

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

JOAN MAERTIN, Executrix of)
the Estate of Lothar)
Maertin, JOAN MAERTIN,)
individually and in her) Cause No. L-95-CV
own right, et al.,) 02849 (JBS)
Plaintiffs,)
vs.)
ARMSTRONG WORLD INDUSTRIES,)
INC.,)
vs.)
MONSANTO COMPANY AND AMERICAN)
MINERAL SPIRITS COMPANY,)
Defendants.)

DEPOSITION OF GEORGE LEVINSKAS
Taken on Behalf of the Defendants

November 10, 1997

Condensed Transcript and Word Index

Taylor & Associates Reporting, Inc.

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DEPOSITION OF GEORGE LEVINSKAS,
produced, sworn and examined on the 10th day of
November, 1997, between the hours of eight
o'clock in the forenoon and six o'clock in the
afternoon of that day, at the offices of Taylor
& Associates, Inc., 7494 Ethel, St. Louis,
Missouri, before Nancy A. Kuncaitis, a
Registered Professional Reporter and Notary
Public within and for the State of Missouri in
the cause now pending in the United States
District Court for the District of New Jersey,
wherein Joan Maertin et al. are the Plaintiffs,
and Armstrong World Industries, Inc., and
Monsanto Company and American Mineral Spirits
Company are the Defendants.

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IT IS HEREBY STIPULATED AND AGREED by and
between Counsel for the Plaintiff and Counsel
for the Defendant that this deposition may be
taken by Nancy A. Kuncaitis, Notary Public and
Registered Professional Reporter, thereafter
transcribed into typewriting, with the signature
of the witness being expressly reserved.

GEORGE LEVINSKAS,
of lawful age, being produced, sworn and
examined on behalf of Defendant, testified as
follows:

EXAMINATION

QUESTIONS BY MR. TURET:

Q. Good morning, Dr. Levinskas.

A. Good morning.

Q. My name is Craig Turet. We met a few moments
ago. I'm an attorney representing Armstrong
World Industries in this case. Have you been
deposed before, sir?

A. Yes, I have.

Q. I know you're familiar with what will take place
here, sir. I'll ask you a series of questions.
You will be expected to answer as completely as

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1 you can, but not to speculate or guess. If I
2 ask you a question and you don't know the
3 answer, just say, I don't know. If you don't
4 hear the question or don't understand it, let me
5 know and I'll be happy to repeat it. And if you
6 do answer a question that will indicate that you
7 both heard the question and understood the
8 question, okay?
9 A. Okay.
10 Q. Also, if you need to take a break at any point,
11 just let me know. I'll be happy to accommodate
12 you as long as there is not a question
13 outstanding. And you understand, Dr. Levinskas,
14 that if for any reason you're not available at
15 trial, the testimony that's being taken down by
16 the court reporter today will be available at
17 trial just as if you were testifying there?
18 A. Yes.
19 Q. Dr. Levinskas, are you employed by Monsanto as
20 of today?
21 A. No, I'm retired.
22 Q. And can you give us just a brief overview of
23 your educational background?
24 A. I have a bachelor degree in chemistry from
25 Wesleyan University in Middletown, Connecticut.

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1 I have a doctorate in pharmacology from
2 University of Rochester in Rochester, New York.
3 Q. Do you have a master's as well as a doctorate?
4 A. No master's.
5 Q. What year did you get your doctorate?
6 A. 1953.
7 Q. Did you begin employment in the private sector
8 once you received your doctorate?
9 A. My first employment after that was teaching at
10 the graduate school of public health at the
11 University of Pittsburgh.
12 Q. What courses did you teach?
13 A. I taught a course in applied toxicology and I
14 gave lectures in several other courses that
15 others were giving in the department.
16 Q. Now, was your position as an instructor or
17 professor?
18 A. I started as a research associate, became a
19 research associate lecturer and I was assistant
20 professor when I left.
21 Q. While you were at the University of Pittsburgh,
22 did you also do any consulting work for
23 companies?
24 A. No, I did not.
25 Q. Did you participate in any large scale research

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1 projects that were going on at the University of
2 Pittsburgh at the time?
3 A. We had several grants and contracts with various
4 government agencies, and I was the primary
5 researcher on several of them.
6 Q. Did any of them have to do with chlorinated
7 hydrocarbons?
8 A. No.
9 Q. How long did you end up working with the
10 University of Pittsburgh?
11 A. Until 1958.
12 Q. And with whom were you employed after that?
13 A. The American Cyanamid Company.
14 Q. Where was that based?
15 A. Initially at Stamford, Connecticut; later at
16 Princeton, New Jersey.
17 Q. How long were you employed by American Cyanamid?
18 A. Until 1971.
19 Q. What was the first job that you held with
20 American Cyanamid?
21 A. I joined the company as a research
22 pharmacologist and shortly thereafter I was
23 named the director of their environmental health
24 laboratory.
25 Q. I'm sorry, director of --

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1 A. The environmental health laboratory.
2 Q. Was that in approximately 1958?
3 A. Well, that would probably be about the end of
4 '58, beginning of '59.
5 Q. How long did you say you had worked with
6 American Cyanamid?
7 A. Until 1971.
8 Q. Did you remain as director of the environmental
9 health laboratory throughout that time?
10 A. Yes.
11 Q. Why did you ultimately leave American Cyanamid?
12 A. The company decided to close out the laboratory
13 so it was phased out gradually, and since there
14 were no other job opportunities of interest to
15 me in the company, I left.
16 Q. What were your duties as director of the
17 environmental health lab at American Cyanamid?
18 A. We did animal toxicity tests on Monsanto -- I'm
19 sorry, Cyanamid company products.
20 Q. Those were toxicological studies that were done
21 in-house?
22 A. Yes.
23 Q. Did you also oversee any toxicity studies done
24 by outside independent laboratories?
25 A. Not while at Cyanamid.

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1 Q. What -- during the time period that you worked
2 for American Cyanamid, what types of products
3 did that company manufacture?
4 A. They were strong in pesticides. They had a
5 variety of organic and industrial chemicals and
6 we tested products from those groups.
7 Q. And did any of the studies that you participated
8 in while at American Cyanamid involve
9 chlorinated hydrocarbons?
10 A. No.
11 Q. What was the size of the environmental health
12 lab during the period of time that you were
13 there? Let's say what was the largest that it
14 got?
15 A. It was about 12 to 15 people when I got there.
16 It reached, at its top it was probably about 30
17 people. And then as I say, it started to be
18 disbanded.
19 Q. When would you approximate that it reached its
20 largest size?
21 A. I would say probably '68, '7, '8, '9, somewhere
22 about there.
23 Q. Then there was a couple years phase out?
24 A. Yes.
25 Q. Did you ever perform toxicological testing while

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1 you were employed by American Cyanamid that led
2 to a conclusion that a particular product was
3 carcinogenic?
4 A. I do not recall that we found any compounds that
5 we tested to be carcinogenic.
6 Q. Now, other than supervising or actually
7 performing toxicological studies on American
8 Cyanamid products, did you have any other job
9 responsibilities during your employment with
10 that company?
11 A. I'm not sure what you mean by other job
12 responsibilities. Certainly administrative
13 functions were involved as director of a
14 laboratory. And also responsibility for
15 assessing test results and writing and
16 distributing reports within the company. On
17 occasion we would present our studies to
18 regulatory agencies if there were regulatory
19 issues involved with the products we were
20 studying.
21 Q. What were some of the regulatory agencies that
22 you had occasion to present reports to during
23 the course of your employment?
24 A. At that time it would have been predominantly
25 the U.S. Department of Agriculture and the Food

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1 and Drug Administration.
2 Q. When you say presented studies to them, did that
3 involve forwarding a copy of your written report
4 to them or was it something more than that?
5 A. Generally the written reports were submitted by
6 people who had regular dealings with the
7 regulatory agencies. I would go down on
8 occasion either at the request of an agency to
9 expand or discuss a study or the regulatory
10 people in the company would ask me to accompany
11 them when they presented the data.
12 Q. At American Cyanamid when you were director of
13 the environmental health laboratory, were you
14 part of a larger department within the company?
15 A. I was part of the corporate medical department.
16 Q. And were you answerable to a medical director,
17 is that who was your supervisor?
18 A. I had a supervisor who was a nonphysician in the
19 medical department. He in turn reported to the
20 director of the medical department.
21 Q. Now, during your employment at American
22 Cyanamid, did you ever have occasion to work
23 directly with any of the people employed at
24 Monsanto?
25 A. I had met some people from Monsanto, as I did

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1 from other companies over the years, at
2 meetings, in conferences and I had had contacts
3 with them along those lines. I did not -- I do
4 not recall having a contact in the sense of a
5 testing -- joint studies or anything of that
6 sort with these people.
7 Q. The people that you saw over the years, were
8 those fellow toxicologists?
9 A. They were predominantly toxicologists, some
10 physicians and a few industrial hygienists.
11 Q. Was Dr. Kelly, the medical director at Monsanto,
12 one of the people you were mentioning that you
13 met over the years?
14 A. Interestingly enough, I never met Dr. Kelly
15 until I came to work for Monsanto.
16 Q. How about Elmer Wheeler?
17 A. Elmer Wheeler I met as an industrial hygienist.
18 Q. How about Dr. Hunt?
19 A. Bill Hunt I met as a toxicologist, yes.
20 Q. Any others that you can remember that you got to --
21 know over the years?
22 A. From Monsanto, Wheeler and Hunt were the two. I
23 should go back. I did meet very casually but
24 did not have any dealings with Jack Garrett, who
25 was an industrial hygienist also reporting to

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1 Elmer Wheeler.
2 Q. How did your employment with Monsanto come
3 about?
4 A. After I left Cyanamid, I was looking for a job.
5 They made me a job offer -- invited me for an
6 interview made me a job offer and I accepted.
7 Q. By the way, just to complete the profile, I take
8 it your next job after American Cyanamid was
9 with Monsanto?
10 A. Yes.
11 Q. How long were you employed by Monsanto?
12 A. '71 -- 1971 to 1991.
13 Q. At that point you retired?
14 A. Yes.
15 Q. Have you done periodic consulting work with the
16 company since your retirement?
17 A. I have done consulting work, but I would not say
18 periodic. It has not been a regular or a fixed
19 interval sort of thing.
20 Q. Has that typically been in connection with
21 litigation?
22 A. I think all of it has been in connection with
23 litigation, that is with Monsanto Company.
24 Q. Have you also done consulting work with other
25 companies since you retired?

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1 A. I have done a certain amount, yes.
2 Q. Has your consulting work for others also
3 involved litigation?
4 A. Some of it's been litigation, some of it has
5 just been general information and guidance.
6 Q. Has all of the litigation work you just referred
7 to related to PCBs?
8 A. The non-Monsanto work is definitely not PCBs.
9 Q. What was the position you assumed when you
10 started with Monsanto in 1971?
11 A. I think my first title was probably manager of
12 environmental -- I'm sorry, manager of product
13 safety or some such title, and that was changed
14 after a while to manager of environmental
15 assessment and toxicologist.
16 MR. DAVIDSON: Craig, I would like to
17 clarify something you just talked about, just
18 for clarification purposes. You used the word
19 "consulting" and that is a term of art. I
20 think if you delve into it, I believe Dr.
21 Levinskas has been presented by deposition, such
22 as your requesting this deposition, and that is
23 the extent of what he might refer to as
24 consulting work for Monsanto. It's really
25 nothing more than being presented as a fact

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1 witness.
2 Q. Was there any difference substantively in your
3 duties between the time you served as manager of
4 product safety or whatever the title was, and
5 manager of environmental assessment and
6 toxicology?
7 A. Initially when I joined the company, Dr. Hunt
8 was the toxicologist. Dr. Hunt died somewhat
9 over a year after I joined the company. After
10 his death, I took over the responsibilities for
11 the toxicology. That would be the most
12 substantive change.
13 Q. Did you take over for Dr. Hunt fairly soon after
14 his death?
15 A. Relatively soon. I don't recall exactly when I
16 was told I had that responsibility.
17 Q. Was it somewhere around 1972?
18 A. It would have been the latter part of '72.
19 Q. Okay. Did your position change at all from
20 manager of environmental assessment and
21 toxicology from 1972 or so to the time you
22 retired?
23 A. Later, it was retitled director of environmental
24 assessment and toxicology and then a few years
25 before I retired I was a senior toxicology

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1 consultant. That was the title, but I was still
2 a company employee.
3 Q. When did you serve as director of environmental
4 assessment and toxicology?
5 A. I don't recall specific dates, but it would have
6 been the latter part of the 1970s until probably
7 about 1985, '87.
8 Q. Then you were senior toxicology consultant from
9 that point on until your retirement in '91?
10 A. That's correct.
11 Q. Going back to your time as manager of product
12 evaluation or -- I'm sorry, product safety, what
13 were your duties and responsibilities?
14 A. At that time Monsanto was trying to pull
15 together various assessment procedures it had
16 for safety of products and my function was to
17 work with the operating units to put together a
18 more formalized procedure for evaluating
19 potential health and environmental effects of
20 chemicals and to review the status of knowledge
21 on products and make recommendations for testing
22 or judgments about their potential safety for
23 new products and new uses of existing products,
24 to try to anticipate the issues which could be
25 raised by those products.

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1 Q. So was this an assignment that brought you to
2 each of the plants to evaluate products being
3 manufactured at those plants?
4 A. The people in the operating units that had the
5 products or had the interest in the products
6 would bring the information to me. I did not
7 visit plants with any frequency.
8 Q. Just so I understand, did this relate to safety
9 of products as it affected the workers of
10 Monsanto or is it something broader than that?
11 A. This would include workers, which would include
12 customers and also taking into consideration
13 environmental issues.
14 Q. And did this undertaking proceed product line by
15 product line throughout the company?
16 A. I indicated that this was for new products and
17 new uses of existing products. We were going to
18 start with those things.
19 Q. Did any of those undertakings involve PCBs or
20 PCB containing products manufactured by
21 Monsanto?
22 A. For practical purposes in most cases PCBs were
23 existing products and they were not in my
24 purview when I first started working with
25 Monsanto.

