16 asked about liver pathology, so we had livers that
17 had been treated and were sitting in formaldehyde and
18 that was a readily available material that we could
19 look at to see if there were tumors, cancer, things
20 in there that we had not seen before.

21 Q. Had the IBT study of '71 already reported the
22 presence of tumors?

23 A. It reported the presence of hepatomas, benign
24 tumors.

1 Q. Had it reported the presence of cancer?

2 A. No.

3 Q. Now, with respect, sir, to the letter that you
4 wrote to Dr. Calandra, which we have marked as
5 Exhibit 9, where you were requesting a change in one
6 of the draft reports from "slightly tumorigenic" to
7 "does not appear to be carcinogenic", would you
8 explain why you made that request?

9 MR. ZIEGLER: Asked and answered.

10 Objection to the form of the question.

11 BY MR. GOUTMAN:

12 Q. Go ahead.

13 A. I think I have indicated two reasons. One is
14 the findings in all three studies were basically
15 similar. And I say if you change the wording in two
16 why not change it in a third one to be consistent
17 because I like consistency in the reporting of data,
18 and the second one is that at the time the review was
19 done, the specific question we were asking was not
20 just overall toxicity with carcinogenicity, but since
21 the phrase "does not appear to be carcinogenic" was
22 more specifically directed to that question I asked
23 him, I said that the tumorigenic statement, I
24 believe, has already appeared in the original two

1 year report which I said for practical purposes we
2 are finished at this stage of the game, so that both
3 statements have been presented publicly about the
4 tumorigenic and noncarcinogenic.

5 Q. Sir, with respect to Levinskas 7, which was a
6 draft of the supplemental report, I believe your
7 testimony was, was this report submitted to any
8 government agency, to your knowledge?

9 Take a second.

10 A. I really don't know.

11 Q. At any time.

12 If you don't know you don't know.

13 Q. At this same meeting did Drs. Richter and
14 Gordon, this meeting at NCI, did Drs. Richter and
15 Gordon also review the pathology material from IBT?

16 A. Yes, the purpose of the meeting was Richter
17 and Gordon brought down typical representative slides
18 from the IBT studies and Dr. Kimbrough brought along
19 typical representative slides from her study.

20 Q. Did Drs. Richter and Gordon express to you
21 whether they saw any cancer in the IBT slides?

22 A. The specific wording is in one of these
23 exhibits, but I believe their conclusion was if they
24 used Squire's new terminology they would agree.

1 Q. Excuse me. I'm talking about the IBT slides;
2 not the Kimbrough slides.

3 A. No, let me go back.

4 Q. Let me rephrase the question. With respect to
5 the IBT slides, we have been here a while, did Dr.
6 Richter and Dr. Gordon express an opinion as to
7 whether those slides showed cancer?

8 A. To the best of my recollection, they said
9 that -- no, they did not consider those cancerous
10 lesions.

11 Q. And did Dr. Squire and Kimbrough agree with
12 them?

13 A. My recollection is that Squire and Kimbrough
14 did not make a statement that they saw cancer in the
15 Monsanto slides, IBT slides.

16 MR. GOUTMAN: Can you read back that
17 answer.

18 (The last answer was read back by the
19 Court Reporter)

20 THE WITNESS: They did not make a
21 statement that they saw cancer.

22 BY MR. GOUTMAN:

23 Q. Did they make a statement, sir, that they did
24 not see cancer?

1 A. My recollection is that they agreed that they
2 did not see cancer in the IBT slides.

3 MR. GOUTMAN: That's all I have.

4 - - -

5 BY MR. ZIEGLER:

6 Q. With respect to your testimony that they did
7 not make a statement that they saw cancer in the IBT
8 slides, would you consider -- I take it you don't
9 consider a carcinogenic response the same thing as
10 cancer; is that right? Do you understand what I mean
11 by "carcinogenic response"?

12 A. A carcinogenic response, that phrase, is the
13 equivalent of saying cancer.

14 Q. Do you remember Dr. Squire ever stating that
15 he defines discrete nodules as precancerous lesions,
16 and thus the indicative of carcinogenic response?

17 A. The context in which he is saying that I think
18 is a different context than I was saying carcinogenic
19 response earlier. Dr. Squire said he considered
20 these lesions a precancerous response. And I can,
21 with the few comments I made at the meeting because I
22 was an observer, I said -- we were outside of
23 Washington, DC. I said I presume this road out here
24 goes to Washington, DC. He said that's correct. I

1 said, You are telling me that every car that goes
2 down that road is going to go to Washington, DC. I
3 said that isn't true. Some of those cars will break
4 down before they get to the Washington, DC limits.
5 And some will turn around and go back and some will
6 go off on side roads.

7 Q. Some of them will make it to Washington,
8 though, won't they?

9 A. That's correct, so that if a cell goes through
10 changes and ultimately becomes cancerous every change
11 doesn't necessarily mean it is going to become a
12 cancer. That was the point I'm trying to make. And
13 he is saying that every time --

14 Q. So when you say that Dr. Squire and Dr.
15 Kimbrough agreed that the IBT slides did not show
16 cancer, you are not saying that they believed that
17 these cells could not become cancerous; right? Under
18 your analogy.