1 material, what testing, if any, was to be
2 recommended and as the initial samples went out,
3 they would have that information if the product
4 looked like it was feasible or had prospects we
5 might do further testing or more extended
6 testing.
7 Q. Again, as of this 1971, '72 period when more
8 testing was required, was it done in-house at
9 Monsanto or was it done by an independent
10 laboratory?
11 A. At that time Monsanto did not have a toxicology
12 laboratory in-house so the testing was done at
13 outside what I call contract laboratories.
14 Q. Just so I'm clear, what is your definition of an
15 outside contract laboratory?
16 A. It's a laboratory that provides a service and
17 you contract with them for the provision of that
18 service.
19 Q. So you or somebody at Monsanto would tell the
20 outside contract lab what type of a study you
21 wanted done on a particular product and they
22 would do it and report back to you?
23 A. That would be the general intent, yes.
24 Q. During that same 1971 to '72 period, was one of
25 the outside contract labs that was utilized by

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1 MR. LIPSHUTZ: Could the court
2 reporter read back that answer?
3 (Answer read)
4 Q. Did they become in your purview while you were
5 the manager of product safety?
6 A. I'm not sure when, but later on when we got more
7 involved and caught up on some of these things,
8 then I got more involved with PCBs. That would
9 have been sometime later.
10 Q. And can you tell me in the abstract what was
11 involved in developing these -- without putting
12 words in your mouth, tell me what it is that was
13 involved in these undertakings you're describing
14 as manager of product safety for any one
15 product.
16 A. Well, it was sort of a product specific issue.
17 We would look at what was known about the
18 chemical, its chemical, physical properties. We
19 would look at what the intended uses were and
20 what the potential was for exposure under those
21 conditions of use. We would take a look at
22 similarity or what was known about somewhat
23 similar products and we would make
24 recommendations to the operating unit as to what
25 precautions should be taken in handling the

1 Monsanto Industrial Bio-Test Labs?
2 A. Yes.
3 Q. And will you understand what I'm talking about
4 if I call it IBT?
5 A. Yes.
6 Q. Were there other outside contract labs that were
7 utilized by Monsanto at the time?
8 A. Yes.
9 Q. As best you can estimate, what percentage of the
10 work being done by outside contract labs on
11 behalf of Monsanto was being done in IBT in this
12 1971, '72 time period?
13 A. I would say probably the greater part of it, but
14 I was not involved in the testing program when I
15 first came and I'm not too sure of how much was
16 done, but I would think the greater part of it
17 was being done by IBT.
18 Q. Now, to whom did you report while you were
19 manager of product safety?
20 A. Elmer Wheeler.
21 Q. Before I go on, just to finish out the analysis,
22 once you had gone through a particular product
23 and looked at the chemical and its properties
24 and developed information about safe handling
25 and/or possibility of exposure was there a

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1 written work product that emerged?
2 A. What I indicated was that we would make
3 recommendations to the operating units as to
4 what we thought should be done. In some cases,
5 no testing at the initial limited amount of
6 sampling that was done would be required. In
7 other cases, the timing and the schedule of the
8 testing would be left to the discretion of the
9 operating units because they knew how they
10 wanted to progress on the timetable of
11 developing that product. If testing was done,
12 reports would be issued, yes.
13 Q. Okay. I probably threw things off by focusing
14 on that aspect. I'm talking about generally
15 once you finished an analysis of a particular
16 product line looking at all the properties and
17 looking at all the recommendations that you had,
18 did you develop some sort of a written
19 recommendation with respect to that product?
20 A. I think in most cases a written report was sent
21 back to the operating unit, yes.
22 Q. What is an example of an operating unit? What
23 are you talking about when you talk about an
24 operating unit?
25 A. We had a phosphates and detergents group and

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1 they made phosphate chemicals that are used in
2 detergents, and some food contact uses -- food
3 uses, not food contact, but ingredients of
4 foodstuffs, so they're the people that are
5 responsible for the research on the products,
6 for the development of uses, for peddling the
7 products to customers. That's the operating
8 unit for that group. And much of Monsanto was
9 created in separate blocks of chemicals that
10 were related to each other and they're what I
11 call business groups.
12 Q. Was the plasticizers group also a business
13 group?
14 A. Plasticizers were a business group, yes.
15 Q. As of this 1971, '72 period, who was the head of
16 that particular group if you can remember?
17 A. Which group?
18 Q. Of the plasticizer group?
19 A. I really can't recall who would have been at
20 that time.
21 Q. Do you remember doing any of this investigative
22 work, for lack of a better word, on specific
23 plasticizer products?
24 A. If you're talking about these environmental
25 reviews I talked about, yes, I did them on

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1 plasticizer products. I'm not sure which ones
2 and when, but yes, there was some uses which
3 were new products that we looked at.
4 Q. Do you remember if any of them related to
5 Santicizer products?
6 A. Santicizer is a trade name for a class of
7 plasticizers and it would include several items,
8 and yes, Santicizer as such would have been
9 included.
10 Q. Now, jumping back, you said you reported to
11 Elmer Wheeler?
12 A. Yes.
13 Q. What was Mr. Wheeler's position at the time?
14 A. I'm not sure what his formal title was, but for
15 practical purposes all of the non-physician
16 persons in the medical department reported to
17 Elmer Wheeler. He was probably assistant
18 medical -- I shouldn't say medical director, but
19 a director reporting to Dr. Kelly who was the
20 medical director.
21 Q. When you came over to Monsanto in 1971, what did
22 you do to prepare for the position if you can
23 recall?
24 A. I don't recall that I did anything specific to
25 prepare other than get myself moved out here.

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1 Q. When you showed up at work, were there materials
2 that you reviewed to get up to speed on what had
3 come before you had arrived?
4 A. No.
5 Q. Did you take it upon yourself to review any of
6 the historical studies that had been done on
7 particular products manufactured by Monsanto?
8 A. No.
9 Q. Did you speak with others with whom you were
10 then working to develop some of the history for
11 yourself about Monsanto's products?
12 A. I've indicated that my interests, or I was
13 assigned new products and existing uses -- or
14 new uses of existing products. There would be
15 no history on the new products in this instance
16 and new uses might or might not have a prior
17 history. The first several months I met with
18 people in various parts of the company to get
19 some familiarity with company products, to get
20 some idea of what sort of resources were within
21 the company that I could rely on or call upon to
22 familiarize myself with things and that sort of
23 thing and we started looking at new products. I
24 don't want to create the impression there was a
25 big flood gate of new products that suddenly

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1 engulfed me. So as a few came in and we worked
2 on them and in collaboration with other people
3 in some cases, then the tempo picked up a bit.
4 Q. Let's jump ahead to the point at which you
5 became manager of environmental assessment
6 toxicology. And if I understood you correctly
7 before, that was the point at which you also
8 picked up responsibility for toxicology that Dr.
9 Hunt had had previously?
10 A. Yes.
11 Q. What was the nature of those duties that were
12 added to your portfolio?
13 A. Well, when I came here Dr. Hunt had gone -- he
14 would go to periodic contract labs and keep tabs
15 on studies being done. And he might make
16 comments back to the operating units. The
17 operating units placed the studies, I presume in
18 consultation with the medical department and so
19 forth. So that most of the studies that were
20 underway when Dr. Hunt died were known and were
21 to some degree being shepherded by the operating
22 unit personnel. So there was very little actual
23 change. And after Dr. Hunt died, then I began
24 to get more involved in getting caught up on
25 what was underway and what was under test, but

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1 again, I can't say that I suddenly read every
2 report and brought myself up-to-date on every
3 product that was out.
4 Q. Obviously, this case allegedly relates to PCBs.
5 So let's focus on PCB products for the moment.
6 As you assumed these additional duties as a
7 toxicologist, what did you do to familiarize
8 yourself with PCBs in particular?
9 A. I really wasn't doing much to familiarize myself
10 with PCBs. Elmer Wheeler was handling most of
11 the PCB issues.
12 Q. Did Mr. Wheeler seek out anybody's assistance as
13 he was staying abreast of developments relating
14 to PCBs?
15 MR. DiMURO: I'll object to the
16 form. You can answer.
17 A. I don't know what he may have done with other
18 people, but we did have occasional discussions
19 with not very much detail on PCBs. I don't
20 think he ever came in and specifically asked me
21 my opinion on PCBs.
22 Q. And what types of discussions did you have with
23 him that related to PCBs?
24 A. They were getting to be recognized as
25 environmental contaminants. They were getting

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1 to be spotlighted as environmental contaminants
2 and I was led to believe that Monsanto had
3 undertaken studies that were in progress and
4 they were going along well and I saw no reason
5 to get myself involved in them.
6 Q. These studies that were underway were being done
7 by IBT?
8 A. Yes.
9 Q. And is that the set of four tests or so that
10 were published in or around 1971?
11 A. I'm not sure which publications, I don't recall
12 any 1971 publications. I mean, at this time I
13 don't recall any.
14 Q. Did the medical department at Monsanto during
15 this, let's say '72, '73, '74 period, have
16 periodic meetings?
17 A. I don't recall that they were scheduled with any
18 regularity, periodic meetings, no.
19 Q. Were there any means of communication other than
20 just informal discussions between two people
21 down the hall?
22 A. It was a small group and we were all in one
23 general area of the building and most of the
24 contact was casual and informal in the course of
25 the day, across the counter at lunch time.

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1 Q. Was there any kind of a status report that was
2 circulated to keep people abreast generally of
3 developments within the medical department?
4 A. I don't recall any.
5 Q. When did Mr. Wheeler retire?
6 A. I would guess it was in the latter '70s. I
7 don't recall. I would say probably something
8 like '76 to '78, '9, somewhere in there.
9 Q. To the best of your recollection, was it before
10 or after Dr. Kelly retired?
11 A. It was after Dr. Kelly retired.
12 Q. Do you remember when Dr. Kelly retired?
13 A. It was about '74, 1974, '75, about that time.
14 Q. When do you recall taking on a more active role
15 relating to PCBs?
16 MR. DiMURO: Object to the form. He
17 can answer.
18 THE WITNESS: Beg your pardon?
19 MR. DiMURO: I object to the form of
20 the question. You can answer.
21 A. Well, my personal feeling is I got involved with
22 PCBs when Dr. Kimbrough came to Monsanto to
23 comment that she had observed liver cancers in
24 female rats fed Aroclor 1260 and that was
25 probably the end of '73 or beginning of '74

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1 somewhere about there. And the reason I got
2 invited was that Dr. Kimbrough came to Monsanto
3 to present her findings and I was asked if I
4 knew Dr. Kimbrough and I said yes I had known
5 her for several years, so I was asked to go to a
6 meeting. That, to me, is the focal point from
7 which I got involved in PCBs.
8 Q. That will teach you to volunteer information.
9 A. Knowledge of acquaintances, you know.
10 Q. How had you gotten to know Dr. Kimbrough before
11 1974?
12 A. Dr. Kimbrough was with the Center for Disease
13 Control outside of Atlanta. I had met her
14 supervisor, a physician who was her immediate
15 supervisor some years earlier, and in the course
16 of meetings, toxicology and so forth, I was
17 introduced to Dr. Kimbrough.
18 Q. Just to finish out your employment history a
19 little bit, did your responsibilities change at
20 all from the time you were manager of
21 environmental assessment and toxicology to the
22 time when you were senior toxicology consultant?
23 A. Yes, we built a laboratory for toxicology
24 testing. I had a great deal of involvement with
25 that. I was director of it at the time -- I

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1 shouldn't say director -- it was reporting to me
2 until it started to get functional. Then
3 because of other work pressures and so forth,
4 that was assigned to another person. And as the
5 group of toxicologists grew at Monsanto, I got
6 into more of a teaching role with mentoring
7 younger toxicologists and I got a little further
8 removed from the day-to-day testing, but for
9 practical purposes it was a continuum.
10 Q. When was the toxicology lab built by Monsanto?
11 A. It's down here in St. Louis near the Washington
12 University Medical School.
13 Q. Perhaps a better question is when did it become
14 operational?
15 A. I think they started moving into it about 1977.
16 The -- I think it was about 1977 that they
17 started people moving into that laboratory.
18 Q. And who was the person who assumed control or
19 responsibility for the toxicological lab?
20 A. The first director was Paul Wright.
21 Q. Let me take you back through the structure of
22 the Monsanto medical department for a few
23 minutes. Going back to 1971, you mentioned the
24 medical director was Dr. Kelly; right?
25 A. Right.

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1 Q. He was a physician?
2 A. Yes.
3 Q. Were there other physicians at that time in the
4 medical department?
5 A. Yes, there was a Dr. Murray Johnson who was the
6 assistant director or associate director, I
7 guess, of the department. And there was a
8 clinician, Ray Mezaras (phonetic) who was in the
9 clinic that they had at the site here in St.
10 Louis. There were other physicians at other
11 locations and I did not have very much contact
12 with them.
13 Q. Are these like plant physicians?
14 A. Yes, plant physicians.
15 Q. And who became medical director when Dr. Kelly
16 retired?
17 A. Dr. George Roush.
18 Q. Who became medical director after Dr. Roush left
19 the company?
20 A. Barry -- let me see, what's his last name -- he
21 was there a few years before I left and he has
22 since left Monsanto. Barry Friedlander.
23 Q. To the best of your knowledge has Dr. Kelly
24 passed away?
25 A. Yes, he passed away a few years ago.

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1 Q. Dr. Wheeler as well?
2 A. Yes, earlier than Dr. Kelly.
3 Q. And from the time you joined Monsanto through
4 your tenure there, were there additional
5 physicians added to the medical department again
6 focusing on the medical department in which you
7 served, not the plant physicians?
8 A. In the last couple years there was a Jim Spraul
9 that came to join us after Dr. Roush was medical
10 director. Jim, unfortunately, died of liver
11 cancer some years back. He was a really young
12 fellow. There were two other physicians -- I
13 can see the faces, I can't put a name on them.
14 One of them who came from Olin Matheson worked
15 for a couple years then went to Olin Matheson.
16 Don Coleman was more or less his assistant or
17 associate medical director of Dr. Roush. He
18 left after a couple of years. Before I left a
19 young woman physician, Becky, was hired by
20 Monsanto, so there have been other people in the
21 corporate medical department as distinct from
22 the clinics, but toward the end of my time at
23 Monsanto the medical department people started
24 spending more time in the clinic at the
25 headquarters site than they had previously.

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1 Q. Also back in 1971 you mentioned Elmer Wheeler
2 was there and he was industrial hygienist?
3 A. Yes.
4 Q. And Jack Garrett was also an industrial
5 hygienist?
6 A. Yes.
7 Q. Were there any other hygienists in the medical
8 department as of 1971?
9 A. There was Dr. Carl Bole, he was an industrial
10 hygienist working with Garrett. Those are --
11 near as I can tell that was about the extent of
12 the medical department.
13 Q. Toxicologists, you mentioned?
14 A. Bill Hunt.
15 Q. By the way, industrial hygienists, again between
16 you're talking 1971 and the year you retired,
17 were there additional industrial hygienists
18 added to the medical department?
19 A. Yes. The industrial hygiene -- after I came,
20 the industrial hygiene department, or section, I
21 guess, rather than department, expanded by
22 adding several more industrial hygienists both
23 at headquarters and at plants and the toxicology
24 section expanded.
25 Q. Who were the ones that you can recall being

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1 added let's say in the 1970s in the medical
2 department?
3 A. I would have trouble getting their names for the
4 hygienists because some of them would come and
5 go or spend time at the plants and go back. I'm
6 really not in a position to do that.
7 Q. Toxicologists, there was Bill Hunt before you.
8 Was there anybody else there in 1971 when you
9 joined Monsanto?
10 A. No.
11 Q. And after your arrival, were there additional
12 toxicologists added?
13 A. We hired Paul Wright in, would have been about
14 the middle, or before Bill Hunt died to work
15 with me on the environmental assessment
16 schemes. And at the time we made an offer to
17 him, between the time we made an offer to him
18 and he arrived, Bill Hunt died. And that would
19 have been more or less mid third quarter of
20 '72. Then '73, we hired Fred Johannsen as a
21 toxicologist and beyond that we kept adding
22 toxicologists with some regularity for some
23 years as we got more involved in the testing
24 programs on a day-to-day basis we kept adding
25 staff.

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1 Q. How many toxicologists were on staff at Monsanto
2 by the mid '80s?
3 A. At the peak I had 16, counting myself. We had
4 16 Ph.D.s maybe about 14, 14, 15 Ph.D.s one or
5 two master's and half dozen clerical staff.
6 MR. LIPSHUTZ: I'm having a little
7 trouble hearing the witness.
8 Q. Those are all toxicologists?
9 A. Yes, exclusive of those that were in the
10 laboratory downstairs.
11 Q. Okay. When you joined Monsanto in 1971 were
12 there any epidemiologists on staff?
13 A. No.
14 Q. Did there come a time while you were employed by
15 Monsanto that an epidemiologist was hired?
16 A. Yes.
17 Q. Who was that?
18 A. Bill Gaffey.
19 Q. He was the first epidemiologist, to the best of
20 your knowledge, hired by Monsanto for the
21 medical department during your tenure there?
22 A. They had a young lady, Judy Zack, who was here
23 for a while. I had very little contact with
24 Judy, but she did some epidemiology work, but
25 Bill Gaffey was the first one that headed a

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1 formalized epidemiology section.
2 Q. When did Mr. Gaffey or Dr. Gaffey join the
3 medical department of Monsanto?
4 A. I would -- again, I don't have a clear
5 recollection of the time, but somewhere about
6 1980 I guess, might have been a little earlier.
7 Q. Now, as of the early 1970s when you joined the
8 medical department, what was the function that
9 was served by that department?
10 MR. DiMURO: You're talking about the
11 day he joined the department what the function
12 was?
13 MR. TURET: Yeah, that approximate
14 time frame.
15 A. You mean the function of the medical
16 department?
17 Q. Yes.
18 A. I don't think that was ever stated to me. I
19 presume it was like many other medical
20 departments. I don't recall a specific
21 statement of what their function was. I
22 indicated what I was being hired for, and that
23 I'm familiar with.
24 Q. You were there for how many years, 1971 --
25 A. To '91.

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1 Q. Twenty years. Based on your experiences while
2 you were there, what was the function of the
3 medical department to the company as a whole?
4 A. Well, over the years we developed, at least I
5 can speak a little more definitely on that, with
6 the passage of time, we began to talk about what
7 the function was, what the function of
8 toxicology was and the environmental assessment
9 procedure we were developing, so we began to
10 formalize and put down some of these things that
11 we were supposedly doing. But I don't know
12 whether there was a written statement of a
13 charter or a mission statement for the medical
14 department. I really don't have any knowledge
15 of such a thing.
16 Q. I'm not asking for a formal written statement.
17 I'm just asking for your experiences based on
18 the time you were working in the medical
19 department what function it served.
20 A. Well, I would assume like any function for any
21 medical department. One is to work -- the
22 industrial hygiene people go out and make
23 measurements in the plants to see that the
24 exposures were either controlled or within
25 permissible limits of whatever standards were

1 information to the operating units so they could
2 get the registrations or the approvals for the
3 use of pesticides. To a large extent, at that
4 time, there were relatively few regulations
5 dealing with anything, so most of this was that
6 was what in the judgment of the individuals
7 involved could be done or ought to be done.
8 Q. You mentioned the issue of commissioning studies
9 where appropriate. Was that one function, to
10 recommend outside studies by outside contract
11 labs?
12 A. My understanding of it was that the
13 recommendations -- the operating units were
14 responsible for the testing to some extent
15 because they were the ones who would have to
16 fund it. The medical department would provide
17 support and maybe some expertise in dealing with
18 those studies. But that was to a large extent
19 an operating unit responsibility. When I came
20 here the intent was to formalize and pull this
21 together under a central control in the medical
22 department.
23 Q. Was it not within your purview to recommend to
24 operating units that further testing might be
25 appropriate or desirable?

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1 set. The physicians had the responsibility to
2 see that the health surroundings of the
3 employees was maintained. And the toxicologists
4 were to provide what support they could by
5 virtue of doing testing or reviewing published
6 literature to come up with information that
7 could be used in assessing safe working
8 conditions and safe uses of chemicals. And then
9 later on, more recently, about the time I came
10 here was concerns about the environmental
11 safety. So all of these things contributed
12 something to the big picture. Beyond that
13 generalization I really don't know how to gather
14 your question.
15 Q. I understand it's a broad question. This may be
16 repetition of some of the things you just said,
17 but was one function to gather information
18 concerning toxicity of products being
19 manufactured by Monsanto?
20 A. One was to keep abreast of information that was
21 available on the products that Monsanto, or
22 related -- products related to those Monsanto
23 was selling. There were some instances where
24 regulatory approval was required for products
25 such as pesticides. It was to help provide to

1 A. I indicated that that was, to deal with,
2 initially we were dealing with new products and
3 new uses of existing products. But whatever was
4 out there already was not in my purview when we
5 started.
6 Q. Did there come a time later -- let me withdraw
7 that. What about where there were gaps in
8 testing that had been conducted in the past on
9 existing products?
10 MR. DiMURO: Object to the form. You
11 can answer.
12 A. When you say gaps, in the absence of any
13 requirements, I don't see how you could say a
14 gap. I'm trying to indicate that that was a
15 question of judgment on people whether something
16 should or shouldn't be done. We were starting
17 to look at new products and new uses because we
18 could deal with those. There was no way we
19 could go back and automatically and instantly
20 look at everything that the company had ever
21 done and had on record. The resources and such
22 weren't there. But to say gaps, in the absence
23 of a definition of what's needed, I don't see
24 how you could see there was a gap. There is
25 probably no product on earth that somebody

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1 wouldn't like to know more about.
2 Q. Well, you mentioned that one of the functions of
3 the medical department would be to stay abreast
4 of developments being published in the
5 literature, for example. If a study came out
6 from some other source and suggested that there
7 could be a toxicity problem with a particular
8 product at Monsanto, would it not be the medical
9 department that would make a recommendation that
10 further testing was desirable or appropriate?
11 MR. DiMURO: Object to the form.
12 A. If a report came out with, quote, adverse
13 findings in a study, I think the first question
14 would be, is that possible with the Monsanto
15 product under the conditions of Monsanto use.
16 If somebody were injecting intravenously a fluid
17 of some sort that was not intended for injecting
18 intravenously in people, I don't think I would
19 get -- we would tell people, be careful but it
20 had no relevance. So the first thing we would
21 do would be to assess whether the information
22 was relevant to the particular product and the
23 use of our product. I mean, it doesn't
24 necessarily call for testing.
25 Q. If you reached the conclusion that the testing

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1 was relevant to the use of the product, would it
2 not then be a medical department recommendation
3 that more testing was necessary or desirable or
4 appropriate?
5 MR. DiMURO: I'll object to the
6 form.
7 A. I think it could be equally applicable that you
8 would review your handling precautions and you
9 might decide that you did not have to test. The
10 purpose of testing, if somebody raises a
11 question about a chemical, and assuming that
12 that is a valid result, to do the thing over
13 again and confirm that it happens, there is some
14 merit to that. But if it happens in animals, no
15 amount of testing is going to obliterate it, I
16 mean overcome it. So you would look at your
17 handling procedures, you would look at the uses,
18 you might curtail uses, you might change your
19 handling procedures or something, but it does
20 not automatically in my judgment lead to a
21 requirement for the testing.
22 Q. No, I'm not asking if it automatically leads to
23 anything. I'm asking whether the medical
24 department would find it within its purview to
25 make suggestions about whether further testing

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1 was or was not required or appropriate.
2 A. Well, I guess my feeling would be that if we got
3 information, we would certainly convey it to the
4 operating units with a recommendation. The
5 recommendation might or might not include
6 further testing.
7 Q. Okay. Did the medical department also serve the
8 function of gathering toxicity information into
9 one place from which it could be available to
10 others such as customers?
11 A. Yes.
12 Q. And did the medical department also make that
13 information available to researchers or others
14 in the public at large?
15 A. I don't know of any mechanism by which you could
16 make it available to the public at large except
17 taking out a newspaper ad, and we were not doing
18 that. But we certainly attempted, as far as I
19 know, we attempted to make the information
20 available to our own people and when I had
21 queries from outside I would tend to respond and
22 include that information in response to them.
23 But the public at large, I don't see a mechanism
24 for getting that information out there.
25 Q. Fair enough. But for Monsanto employees, for

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1 customers, for people who asked for it, would
2 such information come from the medical
3 department?
4 A. Yes.
5 Q. How about government agencies?
6 A. There were two reasons for going with government
7 agencies. At that time one would be we were
8 seeking regulatory approval and providing them
9 information they requested, or the other would
10 be that they may have come to us and asked about
11 a product because of something else they were
12 dealing with. And in both those cases I think
13 we responded.
14 Q. Responded by giving whatever information you
15 had?
16 A. Providing them with what we had, yes.
17 Q. All right.
18 MR. TURET: Off the record for a
19 second.
20 (Lunch recess.)
21 MR. TURET: Back on the record.
22 Q. Dr. Levinskas, I would like to have the court
23 reporter mark as Levinskas I a document I would
24 like you to take a look at.
25 (Memo dated 10/13/71)

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1 marked as Exhibit No. 1 2 for identification.) 3 Q. I don't want to rush you, sir. Just for the 4 record, this has Bates number MAE 054084-085. 5 It's an October 13, 1971, memorandum to the 6 file. Dr. Levinskas, have you ever seen this 7 document before? 8 A. Yes. 9 Q. And down at the very bottom of the second page, 10 are those your initials handwritten on it? 11 A. Yes. 12 Q. And so is this a document that you authored? 13 A. Yes. 14 Q. Now, this memo starts out saying that you had 15 spoken with Dr. Kimbrough today, the memo is 16 dated October 13, 1971. Is this the 17 conversation you referred to earlier today when 18 you offered to contact her since you had known 19 her from previous years? 20 A. No. 21 Q. What was the nature of the conversation that is 22 involved in this memorandum? 23 A. My recollection is that someone, it may have 24 been Wheeler or Kelly, had heard that there was 25 sort of a rumor floating around of a possible	1 that would be a cancer of a bladder in a rat. 2 Q. The memo goes on to say that sections of both 3 bladders were sent to NCI. Is that the National 4 Cancer Institute? 5 A. Yes. 6 Q. For diagnosis of Drs. Strauss and Katherine 7 Snell? 8 A. Yes. 9 Q. They're both affiliated with National Cancer 10 Institute as of October, 1971? 11 MR. DiMURO: I'll object to the form. 12 Q. To the best of your knowledge? 13 A. As I recall, Dr. Kimbrough said she sent the 14 slides of the bladders to the National Cancer 15 Institute and then the information she got back 16 was from Drs. Strauss and Snell. I would assume 17 they're probably institute employees, but I 18 don't know. 19 Q. Is there any significance, Dr. Levinskas, to the 20 fact that Dr. Kimbrough chose the National 21 Cancer Institute to have a second look at her 22 slides? 23 MR. DiMURO: Objection to the form. 24 You can answer if you know. 25 A. Well, two reasons: One is it's another
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1 bladder tumor in rats fed Aroclor 1260 and that 2 Dr. Kimbrough was doing and talking about it and 3 I said I knew Dr. Kimbrough and I would be 4 willing to call her to inquire further, get some 5 further information on this and this is a 6 summary of my discussion with her on the phone 7 about that study. 8 Q. Had you spoken with Dr. Kimbrough before October 9 13 of 1971 as a Monsanto employee? 10 A. Not that I recall. 11 Q. Now, the memo suggests that Dr. Kimbrough had 12 seen two lesions in bladders of rats that were 13 fed Aroclor 1260. Is that your understanding of 14 what had prompted your call to her? 15 A. I say two lesions in the memo. It may have been 16 there were lesions in the bladder, I don't know 17 if it was two or not, but she said she had seen 18 those. 19 Q. It says one of the tumors was diagnosed as a 20 malignant anaplastic carcinoma of the bladder. 21 What exactly is that? 22 A. I'm not a pathologist, but that would be -- 23 malignant is one that would be aggressive like 24 definitely cancer. And the anaplastic 25 description of the type of tissues they saw, but	1 government agency, and to an extent some of the 2 most knowledgeable people in cancer would be at 3 the National Cancer Institute. I think it's a 4 logical choice, but other than that, assuming 5 that's why she made her choice. 6 Q. Was it your understanding at the time that as 7 you refer in your memorandum here, the diagnosis 8 of carcinoma in the female was confirmed? 9 A. Yes. 10 Q. To your knowledge, was the lesion that was 11 detected in the male ever resolved? 12 A. If I remember correctly, later in the year there 13 was -- there was a meeting at Quail Roost, a 14 conference at which several people were involved 15 including people from Monsanto, Dr. Kimbrough 16 herself, people from the FDA I was told, and 17 people from Bio-Test and others and that they 18 looked at the slides and with respect to the 19 male cancer, they decided that -- the conclusion 20 as reported to me was that it was a cancer but 21 it was not related to the feeding with PCBs. 22 That was the consensus of the various people, 23 including the pathologist that looked at the 24 lesion. 25 Q. Do you have any understanding of how it's

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1 determined or on what basis it's determined that
2 cancer that's found is related to the PCBs?
3 MR. DiMURO: Object to the form.
4 A. I think there is a variety of things. The first
5 thing that would occur to me is that it says it
6 occurred in a female which died after six
7 months. Six months would be rather short for
8 induction of cancer by almost any chemical.
9 Q. I thought we were talking about the diagnosis of
10 the male?
11 A. The male is eight months; it's still a short
12 time.
13 Q. So the answer is the same with respect to the
14 male?
15 A. Yes.
16 Q. There is a reference in here to porphyria. I
17 may be mispronouncing it.
18 MR. DiMURO: Last paragraph, first
19 sentence first page?
20 MR. TURET: Yes.
21 A. I see it.
22 Q. What is porphyria?
23 A. It's the secretion of chemicals or compounds
24 called porphyrins in the urine.
25 Q. Is there any significance to that observation

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1 here in these rats, to your knowledge?
2 MR. DiMURO: I'll object.
3 A. I'm not aware there is any particular -- it's an
4 observation made. I'm not sure anybody made a
5 causal connection or a causal connection if any
6 is known. It happens with exposure to some
7 chemicals.
8 Q. And down at the very last, this is apparently
9 how Weiseburg learned about them. Who is the
10 Weiseburg that refers to?
11 A. That would be John Weisburger who at that time
12 was with the National Cancer Institute.
13 Actually, it should be Weisburger -- no, it's
14 Weiseburg. I stand corrected, it's Weiseburg.
15 Q. He was a pathologist with the National Cancer
16 Institute?
17 A. Yes.
18 (Memo dated 12/6/74
19 marked as Exhibit No. 2
20 for identification.)
21 MR. O'CONNOR: Off the record.
22 (Discussion off the record)
23 MR. TURET: I'm showing the witness a
24 document that has been marked in a previous
25 deposition in another litigation as Deposition