19 MR. GOUTMAN: Objection to the form of
20 the question.

21 BY MR. ZIEGLER:

22 Q. Or that the cells did not show a carcinogenic
23 response.

24 MR. GOUTMAN: Objection. It is a multi

1 part question at this point. Which part do you
2 want him to answer?

3 MR. ZIEGLER: Both.

4 MR. GOUTMAN: Well, it is improper. He
5 is not going to answer both at the same time.
6 Break it down, please.

7 MR. ZIEGLER: Are you instructing him
8 not to answer?

9 MR. GOUTMAN: It is a multi part
10 question. Please break it down for him.

11 BY MR. ZIEGLER:

12 Q. Do you remember that Bio-Test conceded that
13 it had no means at its disposal to dispute the
14 findings of Kimbrough that Aroclor 1260 in female
15 Sherman rats is a liver carcinogen except on the
16 basis of experimental design?

17 A. I don't recall who made that statement and I'm
18 not sure. I have said several times that I accept
19 the fact that Kimbrough's data showed cancer in rats.
20 That statement I just don't have connection with.

21 Q. Do you have a problem with the statement I
22 just made?

23 MR. GOUTMAN: He just answered the
24 question. He just answered that.

1 THE WITNESS: It is not a statement that
2 I would make.

3 BY MR. ZIEGLER:

4 Q. I asked you earlier, we talked earlier about
5 your validation of the IBT studies. Did you generate
6 documentation with respect to this validation process
7 that you went through?

8 A. Tremendous reams of paper.

9 Q. Really? Okay.

10 A. Which were submitted to the regulatory
11 agencies.

12 Q. And were those in existence, that you recall,
13 at the time you left your position with Monsanto in
14 1991?

15 A. I would have to assume they were. I don't
16 know.

17 Q. Did you have them in your files or did you
18 send them to the filing system? Can you tell me what
19 you did with those?

20 A. When good laboratory practices, regulations,
21 were passed, we created a quality assurance unit
22 which we did not have previously. And they were the
23 ones that collected the data, checked on our
24 operations and so forth. They were the possessors

1 of the final repository, if you will, of archival
2 records, including those reports. Now, what happened
3 since I left the company I have no idea because
4 Monsanto has split into two separate companies. I
5 really just don't know.

6 Q. I don't expect you to know what happened
7 to your records after you left the company.

8 A. But there was a quality assurance unit that
9 had custody of that information and materials and
10 that's the group that also got the slides on the PCB
11 studies that we got back from FDA.

12 MR. ZIEGLER: No further questions. I
13 do appreciate your time and your efforts in
14 this.

15 MR. PENDERGAST: No further
16 questions.

17 MR. GOUTMAN: No further questions.

18 MR. TEDFORD: No questions.

19 (Witness excused.)

20 (Deposition concluded at 1:45 p.m.)

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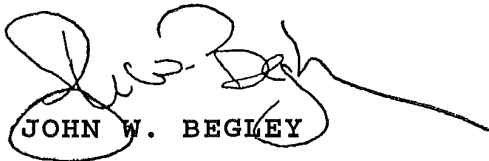
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I, JOHN W. BEGLEY, a Registered Professional Reporter and Notary of the State of Pennsylvania, do hereby certify that I reported the deposition of Dr. George P. Levinkas in the foregoing matter; that the foregoing is a true and correct transcript of the stenographic notes of testimony taken by me.

I FURTHER CERTIFY that I am not an attorney or counsel of any of the parties; nor a relative or employee to any attorney or counsel connected with the action, nor am I in any way interested in the result of said case.


JOHN W. BEGLEY

DATE:

*NOTE: The certification appended hereto does not apply to any reproduction of same unless under the direct control and/or supervision of the certifying court reporter.

LAWYER'S NOTES

1			
2	PAGE	LINE	
3	<u>17</u>	<u>3</u>	<u>CHANGE TRION TO TREON</u>
4	<u>18</u>	<u>15</u>	<u>CHANGE LABOA TO LATER</u>
5	<u>20</u>	<u>9</u>	<u>DELETE RESULT</u>
6	<u>78</u>	<u>7</u>	<u>CHANGE (MAILEE) TO (MAILED)</u>
7	<u>82</u>	<u>16</u>	<u>CHANGE TERMS TO TUMORS</u>
8	<u>82</u>	<u>20</u>	<u>CHANGE SECOND POWR TO POOR</u>
9	<u>82</u>	<u>24</u>	<u>CHANGE FIRST WERE TO WITERE</u>
10	<u>115</u>	<u>7</u>	<u>CHANGE SUCCESSFULLY TO SUCCESSIVELY</u>
11	<u>133</u>	<u>20</u>	<u>CHANGE WITH TO BUT; CHANGE</u>
12	<u> </u>	<u> </u>	<u>BUT NEAR END OF SENTENCE</u>
13	<u> </u>	<u> </u>	<u>TO AND</u>
14	<u>140</u>	<u>1</u>	<u>CHANGE OF TO OR</u>
15	<u> </u>	<u> </u>	<u> </u>
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