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1 Exhibit Levinskas 10. This is a December 6,
2 1974, memorandum from Frederick Johannsen to
3 George Roush. Dr. Levinskas, have you ever seen
4 this document before?
5 A. Yes.
6 Q. And had you seen it before the deposition in
7 which it was marked as an exhibit?
8 A. I'm quite sure that I did.
9 Q. Who is Frederick Johannsen?
10 A. A toxicologist who was reporting to me working
11 at Monsanto.
12 Q. Now, this refers to a telephone conversation
13 between Dr. Kimbrough and you. I don't know if
14 I asked you this last time, were you in regular
15 contact with Dr. Kimbrough through the late
16 1974, into 1975 period?
17 MR. DiMURO: I'll object to the
18 form.
19 A. We had contacts following her visit to Monsanto
20 to talk about her 1260 study. I wouldn't
21 characterize them as regularly, but I would say
22 now and then.
23 Q. When did Dr. Kimbrough first come to Monsanto to
24 share with you her findings about 1260?
25 A. My best recollection it was probably in the

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1 latter part of '74, mid to latter part of '74,
2 but I really don't recall a specific date.
3 Q. And was that a meeting at which you were
4 actually present?
5 A. Yes.
6 Q. Who else was present, from Monsanto in
7 particular?
8 A. I don't recall everyone else that was present
9 there. Dr. Kelly was there. Elmer Wheeler was
10 there, and I suspect there were several other
11 people or some other people from the operating
12 units, but I don't -- I don't recall the makeup
13 of the meeting.
14 MR. LIPSHUTZ: Would you identify
15 that document again for me?
16 MR. TURET: This is one of the ones
17 that's going to be faxed your way. I'm waiting
18 for the other copies to be bought in so I can
19 fax you the bunch. But if you want, we can send
20 along this first set of documents to you and
21 supply the rest to you later.
22 MR. LIPSHUTZ: I don't need to see
23 the documents right now. What was that marking,
24 though?
25 MR. TURET: This was produced by

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1 Monsanto as an exhibit to one of the transcripts
2 that was requested.
3 MR. LIPSHUTZ: I'm sorry, I'm not
4 hearing. Was that marked in connection with
5 this deposition?
6 MR. TURET: It has been now as
7 Levinskas 2, but it was previously marked as
8 Levinskas 10 in another litigation.
9 MR. LIPSHUTZ: Now I understand.
10 That's what confused me. Okay.
11 Q. Dr. Levinskas, there is a comment here about Mr.
12 Johannsen having made a call to Dr. Sidney
13 Siegel at NCI. Do you know who Dr. Siegel is?
14 A. He was one of the administrative people and
15 researchers at the National Cancer Institute.
16 Q. Was he the person who one would contact at the
17 time at the National Cancer Institute to find
18 the status of toxicological studies being done?
19 A. He would be one of the people we could call. We
20 had the advantage that I had met him, didn't
21 know him well, but I had met him, so he agreed
22 to call him.
23 Q. Were you aware as of early December of 1974 that
24 NCI was conducting studies like the one
25 described in this memo?

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1 MR. DiMURO: Object to the form.
2 A. I think, it would seem to me the memo is fairly
3 self-explanatory, in talking to Dr. Kimbrough,
4 she thought NCI was doing a study on Aroclor
5 1254, and I asked Dr. Johannsen if he would call
6 Dr. Siegel and inquire, see if he could get some
7 information about that study.
8 Q. Did the information about the status of that
9 study come back to you as well others?
10 A. I would have seen Dr. Johannsen's memo and that
11 was the distribution as indicated on that memo
12 that he would have made.
13 Q. Down at the bottom there is a handwritten note
14 signed WR at the bottom. Who is WR if you know?
15 A. I do not know.
16 Q. Do you know whether it's William Richard?
17 A. It could be, but I don't know.
18 Q. Do you have any understanding of what those
19 handwritten notes refer to?
20 A. I don't know that I've seen the handwritten
21 notes before, but I don't have any knowledge of
22 what they are or why they were put there.
23 Q. What was Aroclor 1016 if you know?
24 A. It was a PCB which had a lower average of degree
25 of chlorination than Aroclor 1254 and it was

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1 being looked at as a possible replacement for
2 the other Aroclors, the more highly chlorinated
3 Aroclors.
4 Q. And what was MCS 1043 if you know?
5 A. MCS is an acronym for Monsanto Company Sample,
6 and I don't know without -- I'm sure the records
7 are somewhere, but I don't know what the number
8 1043 would be without checking out something
9 else. I just don't know.
10 (Letter dated 12/17/74
11 marked as Exhibit No. 3
12 for identification.)
13 Q. For the record, the document that has been
14 marked as Levinskas 3 is a December 17, 1974,
15 letter reportedly from Dr. Levinskas to Dr.
16 Donovan Gordon of IBT and has an enclosure, a
17 letter from Dr. Kimbrough and some other
18 materials and it's Bates number MAE 051687
19 through 694. Just so you know, Dr. Levinskas,
20 you're welcome to read the whole document
21 beginning to end, but I would also refer you to
22 the parts that I would ask you about. Have you
23 ever seen that document before, sir?
24 A. Yes.
25 Q. What is it?

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1 A. After Dr. Kimbrough came to Monsanto, I asked
2 for further information about the details of
3 this study and this is the information that she
4 sent to me.
5 Q. Okay. The cover letter on this is forwarding
6 the information you received onto Dr. Gordon?
7 A. Yes.
8 Q. And what was Dr. Gordon's position with IBT at
9 the time?
10 A. He was a pathologist up there.
11 Q. And down at the CC section on that cover letter
12 there is a reference to Dr. JC Calandra. Who is
13 Dr. Calandra?
14 A. He was the owner at that time, the president of
15 the laboratory.
16 Q. Now, there is a reference here to a subsequent
17 discussion with them that's coming up. What
18 subsequent discussion was being referred to, if
19 you know?
20 A. We were planning -- I say we were planning. It
21 was our intention that Dr. Gordon would look at
22 the slides on the studies Monsanto had done at
23 IBT on Aroclor 1260 to look at those lesions
24 again, and to go down and look at the lesions
25 that Kimbrough had described. And have

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1 Kimbrough look at slides from the Monsanto
2 studies so that we could attempt to resolve the
3 apparent differences in observations between the
4 two studies.
5 Q. And was there a meeting set up for that purpose?
6 A. Yes.
7 Q. When was that meeting to take place, if you
8 know?
9 A. Well, it would have been subsequent to this. I
10 think it probably was early '75.
11 Q. Now, there is a reference down in the last
12 paragraph right at the end that you anticipate
13 that Dr. Gordon, Dr. Kimbrough and Bob Squires
14 as well as you would attend. Who was Bob
15 Squires?
16 A. Bob Squires was a pathologist. I believe he was
17 at the National Cancer Institute at that time.
18 Q. Flipping to the next page, the one Bates
19 numbered MAE 051688, is that a letter you
20 received from Dr. Kimbrough?
21 A. Yes.
22 Q. When she talks about a brief outline of the
23 experiment that, I guess Aroclor 12-72-A, is
24 that the document that follows it?
25 A. Yes.

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1 Q. Now, flipping forward, I guess Bates number MAE
2 051691, says at the top, Preliminary List of
3 Microscopic Findings?
4 A. Uh-huh.
5 Q. Down in the section that says liver, under tumor
6 type?
7 A. Yes.
8 Q. First one is nodular hyperplasia. What is that?
9 A. It's a swelling of the structures within the
10 cell, but they're like nodules, they're little
11 lumps and they're scattered. It's not a large
12 mass.
13 Q. And do nodular hyperplasias occur spontaneously?
14 A. They can.
15 Q. You notice under the control section it's
16 reported there were three nodular hyperplasias
17 and under the experimental rats there are seven?
18 A. Yes.
19 Q. Is there any significance to the fact there is
20 seven in the rats that were exposed to Aroclor
21 1260 versus three in the control?
22 MR. DiMURO: Object to the form to
23 the extent you're asking for expert testimony,
24 I'm going to direct him not to answer. If you
25 want his opinion, that's fine.

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1 MR. TURET: I'm asking for his
2 opinion.
3 A. In terms of the number of animals involved, I
4 don't think that's a significant difference.
5 Q. Next section says nodular hyperplasia and
6 hepatomas. What are hepatomas?
7 A. A hepatoma is a liver tumor which is, at that
8 time was generally, and I think today is also
9 considered to be a benign tumor.
10 Q. And are those hepatomas tumors that occur
11 spontaneously in humans or are they only as a
12 result of exposure --
13 MR. DAVIDSON: In humans?
14 Q. Let me rephrase the question. Are hepatomas
15 benign tumors that occur in Sherman strain rats
16 spontaneously or do they occur only as a result
17 of some other phenomenon?
18 MR. DiMURO: I'll object to the
19 form. If he has a personal opinion --
20 A. The strain of rats that Kimbrough used, which is
21 from -- this document says obtained from the
22 NCDC animal farm at Lawrenceville, and the
23 Sherman strain, I have no knowledge of the
24 Sherman strain, I have not worked with them. I
25 don't know what the incidence would be of

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1 hepatomas that do occur or can occur
2 spontaneously in some animals, in some rats, as
3 evidenced by the fact -- well -- it's difficult
4 because she combined nodular hyperplasia and
5 hepatomas, so I don't know, of that 154 in the
6 high level, I don't know how many hepatomas
7 alone, or whether it's 153 nodular hyperplasias
8 and one hepatoma.
9 Q. Do you have any understanding of how nodular
10 hyperplasia here can be in a separate category
11 and not be lower than a category with both
12 nodular hyperplasia hepatoma?
13 A. I don't know how she put this table together or
14 what her reasoning was or the background. All I
15 know is what she provided in this table.
16 Q. Do you have any understanding personally as to
17 whether there is a significance to seeing 154
18 nodular hyperplasias and hepatomas in the rats
19 exposed to the Aroclor 1260 as opposed to one in
20 the control group?
21 MR. DiMURO: Object to the form. You
22 can answer.
23 A. Obviously the number is greater and on a
24 statistical basis I would expect it to be
25 greater. It's not statistically significant.

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1 Q. Can one derive from looking at that number that
2 nodular hyperplasia and hepatomas increase in
3 experimental rats is caused by the Aroclor 1260?
4 MR. DiMURO: I'll object to the
5 form. You're asking for expert testimony on one
6 study, on one person's conclusions.
7 MR. TURET: I'm asking for his
8 opinion based on this. I'm not asking for
9 expert testimony.
10 A. There is no question but 154 is markedly greater
11 than one. It's a statement of fact.
12 Q. Yes, I understand one is a larger number than
13 the other. Did you hear my question? Can you
14 derive from that, just from the numbers that
15 fact that there were 154 in the rats exposed to
16 Aroclor 1254 versus one in the non-exposed
17 control group, does that translate into the fact
18 that Aroclor 1260 caused the nodular hyperplasia
19 and hepatomas in the exposed rats?
20 MR. O'CONNOR: Object to the form.
21 Just so the record is clear, Craig, I think
22 you're referring to Aroclor 1260. You mentioned
23 Aroclor 1254.
24 MR. TURET: That was my mistake. I
25 intended to say 1260.

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1 A. I think the basic premise is correlation is not
2 causation. Correlation and causation may go
3 together. Correlation does not prove
4 causation. So there is no question that a
5 larger number of observations that were made in
6 the treated animals, but it is going beyond the
7 data that that's the conclusion one is drawing,
8 but the data are consistent with that conclusion
9 but they don't necessarily make that a
10 conclusion.
11 Q. Moving onto the next item, hepatocellular
12 carcinomas, what is hepatocellular carcinomas?
13 A. Well, hepato, is a liver cell and the carcinoma
14 is a cancer of the liver.
15 Q. And what is an adenofibrosis?
16 A. Adenofibrosis, I'm not that good a pathologist,
17 I don't think that's a tumor. It may be a
18 fibrous tissue tumor, but it's not been
19 considered a carcinogen, but -- I would like to,
20 if I might add, in one bladder papilloma which
21 is a tumor, you will see one in the control
22 animal and none were seen in the treated
23 animals.
24 Q. I'm not going to ask anything further on that
25 one.

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1 (Letter dated 1/14/75
2 marked as Exhibit No. 4
3 for identification.)
4 Q. For the record, I'm showing the witness a
5 document that's dated January 14, 1975, which
6 purports to be a letter from Dr. Levinskas to
7 Dr. Gordon of IBT. It's a document that was
8 marked as Deposition Exhibit Levinskas 13 in a
9 prior deposition. Doctor, have you seen the
10 document that's been presented to you before?
11 A. Yes.
12 Q. And although there is no signature line at the
13 bottom, is this a letter that you sent to Dr.
14 Gordon?
15 A. Yes.
16 Q. Now, the letter purports to send along three --
17 are they studies, toxicological studies?
18 A. They're reprints of studies.
19 Q. And is it fair to say these reprints were sent
20 along to Dr. Gordon in anticipation of a meeting
21 that he and Dr. Richter were going to have with
22 Dr. Kimbrough and Dr. Squire?
23 A. Yes.
24 Q. Is this leading up to the same meeting that was
25 referred to in the letter we discussed a couple

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1 moments ago?
2 A. Yes.
3 Q. Did you personally select the three reprints
4 that were going on to these gentlemen?
5 A. I don't recall how I got these reprints, but we
6 had them and they talked about these things in
7 the first sentence, due to liver tumorigenesis
8 of PCBs, and since that was a subject of the
9 meeting, I thought it was prudent to inform them
10 of what was published in the literature
11 regarding the subject that was under discussion.
12 Q. Did you select these three reprints as being
13 leading authorities at the time on the issue of
14 liver tumorigenesis?
15 A. I did not select them on that basis. My
16 recollection is these were reprints that we had
17 or had been called to our attention and,
18 therefore, I included them or sent them on to
19 Don Gordon.
20 Q. So is there any particular significance in the
21 fact that these three articles are here as
22 opposed to other articles that might have
23 covered the same topics?
24 MR. DiMURO: I'm going to object to
25 the form. I think he told you twice why he

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1 selected them, but you can answer.
2 A.I think these were available and known to us.
3 They were not selected from a larger bailiwick.
4 They might have been called to our attention by
5 Kimbrough. I don't know how they came to my
6 attention.
7 Q.Did the meeting that's referred to here as a
8 January 31, 1975, meeting ultimately take place?
9 A. Yes, the meeting did take place.
10 Q.Did you participate in that meeting?
11 A.I attended.
12 Q.Did Drs. Richter and Gordon also attend?
13 A. Yes.
14 Q. Was Dr. Kimbrough there as well?
15 A. Yes.
16 Q.How about Dr. Squire?
17 A. Yes.
18 (Memorandum dated 1/31/75
19 marked as Exhibit No. 5
20 for identification.)
21 Q. For the record, Levinskas 5 is a two-page
22 memorandum that is entitled at the top, Aroclor
23 1260 meeting at NCI, January 31, 1975. It's
24 Bates number MAE 027812.
25 Dr. Levinskas, have you seen the

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1 document that's just been shown to you before
2 today?
3 A. Yes.
4 Q.Down at the bottom of the second page there are
5 the three initials G-J-L. Are those your
6 initials?
7 A. Yes.
8 Q. Was that a document that you authored?
9 A. Yes.
10 Q. Now, down in the paragraph that begins, control
11 animals in this study, the sense is control
12 animals in this study have very clean livers.
13 What did that mean at the time you wrote it?
14 A.I would say the next sentence is explanatory,
15 which says, the incidence of spontaneous
16 changes, in other words there are differences
17 that occur in animals as they age, so the
18 incidence of spontaneous change was quite low.
19 And then my next sentence, I say insofar as
20 could be determined, Dr. Kimbrough has no data
21 from other two-year studies which could be used
22 to assess the spontaneous tumor incidence of
23 this strain of rats. There are differences in
24 the types of pathology and the incidences in
25 various strains of rats. And if one is using a

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1 rat consistently or regularly, one develops a
2 background information and we had no such
3 background information against which to assess
4 the data that Kimbrough presented.
5 Q.What did you mean by the sentence that follows
6 that, despite the absence of historic control
7 data, her results would be hard to refute?
8 A.I think any time you have an adverse finding of
9 any sort in an animal study and you try to
10 repeat it, and if you don't repeat it, it
11 doesn't negate the fact that it was seen the
12 first time and that's why I say her results
13 would be hard to refute.
14 Q.The following page, top paragraph, you were
15 referring to you and Dr. Gordon and Dr. Richter,
16 it says, after we left and they conceded the
17 occurrence of hepatic carcinomas, there was
18 little else to do. Do you have any recollection
19 one way or the other as to whether Drs. Gordon
20 and Richter conceded the occurrence of hepatic
21 carcinomas in that study?
22 A.The recollection I have is when we left, as we
23 were going back to the airport, they said, and
24 they were looking at some of the selected
25 tissues from Kimbrough's study that a few of the

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1 ones they saw, there was no question but the
2 changes in those livers were more severe than
3 what they had seen in the IBT studies and that
4 some of those were hepatic carcinomas.
5 Q.In the Kimbrough study?
6 A. Yes.
7 Q.Now, there is also a reference in the following
8 paragraph to the only palliative course of
9 action would be to publish our two-year study on
10 Aroclor 1260 before Dr. Kimbrough gets into
11 print. That was your assessment at the time?
12 A.My recollection was that if we published
13 simultaneously or almost simultaneously, both
14 studies, the one that was negative and the one
15 that was positive, we were presenting all the
16 information available, and people could draw
17 their own conclusions. Once she has published a
18 study indicating it causes the cancer, for us to
19 go out and say we did a study and it's negative,
20 you can't offset the fact that somebody has
21 already said it caused cancer and the idea is
22 lodged in people's minds.
23 Q.I take it the next sentence, this would at least
24 blunt the impact of her publication, that
25 remains your view today?

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1 A. Yes.
2 (Letter dated 3/24/75
3 marked as Exhibit No. 6
4 for identification.)
5 Q. Dr. Levinskas, I've just shown you a document
6 that's been marked in this litigation as
7 Levinskas 6, marked in a prior litigation as
8 Levinskas 15. The cover letter, at least, is a
9 March 24, 1975, letter from Dr. Gordon to you.
10 And there are some enclosures, some trip
11 reports. Do you remember seeing this document
12 before today?
13 A. Yes.
14 Q. Do you remember receiving it from Dr. Gordon?
15 A. Yes, it came in the mail.
16 Q. And is this referring to the same meeting with
17 Dr. Kimbrough that we've been discussing now for
18 a little while?
19 A. Yes.
20 Q. Dr. Gordon, the first trip report is one which
21 you'll see if you flip on a few pages ahead that
22 was prepared by Dr. Gordon, at least has his
23 signature at the bottom?
24 A. Yes.
25 Q. Dr. Gordon states in the first page of his trip

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1 report, the purpose of the meeting was to review
2 the slides and data from a 23-month oral feeding
3 study with Aroclor 1260 in rats that was
4 conducted by Dr. Kimbrough while at the EPA.
5 Where was Dr. Kimbrough now as of February of
6 1975?
7 A. The Center for Disease Control, when I first met
8 Kimbrough was under the Public Health Service,
9 and then subsequently there was -- I don't know
10 the administration shifts, but when the
11 Environmental Health Science was created and so
12 forth, and EPA, they juggled around the
13 relationships and I don't know whether this
14 statement while she was at EPA is correct or not
15 in this case. But we met at the National Cancer
16 Institute and when I first met Kimbrough she was
17 with the Public Health Service and was stationed
18 at Chamblee, Georgia, outside of Atlanta. I
19 think she was in there rather than -- prior to
20 EPA, but location is somewhat irrelevant, I
21 think.
22 Q. I understand what you're saying. The purpose of
23 the meeting as described by Dr. Gordon, is that
24 the same as your understanding of the purpose of
25 that meeting?

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1 A. Yes.
2 Q. Down below there is a reference to in summary --
3 MR. DiMURO: What page?
4 MR. TURET: Same page, further down.
5 A. About seven or eight lines from the bottom?
6 Q. Right. Is your understanding of her study the
7 same as what's reported in that summary?
8 MR. DiMURO: Are you asking whether
9 he agrees with that line?
10 MR. TURET: Yes, the sentence starts
11 in summary, and ends with test animals, period.
12 A. The information there is consistent with the
13 earlier exhibit where Dr. Kimbrough sent me the
14 table you questioned me about the hepatomas.
15 And that is consistent with that table. They
16 did not look at all the slides from all the
17 animals. So if you read that, Dr. Gordon's
18 statements to say that in summary, Kimbrough
19 makes statements, and these are the statements,
20 then that's correct. If you are reading into
21 this that Dr. Gordon is saying he saw the high
22 incidence and all those other things in the
23 Kimbrough study, that's incorrect because he
24 didn't look at enough slides to make that
25 statement. So I guess it's how do you want to

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1 read the words, the context in which you're
2 reading.
3 Q. So you're saying that Dr. Gordon didn't see
4 enough slides to be able to say one way or the
5 other what the Kimbrough study showed?
6 A. No, I'm saying that the statement that Kimbrough
7 found a rather high incidence of all these
8 things, he didn't look at enough slides from
9 enough animals to know what the incidence is.
10 He did see some of these things, hyperplastic
11 nodules and neoplastic hepatomas, carcinomas,
12 lesions of livers, he did see some of all these
13 things, but not enough to have an idea of
14 whether it was high or low or intermediate level
15 of incidence.
16 Q. I understand. And is it your understanding that
17 Dr. Squire of the National Cancer Institute
18 reviewed all the slides from the Kimbrough
19 studies?
20 A. I don't know how many he looked at. --
21 Q. Do you have an understanding as to whether he
22 ultimately concurred in her findings?
23 A. I think the statement here, he says, the slides
24 were subsequently reviewed by Dr. Squire.
25 That's my understanding that she went to Dr.

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1 Squire and he helped her with the classification
2 and review of the slides.
3 Q. As it's your understanding also as Dr. Gordon
4 reported that Dr. Squire concurred with her
5 findings?
6 A. Yes, because she used a classification scheme
7 that Dr. Squire had helped develop just prior to
8 this.
9 Q. Okay. Let me flip ahead to the trip report from
10 Dr. Richter which is the last two pages of this
11 document. Is it your understanding that Dr.
12 Gordon -- let me withdraw the question. Is it
13 your understanding that there was some
14 discrepancy between one person's definition of a
15 carcinoma and another person's definition of a
16 carcinoma among this group of people who
17 evaluated the slides?
18 A. I think the definition of what is a carcinoma or
19 not is influenced by several things, which is a
20 person's experience and it's a judgmental
21 issue. And that there are differences of
22 opinion among pathologists when they look at
23 slides. That's one reason they review them to
24 come to some sort of a consensus agreement.
25 Q. Is it your understanding in this instance that

1 051695 to 696. Do you recognize the document?
2 A. Yes.
3 Q. What is it?
4 A. It's a memo from of a meeting we had with Dr.
5 John Weisburger -- it is Weisburger -- who used
6 to be at the National Cancer Institute and was
7 currently at the American Health Foundation in
8 Valhalla, New York.
9 Q. What was the name of that organization?
10 A. It's the American Health Foundation.
11 Q. Okay. And that was essentially a letter you
12 wrote to Dr. Weisburger; is that right?
13 A. Yes.
14 Q. Now, down at the bottom of the page, first page,
15 there is a reference to, our concern -- I take
16 it that's concern of the medical department of
17 Monsanto based on Dr. Kimbrough's study?
18 A. Yes.
19 Q. Now, it asks for Dr. Weisburger's recommendation
20 as to what should be done as a result of this
21 information and thoughts as to how you might
22 proceed. Was Dr. Weisburger actually retained
23 and paid for his recommendations to your
24 knowledge?
25 MR. DiMURO: Objection to the form;

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1 there were differences of opinion as to whether
2 there were or were not carcinomas in the slides
3 taken from the Kimbrough study?
4 A. I think that it's already been said in the
5 summaries that the lesions seen in Kimbrough's
6 study were more advanced than those seen in the
7 IBT study. I think there was general agreement
8 on that.
9 Q. That wasn't the question I asked, though. Do
10 you agree that Dr. Richter concurred in Dr.
11 Kimbrough's findings that there were carcinomas
12 in the slides from the Kimbrough study?
13 A. I thought I just said that.
14 Q. And do you also agree that Dr. Gordon also found
15 carcinomas in the slides from Dr. Kimbrough's
16 study?
17 A. I think I said that.
18 Q. And Dr. Squire also concurred with Dr.
19 Kimbrough's findings?
20 A. Yes.
21 (Letter dated 5/1/75
22 marked as Exhibit No. 7
23 for identification.)
24 Q. Dr. Levinskas, you're now being shown a two-page
25 document dated May 1st, 1975, Bates number MAE

1 paid by who?
2 MR. TURET: Paid by Monsanto.
3 A. The last part first, to my knowledge we did not
4 pay Dr. Weisburger anything to my knowledge.
5 John had been with the National Cancer
6 Institute. I'd known him for some time and had
7 dealings with him earlier. When the question of
8 carcinogenics came out, we turned to several
9 attempts to try to resolve the questions as to
10 differences that arose between our studies and
11 Kimbrough's. And among the people I contacted
12 was John Weisburger who had left the National
13 Cancer institute and was up here in New York.
14 John had a very busy schedule and he said he was
15 flying through from the East Coast to the West
16 Coast somewhere and he had a stop in St. Louis
17 and so he agreed to meet with us at the airport
18 in St. Louis. And if I recall correctly, Dr.
19 Roush and I drove up to meet him and we talked
20 for a couple hours in the airport between
21 flights, and there is a listing of the
22 information I sent to him. I said we would
23 appreciate if you would review this information
24 and on the basis of it give us your
25 recommendations as to what steps we might take

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1 to grapple with the issue of carcinogens. If
2 you look at the last paragraph, I say we shall
3 be waiting at the airport to meet your flight
4 and promise to get you on the next flight. We
5 did meet with him. I do not have any
6 recollection that he ever came back to us with
7 any comments other than saying I have no further
8 recommendations to make on what you're doing.
9 Other than that sort of casual comment, I don't
10 recall that he had anything else to say about
11 it.
12 MR. O'CONNOR: Are you saying the
13 meeting didn't take place?
14 A. No, it did. We met at the airport a couple
15 hours, but we didn't have any formal report that
16 I'm aware of or any written comments as to what
17 we should be doing in addition to what we were.
18 Q. You don't know of any informal comments?
19 A. He had no additional recommendations for what we
20 were doing.
21 MR. TURET: Off the record a minute
22 then.
23 (Brief recess.)
24 MR. TURET: Back on.
25 (Report dated 3/24/75)

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1 marked as Exhibit No. 8
2 for identification.)
3 MR. O'CONNOR: This is Levinskas 8?
4 MR. TURET: Yeah.
5 Q. For the record, this document is a report to
6 Monsanto Company dated March 24, 1975, IBT
7 report Bates numbers MAE 001342-56.
8 MR. DiMURO: Go ahead, shoot.
9 Q. Dr. Levinskas, have you ever seen this report
10 before today?
11 A. Yes.
12 Q. Did you receive it at or about March of 1975
13 from IBT?
14 A. I don't recall when I received it.
15 Q. Do you remember -- let me withdraw that
16 question. What was the purpose behind this
17 study?
18 A. It was in the comments I just made about the
19 meeting with Dr. Weisburger. When Kimbrough
20 raised the question of carcinogenicity of
21 Aroclor 1260 and her results were different from
22 what IBT had found, and since we had looked at
23 only a small section of the animals in the IBT
24 study, which was customary for studies of that
25 nature at that time, we asked IBT to go back and

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1 look at all of the available livers. The
2 practice would be to look at the tissue, and if
3 there were no marked abnormalities grossly that
4 they would only look at a sample to see what
5 sorts of changes. So we ask them to go back and
6 look at all of the livers that were available
7 from those three studies. And this is the
8 pathological evaluation of additional, the extra
9 liver sections from that study, so this would be
10 a report of the microscopic examinations of
11 liver tissues from that study.
12 Q. Now, this one was focused on Aroclor 1254. To
13 your knowledge, were there similar additional
14 studies done with regard to Aroclor 1260?
15 A. Yes.
16 Q. And also 1242?
17 A. Yes.
18 Q. Now, we're looking at a study that's dated March
19 24, 1975. To your knowledge, was there a
20 previous version of this report with terminology
21 that was different?
22 MR. DiMURO: Object to the form, if
23 you want to tell me what version means.
24 MR. TURET: Perhaps Dr. Levinskas, if
25 he understands my question, he can answer.

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1 MR. DiMURO: Sure.
2 A. As I understand, these were additional liver
3 sections looked at from the two-year study which
4 is conducted prior to this reexamination. So
5 there is an earlier report and there is this
6 report.
7 Q. The earlier report, was that done in about 1971?
8 A. '71 or '2 probably yes.
9 Q. Was a previous version of the March 24, 1975,
10 report that used different terminology?
11 MR. DiMURO: Object to the form
12 again. You can answer.
13 A. My recollection is that and this is where the --
14 I was handed two sets of reports from IBT. on
15 each of those three studies. Each of the
16 reports dealt with the additional evaluation of
17 tissues. And I made a side by side comparison
18 of the two versions of those reports. I don't
19 recall which was the first or which was the
20 second in that sense of timing or sequence.
21 Q. When you talk about first and second, you're
22 referring to the 1971-ish reports?
23 A. No, I'm talking about two versions of these
24 additional slides.
25 Q. Why were there two separate versions of these

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1 two additional slides?
2 A. I can't answer that. I don't know.
3 Q. So just to see if I'm understanding you
4 correctly, you were handed two different reports
5 that reflected IBT's reevaluation of the slides
6 relating to Aroclor 1254?
7 A. Yes.
8 Q. Did they cover the same undertaking by IBT?
9 A. Yes.
10 Q. And they were not identical?
11 A. Word for word, no, they were not identical.
12 Q. What do you remember were the differences
13 between the one report relating to Aroclor 1254
14 dated March 24, '75 and the other?
15 A. My recollection is there were three reports that
16 came in, as I said, and I don't have the
17 documents, and I did a point -- I was asked to
18 do -- I was handed two sets of reports and I was
19 asked to compare them and look at them and I
20 made a point by point comparison of them. And
21 in the second version, IBT had changed the
22 wording on two of the three reports and I said
23 to them, since the findings are similar in all
24 three reports and you used the same language the
25 first time, then you changed two the second

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1 time, why don't you change all three the second
2 time, just to be consistent.
3 Q. I know I asked this already. Do you have any
4 recollection as to why there were two reports on
5 the same undertaking at the same time?
6 A. I have no idea where they came from, how they
7 came. I was handed them and asked to review
8 them.
9 Q. Let me direct your attention, I guess it's Bates
10 number MAE 001344, sentence, in conclusion,
11 Aroclor 1254 does not appear to be carcinogenic
12 in rats fed for two years at levels up to and
13 including 100 parts per million. See that
14 sentence?
15 A. Yes.
16 Q. Do you have any recollection as to whether there
17 was anything in that sentence that was different
18 in one of the reports versus the other?
19 A. My general recollection is that the earlier
20 reports, that the earlier version said something
21 like it was tumorigenic, and this one as you
22 read it.
23 Q. When you say the earlier version, are we talking
24 about the 1971 one?
25 A. No, talking about the other version of this

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1 report.
2 Q. The other version of this one, so one of them
3 said tumorigenic and the other one said does not
4 appear to be carcinogenic?
5 A. Yes.
6 Q. And the both relating to the studies done on
7 Aroclor 1254 by IBT?
8 A. Yes.
9 Q. At the same time?
10 A. Yes.
11 Q. The same studies done by IBT, the same
12 conclusions?
13 A. Yes.
14 (Letter dated 8/4/75
15 marked as Exhibit No. 9
16 for identification.)
17 MR. TURET: For the record, this
18 document that has been marked Levinskas 9 is an
19 August 4, 1975 -- actually, wait a minute. I
20 think I mixed two of them. There are two
21 letters that went together. Can we mark that as
22 Levinskas 9-A.
23 (Letter dated 7/18/75
24 marked as Exhibit No. 9-A
25 for identification.)

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1 MR. DiMURO: You want him to look at
2 9-A first?
3 MR. TURET: Yes.
4 Q. Levinskas 9-A is a July 18, 1975, letter from
5 Dr. Levinskas to Dr. Calandra of IBT and Bates
6 numbered MAE 051966. Focusing on Levinskas 9-A
7 first, Dr. Levinskas, have you seen this
8 two-page letter before today?
9 A. Yes.
10 Q. Is this a letter that you wrote to Dr. Calandra
11 of IBT on or about July 18, 1975?
12 A. Yes.
13 Q. In the first -- I guess it's the second
14 paragraph, where -- first refers to the two
15 instances in which "slightly tumorigenic" was
16 changed to "does not appear to be carcinogenic,"
17 is that the reference to what you described a
18 moment ago?
19 A. Yes.
20 Q. In this letter did you ask Dr. Calandra to
21 change the conclusion from "slightly
22 tumorigenic" to "does not appear to be
23 carcinogenic"?
24 A. I say may we request that the Aroclor 1254
25 report be amended to say does not appear to be

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1 carcinogenic, yes. 2 Q. And that you requested it be changed? 3 A. I said may we request it. 4 Q. That's a yes? 5 A. I asked him if he would make a change. I didn't 6 say he had to. 7 Q. Down below there is a reference to, with Aroclor 8 1254 confusion is compounded, appears to be 9 confusion regarding the numbering of the 10 animals. Do you have any recollection of what 11 that confusion involved? 12 A. If you look at the last page, there should be a 13 third page attached that was a table. And this 14 is the basis of which I made the request. If 15 you look at the left column, Aroclor 1260, 54, 16 42, and this hepatomas that they did describe in 17 the original study, they had an incidence in the 18 three study respective, of three, six and 19 seven. And he says slightly tumorigenic in 20 every instance. In the second report that I was 21 asked to compare they had made the change in 22 1260 from slightly tumorigenic to does not 23 appear to be carcinogenic. They made a similar 24 change for 42. And 54, they kept the original 25 terminology, slightly tumorigenic. And I was	1 supplemental report number one and two? 2 A. It's the same thing. If you look at number 600 3 to 800 under 1260 and so forth, then I say this 4 is -- in 42, you've got these numbers. And in 5 1260 you've got these numbers. It's the same 6 transposition, to me, that the threes, sevens 7 and these two blocks of numbers are. In a 8 shorthand manner, I'm saying go back and look at 9 your numbers. These two go together and these 10 two go together. I don't know whether this is 11 the 1242 or that's the 1242, but somehow you've 12 inverted two sets of numbers and got this and 13 this, and I'm saying did this one want to go 14 this way or did this one want to go that way. 15 I'm not sure which it is but those two don't 16 match. 17 Q. Okay, and we're in a written deposition. That 18 entire discussion won't make any sense. Tell me 19 if this is correct: Essentially IBT swapped 20 some numbers by mistake, some of the results 21 that should have been for 1242 showed up for 22 1260 or vice versa? 23 A. I don't know what happened, but my surmise would 24 be somehow the 1242 got mislabeled as 1260 and 25 the 1260 got mislabeled as 1242 in one or the
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1 trying to say to Dr. Calandra, if you made this 2 change for those three, or change for two of the 3 three, why not be consistent and make the change 4 for all three. If you look at hepatomas under 5 1260, the number they give for 1260, they say 6 three, and in the second set of reports it says 7 seven. You look at the last line and you see a 8 seven and a three. And I don't have the 9 original records, but I say you're not 10 consistent. These groups are mixed up. Either 11 1260 is in the wrong place in one or the other 12 columns. I could spend a lot of time going back 13 over the numbers if you want, but that's the 14 gist of what I was try to convey in a shorthand 15 form to Dr. Calandra that if you had 3 in the 16 1260 column once and 3 in that column the next 17 time, and 42 has a 7 in that column and a 3 in 18 that column. 19 Q. This is the report on the very same studies? 20 A. Yeah, you've got the numbers mixed up or 21 something. I don't know what you've done. It 22 doesn't make sense to me. 23 Q. What is, the column that you've listed as range 24 of test animal numbers, what is it you're trying 25 to convey there the differences between	1 other sets. Instead of ABC, they have ABC and 2 CBA. And I don't know whether the A and C are 3 wrong on the top or the C, A on the bottom is 4 wrong, but it should be ABC and ABC instead of 5 ABC and CBA. 6 Q. It's a pretty sloppy set of reports for an 7 important study, is it not? 8 MR. DiMURO: Objection. 9 A. I have no comment. When I looked at the reports 10 I looked at what I called internal consistency, 11 does it make sense. And the first thing is they 12 don't match. So I got a right hand and a left 13 hand and I say which one is it and I don't 14 know. It could be a typo error, I don't know 15 what the problem is, I'm just calling it to your 16 attention. 17 Q. Would you expect a properly done study to be 18 internally consistent? 19 A. Yes. 20 MR. DiMURO: Objection. 21 Q. Let me direct your attention to Levinskas 9 22 which is an August 4, 1975, letter from Mr. 23 Calandra to you, Bates numbered MAE 052975. 24 Have you seen this document before? 25 A. Yes.

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1 Q. Is that a letter you received from Dr. Calandra 2 back in August of 1975? 3 A. Yes. 4 Q. And Dr. Calandra's reference here to amending 5 his statement in the last paragraph, Page 2 of 6 Aroclor 1254 to state does not appear to be 7 carcinogenic instead of slightly tumorigenic, is 8 that a response to your request? 9 A. Yes. 10 Q. And he also down below refers to what you 11 pointed out about the transposition of the 12 numbers. There is also a reference in Paragraph 13 4 of that letter to discrepancies in animal 14 identification numbers. Is that something 15 different than what we've discussed already? 16 A. I would have to have the reports before me to be 17 sure, but he says in the report on reevaluation 18 of the additional sections dated March '75, 19 there was a typo on Page 1 which referred to 20 1260 instead of 1254. Perhaps that is the basis 21 of your confusion. So he's saying we could have 22 mixed up the 54s and 60s. I don't recall 23 specifically what follows on this thing. I 24 don't have a recollection, but he does 25 acknowledge, or I think he acknowledges that I	1 know if you would call that adverse publicity. 2 Q. I'm talking about specifically the request from 3 Monsanto that there be a change to this 4 particular report. Do you remember seeing that 5 in a newspaper or magazine article? 6 A. I can't recall that I did. I may have. I don't 7 recall specifically. 8 Q. Do you remember anyone bringing to your 9 attention that you were named in the magazine or 10 newspaper article for having requested a change? 11 MR. DiMURO: I didn't hear the 12 question. 13 (Question read). 14 Q. Do you understand the question? 15 A. With respect to PCBs, I don't recall it. I may 16 have been, but I don't recall it specifically. 17 MR. O'CONNOR: Off the record. 18 (Discussion off the record) 19 MR. TURET: Back on the record. 20 Q. Dr. Levinskas, the report we've been talking 21 about now, Levinskas 8, the March 24 study? 22 A. Okay. 23 Q. Do you recall Dr. Calandra sending you a revised 24 page with the terminology changed from slightly 25 tumorigenic to does not appear to be
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1 might have said something to ring a bell. 2 Q. Do you remember just in general the issue of 3 some animals having turned up both in a control 4 group and in the experiment group? 5 A. I would have to go back and look at the tables 6 in detail. I just don't have that kind of 7 recollection. 8 Q. Do you remember anybody other than yourself 9 criticizing these particular IBT studies for 10 having used the very same identification numbers 11 in both categories? 12 A. I don't recall anybody raising the question, no. 13 Q. Do you recall any adverse publicity to Monsanto 14 that resulted from these changes from slightly 15 tumorigenic to does not appear to be 16 carcinogenic? 17 MR. LIPSHUTZ: Objection to the 18 form. 19 MR. DiMURO: Objection. 20 A. I don't recall any adverse publicity. I don't 21 really know what you mean by that, and I don't 22 know how I would assess adverse publicity. 23 Certainly this question of the environmental 24 impact of PCBs and cancer was all coming up at 25 this time and I'm sure it got noticed. I don't	1 carcinogenic? 2 MR. DiMURO: For Aroclor 1254? 3 Q. For Aroclor 1254? 4 A. I don't specifically recall it, but I assume it 5 was done. While it may be addressed to me, it 6 may not have been called to my attention, just 7 filed. 8 Q. Do you have any knowledge one way or the other 9 whether the date was changed to reflect that the 10 report had been revised subsequently? 11 A. At this time I don't recall the dates. I don't 12 think I paid much attention to them. 13 Q. Based on your experience as a toxicologist for 14 30 or 40 years, when a report is revised, is it 15 customary for the date to be revised as well? 16 A. I don't think I could say what is customary in 17 terms of the general practices at that time. I 18 suspect it was done both ways. I mean, some 19 people might have amended the report, some 20 people may have just made a change in the date. -- 21 Q. So if the report was amended months later, in 22 your mind it would be just a common practice to 23 have it back dated to the date of the original 24 report? 25 MR. DiMURO: Object to the form, but

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1 you can answer.
2 A. I think I just said I don't think there was a
3 standard practice. I think some laboratories
4 probably back dated them and some didn't. I
5 can't speak to the practices of all
6 laboratories. I don't know.
7 MR. LIPSHUTZ: Can we take a short
8 break?
9 MR. TURET: Can you hold out five
10 minutes?
11 MR. LIPSHUTZ: Something just popped
12 up. I apologize.
13 MR. O'CONNOR: We'll take a
14 five-minute break.
15 (Memo dated 8/22/75
16 marked as Exhibit No. 10
17 for identification.)
18 (Brief recess.)
19 MR. TURET: Back on the record.
20 Q. This document that's been marked as Levinskas 10
21 is an August 22, 1975, memorandum from Frederick
22 Johannsen to George Roush, Bates number MAE
23 022030, dash 033. Dr. Levinskas, have you seen
24 the document that has been marked Levinskas 10
25 before today?

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1 A. Yes.
2 Q. I notice you're CC'd at the top. Do you
3 remember receiving a copy of this document in or
4 about August of 1975?
5 A. I don't specifically recall receiving it, but --
6 Q. Do you remember seeing this document in that
7 general time frame as opposed to in litigation
8 more recently?
9 A. I'm sure it crossed my desk. But I don't have a
10 particular recollection of it, put it that way.
11 Q. Do you remember a time when medical data was
12 compiled on the workers in department 246 at the
13 Krummrich plant?
14 A. I know that Dr. Johannsen was attempting to look
15 at the records in department 246 in Krummrich to
16 see if there was sufficient information to do an
17 epidemiology study.
18 Q. Just to clarify, department 246 at the Krummrich
19 plant is what?
20 A. I believe that's where we were making the PCB
21 Aroclors.
22 Q. Do you know one way or another whether Dr.
23 Johannsen succeeded in compiling that data in
24 that plant?
25 A. This memo summarizes the data they were able to

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1 compile and my recollection is, I don't really
2 know what was done with the information. I
3 don't recall.
4 Q. What prompted this effort to compile information
5 from department 246, if you know?
6 A. This was part of the subsequent actions Monsanto
7 took after Dr. Kimbrough announced the
8 carcinogenicity of Aroclor 1260 in rats. Among
9 the things we wanted to do was see if there was
10 any supportive evidence of indication of this in
11 the workers who were making the material and
12 presumably would have higher degree of exposure
13 than people who had casual contact with the
14 material.
15 Q. Was Dr. Johannsen the one primarily involved in
16 this action?
17 A. Dr. Johannsen was the toxicologist and deemed
18 the man who could probably take the best look at
19 the information, so he was given that
20 assignment.
21 Q. Now, the information is summarized by Dr.
22 Johannsen in this memorandum. Do you have any
23 independent basis, knowledge as to the accuracy
24 of that information?
25 A. No, I have nothing beyond what Dr. Johannsen

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1 reported here.
2 Q. Do you remember seeing any other memoranda
3 regarding status updates of such a
4 compilation --
5 A. I may have. I don't have a specific
6 recollection of it.
7 Q. I didn't get to finish the question. I think
8 you understood the gist of it, relating to this
9 compilation of information?
10 A. (Witness nods).
11 Q. Did I understand you to say you don't have any
12 recollection?
13 A. I don't recall receiving any other information.
14 Q. Do you remember hearing from any corridors other
15 than in this memorandum that the rate of
16 respiratory cancer deaths was higher in
17 department 246 than in the general population in
18 St. Louis?
19 A. I have heard Dr. Roush make that comment, yes.
20 Q. Have you seen any written documents that
21 referred to such an increased respiratory cancer
22 death rate?
23 A. I can't think of any. I just don't recall any.
24 Q. On Page 2 of this document, there is a reference
25 to an opinion shared by Dr. William Gaffey,

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1 manager, epidemiology, Tabershaw-Cooper
2 Associates. Is that the same William Gaffey who
3 later became an employee of Monsanto?
4 A. Yes, if memory serves me correctly, Dr. Gaffey
5 did come from Tabershaw-Cooper.
6 Q. What was Tabershaw-Cooper?
7 A. That was a consulting firm. I'm not sure
8 whether they specialized in epidemiology or
9 among other things, epidemiology.
10 Q. Down at the bottom of that same page there was a
11 reference to, it is recommended that an
12 experienced epidemiologist be contracted to
13 further evaluate this data. Do you have any
14 knowledge one way or another as to whether an
15 experienced epidemiologist was ultimately
16 contracted to evaluate the data?
17 A. Ultimately Dr. Gaffey was hired and I think I
18 said earlier that Judy Zack worked in the
19 medical department for a little while on
20 epidemiology.
21 Q. Do you know if Judy Zack worked specifically on
22 that assignment?
23 A. I don't have a good knowledge of what Judy was
24 working on, so I can't comment directly.
25 Q. Dr. Levinskas, you mentioned earlier that at

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1 some point in time Paul Wright was hired by
2 Monsanto in the medical department?
3 A. Yes.
4 Q. When was that?
5 A. I think Paul joined us at the end of '72,
6 towards the end of '72. It was after Bill
7 Hunt's death and Bill died, I think, August
8 '72.
9 Q. Where had Dr. Wright come from?
10 A. IBT.
11 Q. Do you know what position he held at IBT?
12 A. I do not know his title.
13 Q. Do you know whether Dr. Wright had worked for
14 Monsanto before going to IBT?
15 A. Yes.
16 Q. What was his role at Monsanto before he left?
17 A. My understanding is that he worked in a
18 nutrition unit, animal nutrition unit in the
19 agricultural division of Monsanto, that that
20 program had been phased out, that there was no
21 comparable opening for Dr. Wright at Monsanto so
22 he left and went to IBT.
23 Q. And how long before 1972 had he left Monsanto to
24 go to IBT?
25 A. I don't know when he left Monsanto but he was at

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1 IBT when I joined the company in 1971.
2 Q. While he was employed by IBT, do you know
3 whether Dr. Wright worked on projects
4 specifically for Monsanto?
5 A. I know he worked at IBT and IBT did studies for
6 many companies, including government agencies,
7 and I would not be surprised if he had worked on
8 Monsanto projects, but I don't have specific
9 knowledge of what he did.
10 Q. Do you remember how Dr. Wright's rehiring by
11 Monsanto came about in or about 1972?
12 A. Yes.
13 Q. How did that come about?
14 A. Elmer Wheeler decided, or I should say he
15 finally agreed with me that I needed some
16 assistance, so we began discussing possibilities
17 and Elmer mentioned the fact that Paul Wright
18 might be interested in rejoining Monsanto since
19 he had worked for Monsanto. I had not met Paul
20 Wright before I came to Monsanto, though I had
21 met him once or twice at IBT. So I made
22 inquiries within Monsanto, particularly among
23 the people Paul had worked for and with before
24 he left Monsanto, all of whom had high
25 recommendations for his professional competency,

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1 his technical ability, and therefore I pursued
2 the investigation and we decided it would be a
3 good idea to make Paul an offer. Paul was
4 offered a job to work with me on the
5 environmental assessment. That offer was made
6 before Bill Hunt died. Paul joined us shortly
7 after Bill died, and so people have tended to
8 think of Paul as Bill Hunt's replacement, but in
9 reality he was hired for a different purpose.
10 Q. Did he end up working with you on those
11 environmental assessments or did he end up being
12 sidetracked to the things Dr. Hunt was doing
13 previously?
14 A. That's what happened, when Dr. Hunt died, Elmer
15 Wheeler said that since Paul had better
16 knowledge of Monsanto products, having worked
17 for the company earlier, that he might take over
18 the day-to-day operation of the functions Bill
19 Hunt had had and I would continue on with
20 environmental assessment, and that's what was
21 done.
22 Q. When Dr. Wright came back to Monsanto was he
23 under your supervision?
24 A. Yes.
25 Q. And both of you were under Dr. Wheeler's

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1 supervision still?
2 A. Yes.
3 Q. Who was the one who evaluated Dr. Wright for
4 performance reasons, personnel reasons within
5 Monsanto?
6 A. When it was necessary, I did that.
7 Q. Can you just describe generally the nature of
8 the supervision that you did over Dr. Wright's
9 work?
10 A. Well, I guess since there were two of us in the
11 group, we would meet frequently, had offices
12 adjacent to each other, we would talk about what
13 was going on among ourselves or with people from
14 the operating units if they were around, or
15 across lunch, so just sort of keeping general
16 tabs and seeing that things were moving along.
17 There was no day-to-day instructions or
18 specifics. We just dealt with issues as they
19 came along.
20 (Bonus recommendation
21 marked as Exhibit No. 11
22 for identification.)
23 MR. TURET: For the record, this is a
24 document that says Monsanto at the top, refers
25 to a nominee Paul Wright and it has Dr.

1 Q. Was it your understanding at the time that Dow
2 had encountered lung tumors in rats fed maleic
3 anhydrides?
4 A. That's information Dow gave to Monsanto, yes.
5 Q. Maleic anhydrides was a chemical manufactured by
6 Monsanto?
7 A. Yes.
8 Q. Was it your understanding at the time that Dow
9 wanted to report its findings to the FDA
10 immediately?
11 A. No, my understanding is that Dow was conducting
12 a study with maleic anhydride, the details of
13 which were not that clear to us, but they
14 conveyed this information to Elmer Wheeler who
15 in turn gave it to me and then we looked at it
16 and we did perhaps, somewhat analogous to what
17 I've been saying about PCBs, Dow asked us what
18 they thought we should do with this
19 information. And we went back and made
20 suggestions and recommendations to them and it's
21 for Dr. Wright's handling of that situation that
22 I made the recommendation of the performance
23 award.
24 Q. In the performance award suggestion
25 recommendation, it says that Dow felt they had

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1 Levinskas' name at the bottom.
2 Q. Dr. Levinskas, have you seen this document
3 before?
4 A. Yes.
5 Q. Is this a performance evaluation form that you
6 completed with respect to Dr. Wright?
7 A. It's really a recommendation for a bonus, if you
8 will, for Dr. Wright, so it's not a periodic
9 performance review in that sense of the word.
10 Q. Okay. But it recommends a merit based bonus;
11 correct?
12 A. Yes.
13 Q. And that's your signature down at the bottom;
14 correct?
15 A. Yes.
16 Q. Did you recommend the merit bonus for Dr. Wright
17 in this form?
18 A. Yes.
19 Q. And you agreed his performance is excellent?
20 A. In this instance for this particular action,
21 yes.
22 Q. Was it your understanding at the time that Dr.
23 Wright had done work with Dow, I take it that's
24 Dow Chemical Company?
25 A. Yes, that's Dow Chemical Company.

1 to report these findings to the Food and Drug
2 Administration under their product stewardship
3 program. Am I reading that correctly?
4 A. Yes, okay.
5 Q. And was it your understanding that Dr. Wright
6 contacted Dow's toxicologists and convinced Dow
7 that it would be foolhardy to act precipitously
8 by reporting to the FDA right away?
9 A. Yes.
10 Q. Was it your understanding that based on Dr.
11 Wright's suggestions that Dow ultimately agreed
12 to not contact the FDA right away?
13 A. No. Dow did submit the information to FDA. I
14 don't know exactly when or how, but the basis of
15 discussions I had with Dr. Wright and our
16 recommendations to Dow were that they should
17 consider alternatives and should consider all
18 the possibilities and angles and develop an
19 approach as to what they were going to do as a
20 result of this information and present that
21 entire package to Dow. In other words, go to
22 FDA and here's what we found out, here's what we
23 suspect, and here's what we intend to do about
24 it. And if you, FDA, has additional
25 information, or suggestions we'll be happy to

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1 entertain them. In other words, we're here to
2 try to work with you for resolution of questions
3 that have come up as distinct from throwing
4 something at them and saying here's what we
5 found, we don't know what to do with it, which
6 was basically the way Dow came to us with that
7 information.
8 Q. I want to clarify one piece at a time. Your
9 document says Dr. Wright advised Dow to defer
10 contacting FDA until they thoroughly documented
11 their findings and a subsequent course of action
12 had been developed, et cetera, and Dow agreed to
13 this. Am I reading that correctly?
14 A. I would say that Dow deferred going to FDA by
15 coming to Monsanto first, so we were simply
16 saying to them, we think you're doing the right
17 thing, you're looking at the problem before you
18 rush off to FDA. I think that's the right thing
19 to do, and that's what I think I just said. But
20 Dow had the option of going to FDA before they
21 came to us. We did not say, don't go to FDA
22 until after you talk to us.
23 Q. Dr. Wright suggested they hold off going to FDA;
24 correct?
25 A. They came to us before they went to FDA. If

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1 they were going to go precipitously to FDA, they
2 would have gone there before they came to us.
3 They came to us for our advice and our opinion
4 and that's what we gave them.
5 Q. Was it your understanding at the time that the
6 very intent to conduct a study promptly would
7 serve to forestall precipitous action against
8 the product by FDA?
9 A. Yes.
10 Q. Ultimately the FDA went along with that approach
11 as well?
12 A. Yes.
13 Q. And in conclusion it says that, thus we believe
14 Dr. Wright played a singular outstanding role in
15 preventing FDA from publicly proclaiming that
16 maleic anhydride was a suspect carcinogen? Am I
17 reading that correctly?
18 A. Yes.
19 Q. And it was on the basis of that activity that
20 Dr. Wright was nominated for a merit bonus?
21 A. Yes.
22 Q. And he received the merit bonus?
23 A. Yes, I assume he did. I have no independent
24 confirmation, but on the basis of this I assume
25 he did get it.

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1 Q. That was roughly 9 or 10 percent of his annual
2 salary?
3 A. I don't remember at that time what his salary
4 was. It could have been. I don't recall his
5 salary at the time.
6 Q. If the document that you said he filled out
7 listed his annual salary as \$28,980 --
8 A. Yeah, that would be less than 10 percent.
9 Q. And down at the bottom it says award amount is
10 \$2,500, does that refresh your recollection?
11 A. Two things; one is the 25 is less than 10
12 percent, and that's the amount that somebody put
13 in there. I did not have a specific dollar
14 amount. My recommendation does not include a
15 specific dollar amount, just to make the
16 recommendation that he be considered.
17 (Bonus recommendation
18 marked as Exhibit No. 12
19 for identification.)
20 Q. For the record, this is a similar document from
21 Monsanto that relates to Dr. Wright and lists
22 George Levinskas as a signature at the bottom.
23 Dr. Levinskas, is that document I've shown you
24 marked Levinskas 12 a document you've seen
25 previously?

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1 A. Yes.
2 Q. Is this, too, a form that you filled out and
3 signed recommending a merit bonus for Dr.
4 Wright?
5 A. Yes.
6 Q. The technical accomplishment of significant
7 results include Dr. Wright's excellent analysis
8 and synthesis of widely scattered observations
9 played a prominent role in forestalling EPA's
10 promulgation of unrealistic regulations to limit
11 discharge of PCBs?
12 A. Yes.
13 Q. And on that basis you recommended that he
14 receive a merit bonus of \$1,000?
15 MR. DIMURO: I'm going to object to
16 the form, doesn't say that.
17 Q. Did you recommend he receive a merit bonus of an
18 amount not determined?
19 A. I recommended he receive a merit bonus, yes, on
20 this occasion. I did not specify amounts. --
21 Q. Did Dr. Wright ultimately receive a merit bonus
22 based on your recommendation?
23 A. I presume he did.
24 Q. Is it fair to say in both those instances in two
25 successive years Dr. Wright was recommended for

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1 a merit bonus based on his efforts to slow down 2 government regulation of a chemical substance? 3 MR. DiMURO: Objection to the form 4 and recharacterization. 5 MR. LIPSHUTZ: Join in that 6 objection. 7 A. I may not get the technical terms here. EPA had 8 proposed regulations for limiting, as I recall, 9 discharge of PCBs into the water and the 10 environment. And they called for comments on 11 the recommendations. And Dr. Wright put 12 together a lot of our environmental data, some 13 of which may be Monsanto and some of which may 14 have been literature and he put together a 15 presentation and submitted that to EPA in 16 response to their published articles or 17 whatever, their Federal Register, calls for 18 comments on proposed regulations. They took 19 time to study this and to come up with what some 20 people would call realistic regulations. And 21 since Paul contributed to that, that's why I'm 22 making the recommendation for this achievement 23 award, with reference to chlorinated 24 isocyanurates in addition to the PCBs. 25 Q. Was Dr. Wright ultimately fired by Monsanto?	1 Q. Do you know who the others were who were 2 convicted from IBT? 3 A. Keplinger, Moreno Keplinger, Dr. Keplinger was 4 one. Jim Plank was one. And I think Dr. 5 Calandra had been indicted but during that time 6 he underwent open heart surgery for, I think it 7 was a valve replacement, and he was separated 8 from the trial. To the best of my knowledge he 9 was never retried. So there were three 10 convictions, would have been Moreno Keplinger, 11 Paul Wright and Jim Plank. 12 Q. Did Dr. Calandra ultimately pass away? 13 A. The last I knew he was alive. 14 Q. Was Paul Wright stripped of his certification or 15 license of a toxicologist to your knowledge? 16 A. As far as I know, toxicologists such as myself 17 and Paul Wright are not licensed. We are 18 certified, there were certifying organizations. 19 I do not know whether Paul was certified or not 20 or whether he was stripped of certification, I 21 do not. 22 Q. Do you know whether Dr. Wright ultimately died? 23 A. Dr. Wright died in the early part of '73. The 24 reason I know that is I was not in St. Louis at 25 the time. I was out for sometime and when I
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1 A. Dr. Wright, when he was last employed by 2 Monsanto, Dr. Wright was no longer reporting to 3 me. I don't know the terms under which he left 4 Monsanto. 5 Q. Do you know whether he was criminally convicted? 6 A. At a later date he was found guilty, yes. 7 Q. Was that for the felony of falsifying data 8 submitted to authorities? 9 A. I don't recall the specifics. What I read about 10 it in the newspapers was he was indicted and 11 convicted with others for submitting -- using 12 the mails to defraud and one case was mails, the 13 other case was wire. But for submitting 14 information which was later alleged to be false, 15 he and others were convicted for several 16 studies, but not for Aroclor studies. 17 Q. But it was scientific studies and scientific 18 data that was falsified? 19 A. I don't know whether it was falsified; for 20 submitting false data or false reports. I don't 21 know the basics of it, but yes, as a result of 22 the IBT files he was one of those people 23 convicted. But at that time he was not working 24 for me and I don't know the terms of his leaving 25 Monsanto.	1 came back one of the librarians at Monsanto 2 mentioned to me that Dr. Wright had died and she 3 did send me a copy of his obituary notice. 4 MR. DiMURO: You mean 1993? 5 A. Yeah, '93, I'm sorry. I was out of the country 6 for a couple months and when I came back I was 7 informed that he had died. 8 Q. Do you know whether he died of natural causes? 9 A. I saw the obituary notice that he had died and 10 he was not living in the St. Louis area, and it 11 made no mention of the cause of death. 12 Q. Do you know whether he ever worked again as a 13 toxicologist after leaving Monsanto? 14 A. I really don't know what he was doing. 15 MR. O'CONNOR: Off the record. 16 (Memo dated 10/16/75 17 marked as Exhibit No. 13 18 for identification.) 19 (Discussion off the record) 20 MR. TURET: Back on the record then. -- 21 Q. Dr. Levinskas, we've just marked a document as 22 Levinskas 13 which is an October 16, 1975 letter 23 or memo with Bates number MAE 022089. Is this a 24 document you've seen before? 25 A. Yes.

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1 Q. Is it a memo that you wrote back in October of
2 1975?
3 A. Yes.
4 Q. It refers to a Dr. Pour, P-O-U-R. Who is Dr.
5 Pour?
6 A. Dr. Pour is a pathologist at the Eppley
7 Institute of Cancer in Omaha, Nebraska, and he
8 was working at that time with Dr. Phil Shubik.
9 Dr. Shubik was the former director of the cancer
10 institute and had formerly been with the
11 National Cancer Institute, and he was again, one
12 of these very, very long term researchers in
13 cancer. We went to him with the results of our
14 studies and the Kimbrough studies and asked
15 Shubik what steps would he take to resolve the
16 contradictions or discrepancies, the differences
17 between the findings of Dr. Kimbrough and
18 ourselves. And among his recommendations was
19 the fact that we ought -- he had a pathologist,
20 Dr. Pour, that it would be useful if the same
21 pathologist looked at all of the slides from the
22 IBT studies and all of the slides from the
23 Kimbrough study. So we contacted this Dr. Pour
24 to undertake that. And this is a memo
25 forwarding Dr. Pour's report on the review of

1 Q. What one?
2 A. A breast tumor, mammary tumor, and I think he
3 had one liver tumor. I may be confused. I
4 think he had one liver tumor that he thought
5 came from some other organ. And then he said he
6 had something like that 30 or 40 slides which
7 showed some activity in the sections like
8 something was going on in the sections, but he
9 couldn't tell, without further information or
10 additional information, he couldn't tell whether
11 it was a developing lesion or one that was
12 resolving itself and disappearing. It was in a
13 state of change but he couldn't tell whether it
14 was getting worse or getting better, but I
15 believe he concluded there were no carcinomas in
16 the Kimbrough study.
17 (Letter dated 10/17/75
18 marked as Exhibit No. 14
19 for identification.)
20 Q. For the record, the document marked as Levinskas
21 14 is an October 17, 1975 letter from Dr. Gordon
22 of IBT to Dr. Levinskas, Bates number MAE
23 051697. Dr. Levinskas, have you seen this
24 letter before today?
25 A. Yes.

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1 the IBT slides.
2 Q. Was it your understanding at the time that Dr.
3 Pour had concluded there was no evidence of
4 carcinoma except for one animal in Dr.
5 Kimbrough's study? It's in the middle of the
6 first paragraph.
7 A. No, I think, as I said, this is reviewing the
8 IBT studies. He's saying after reviewing the
9 liver sections of the rat studies in IBT he
10 concluded there was no evidence of carcinoma
11 except for one animal, and that animal had a
12 lesion or a tumor, that he thought might be a
13 metastatic lesion that had spread to the liver
14 from another organ. He is scheduled, supposed
15 to be meeting with Dr. Kimbrough this week to
16 review liver sections from her study. He has
17 not yet looked at Kimbrough's study.
18 Q. Do you know whether Dr. Pour ultimately did
19 examine Dr. Kimbrough's slides?
20 A. Yes.
21 Q. What is your understanding of his findings?
22 A. My recollection of his theory is that he
23 concluded there were no carcinomas in
24 Kimbrough's study. He had one, I think he had a
25 mammary tumor somewhere, that he described.

1 Q. And do you remember receiving it in or about
2 October of 1975 from Dr. Gordon?
3 A. I don't recall it specifically, but yes, I did
4 get it, yes.
5 Q. This is the Dr. Gordon of IBT that we talked
6 about earlier today?
7 A. Right, the pathologist.
8 Q. There is a reference to black and white
9 photomicrographs of Aroclor lesions in rat
10 livers that were taken by Dr. Pour, and --
11 MR. DiMURO: Says liver, not livers.
12 Q. Pardon me, rat liver. Is it your understanding
13 that Dr. Pour took essentially photographs of
14 the slides that he saw when he went to look at
15 the slides of Dr. Kimbrough?
16 A. I believe these are -- the photomicrographs, I
17 think are ones that he took of the IBT slides,
18 although I'm not sure of that. He's saying he
19 sent copies of Kimbrough's findings and reports
20 on Aroclor which I had sent to him earlier in --
21 the year he's returning. I don't think at this
22 stage that Pour has seen Kimbrough's slides.
23 I'm not sure of that at this time, but sounds to
24 me like he's saying that Pour has looked at the
25 IBT slides and Gordon says, I do not concur with

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1 his classification and interpretation of some of
2 the liver lesions and that would be findings of
3 all kinds in the livers. I think he's talking
4 specifically. I don't recall. I don't think
5 he's talking here about the Kimbrough slides.
6 Q. Do you know what it was about the liver lesions
7 that Dr. Gordon disagreed with Dr. Pour on?
8 A. He says, I do not concur. I do not look through
9 microscopes. I am not a pathologist. I listen
10 to them and try to put together and assimilate
11 and digest what they say, but I don't make a
12 diagnosis.
13 Q. Do you have a layperson's understanding of what
14 the difference was between Dr. Gordon and Dr.
15 Pour specifically with regard to these studies?
16 A. I think it's analogous to what we talked about
17 earlier about the differences between Richter,
18 Gordon, Squire and Kimbrough and it's another
19 opinion on this thing, but no, I don't know the
20 specifics of what he's referring to.
21 (Report
22 marked as Exhibit No. 15
23 for identification.)
24 Q. Dr. Levinskas, you're being shown a document
25 that's been marked as Levinskas 15, that's

1 one of those. It's the sort of thing that I
2 would have written and probably did write.
3 Q. In the middle of the first page it states: As a
4 class, the Aroclors are relatively harmless
5 materials for routine industrial handling under
6 ambient conditions. Was that your understanding
7 as of January, 1976?
8 A. Yes.
9 Q. Is that your understanding as of the time you
10 retired from Monsanto?
11 A. Yes.
12 Q. Is that still your opinion today?
13 A. Yes.
14 Q. Now, second page, under the heading, Summary of
15 Monsanto's Long-term Toxicity Studies on
16 Commercial PCBs, there is a reference to, I
17 think it's four studies, a two-year lifetime
18 feeding study of rats, two-year feeding study of
19 dogs, three-generation rat reproduction studies
20 with two litters cast per generation, and a rat
21 teratology study and dominant lethal mutagenic
22 studies in mice. I don't know what that last
23 one is.
24 A. The rat teratology studies, mutagenic studies
25 are different studies.

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1 entitled, Toxicity and Environmental Effects of
2 Commercial PCBs. This particular document was
3 marked at a prior deposition as Levinskas 29.
4 Dr. Levinskas, I note at the very end of the
5 text of this document there are the initials GJL
6 handwritten on Bates number 19643. Are those
7 your initials?
8 A. They're my initials, but I didn't put them
9 there.
10 Q. Is this a document that you authored?
11 A. Looking at the content of it and the type of
12 style, I think I probably have authored a fair
13 part of this document, but I don't recognize it
14 in this form. It may have been part of
15 something else I wrote. I don't recall.
16 Q. Do you know whose handwritten notes are at the
17 top of the first page?
18 A. No, I really don't. I don't know who put them
19 there.
20 Q. Do you remember doing a paper in general that
21 related to toxicity and environmental effects of
22 commercial PCBs that covered these issues and
23 these conclusions?
24 A. I have written statements along these lines a
25 couple different times, and this could well be

1 Q. So it's five studies. Is it your understanding
2 that each of those five studies were done on
3 Aroclor 1254?
4 A. Yes.
5 Q. Are those the studies that were done in or about
6 1971?
7 A. The rat two-year studies were finished about
8 1971. And so these studies would all have been
9 done in the time frame before that or initiated
10 in the time frame before that, into the '71-'2
11 era.
12 Q. So for the two-year study somewhere around 1969
13 through 1971?
14 A. Yes '68, '69, I'm not sure when they started but
15 they were finishing up around 1971. And some of
16 them, the longest studies would be the two-year
17 lifetime study in rats and two-year dog feeding.
18 Q. What's the difference between an acute study and
19 a chronic study?
20 A. At that time, probably still today they're
21 somewhat loose terms. Acute is one or a few
22 doses given in a very short period of time as
23 distinct from chronic which is over an extended
24 period of time. You can argue where you want to
25 draw the line between them, but acute is either

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1 a single dose or a few doses in a short interval
2 of time, hours or days, versus chronic which is
3 repeated dosing over a long period of time.
4 Q. What's the shortest period of time that you've
5 seen a chronic study -- let me rephrase. What's
6 the shortest period of time that you would
7 consider to be a chronic study?
8 A. I would say to some extent it would depend on
9 the kind of study, but for practical purposes
10 anything much less than a year I would not
11 consider chronic. It would have to be better
12 than a year for me to consider it a chronic
13 study.
14 Q. And can you have an acute study that follows the
15 subject over a longer period of time?
16 A. The acute and the chronic refers to dosing
17 period. I could dose a rat today and follow it
18 for its lifetime. I would consider that an
19 acute study because he was dosed only once even
20 though I followed him for a lifetime. I don't
21 know if anybody does it that way. A short-term
22 study is terminated in the short term. So to
23 me, acute and chronic refers to the dosage
24 schedule, not the duration of the study.
25 Q. These studies that are described in long-term

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1 toxicity studies, these are chronic studies, are
2 they not?
3 MR. DIMURO: Talking about the ones
4 described in the document?
5 MR. TURET: Yes, on Page 2, the
6 two-year, three-year feeding?
7 A. The two-year lifetime is chronic. The two-year
8 feeding to dogs is chronic. The
9 three-generation, that's kind of -- that's
10 really not chronic. That's to study the effects
11 on successive generations. In other words, the
12 animals are dosed for a period of time. Their
13 offspring are observed, maybe reared and in turn
14 mated again, so while it was an extended period
15 of time, no animal is on observation for that
16 entire length of time. So I don't know that
17 that's chronic. The teratology studies, again
18 are sort of a subset of the rat reproduction
19 studies. And the dominant lethal mutagenic are
20 not chronic. So the only chronic studies are
21 the rat and dog feeding studies.
22 Q. What are the rat teratology studies?
23 A. Well, the word for rat is the Greek word for
24 monster, so the rat teratology study is looking
25 for malformations of the fetuses, production of

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1 monsters, malformed, misshapen.
2 Q. How about the dominant lethal mutagenic study?
3 A. The dominant lethal mutagenic study is one that
4 really is designed to measure the effect of
5 chemicals on the potency of males, on the sperm
6 of males, so it's a short-term study. But it
7 may affect the offspring of that male that's
8 been dosed, may have a poor survival rate and so
9 forth, so it looks at a change in the genetic
10 composition of the sperm. And so that's why
11 it's a mutagenic study. It measures something
12 different, the ability to transmit changes,
13 genetic changes in the male to the next
14 generation.
15 Q. This battery of tests, the five tests described
16 on the second page of this document, were they
17 also performed on Aroclor 1260, to your
18 knowledge?
19 A. Those were, all those tests were done on 42, 54
20 and 60.
21 Q. 1242, 1254, and 1260. And that was all done by
22 IBT?
23 A. I believe they were all done by IBT, yes.
24 MR. TURET: How about we mark these
25 16 A, B, C, and D.

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1 (Documents
2 marked as Exhibits Nos. 16-A, 16-B, 16-C,
3 16-D for identification.)
4 Q. For the record, that means that Levinskas 16-A
5 is the Two-year Chronic Oral Toxicity Study with
6 Aroclor 1254 in Beagle Dogs. That's MAE 038398
7 to 475. 16-B is the Two-year Chronic Oral
8 Toxicity with Aroclor 1254 in Albino Rats, and
9 that's Bates number MAE 001743. Levinskas 16-C
10 is Three-Generation Reproduction Study with
11 Aroclor 1254 in Albino Rats, and that's Bates
12 number MAE 003505. And Levinskas 16-D is
13 Teratogenic Study with Aroclor 1254 in Albino
14 Rats, Bates number MAE 002241. Dr. Levinskas,
15 you've just been handed four different
16 Industrial Bio-Test study reports that have been
17 marked Levinskas 16-A 16-B, 16-C and 16-D. Are
18 you familiar with these documents?
19 A. I have seen them before.
20 Q. Did you receive them while you were toxicologist
21 with Monsanto back in or about 1971?
22 A. I don't recall, but I don't think these reports
23 were directed to me. If you will look at the
24 dates, says November 1, 1971 and I didn't join
25 the company until July '71, so these studies

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1 would have been finished and I would assume they
2 originally went to Elmer Wheeler. I did see
3 them at a later date, not when they first came.
4 Q. Let's start with the first one, the study on
5 Beagle dogs. What is your understanding of the
6 bottom line findings on this particular study?
7 A. Well, since I indicate I've looked at them
8 somewhat later and I didn't pay that much
9 attention to them, I don't have a good
10 recollection other than looking at the reports,
11 taking time to read it or specific comments on
12 portions of the report.
13 Q. Is it your understanding that this is one of the
14 battery of chronic tests we saw referred to in
15 the previous documents?
16 A. This is one of the studies that were done on the
17 three Aroclors 1242, 1254 and 1260. This is on
18 1254, yes.
19 Q. Based on the reviews of studies that you've done
20 in your tenure as an employee of Monsanto, are
21 you aware of any chronic testing on Aroclor 1254
22 done by Monsanto before these studies?
23 A. There are some published inhalation studies by
24 Joseph Trion (phonetic) who was at the Kettering
25 Institute at the University of Cincinnati at

1 A. Not aware of any other than what I saw later at
2 Monsanto.
3 Q. Do you know of any chronic studies that
4 addressed dermal exposure to Aroclor 1254?
5 MR. DiMURO: At any time?
6 MR. TURET: Prior to the 1971 IBT
7 studies?
8 A. No, I don't think I can recall any.
9 Q. While we're on this same document, Chronic
10 Toxicity study in Beagle Dogs, flipping ahead to
11 Bates number 038402, Paul Wright is one of the
12 signatories of that study, is he not?
13 A. Yes.
14 Q. And he was section head of toxicology for IBT at
15 the time?
16 A. Yes.
17 Q. Let's flip ahead briefly to the others. The
18 next one, Levinskas 16-B is the Chronic Oral
19 Toxicity Study in Albino Rats?
20 A. Yes.
21 Q. Similar question as to do you have any knowledge
22 one way or the other about what the bottom line
23 conclusions of this report are?
24 A. Other than the -- to me two things come out:
25 One is that they did produce liver damage in the

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1 that time. I believe those studies were at
2 least in part sponsored by Monsanto. The only
3 reason I mention that is because at a later date
4 just before I went to Monsanto Trion went to
5 Atlas, and he made me a job offer, Atlas Company
6 in Maryland. And I think at that time may be
7 the first time I took a serious look at PCBs to
8 read on to get some background information on
9 Joe Trion, but other than those inhalation
10 studies at that time, I had no other knowledge
11 of studies Monsanto had sponsored.
12 Q. Do you know one way or another whether the Trion
13 study from the 1950s is viewed to be
14 authoritative in the toxicological industry?
15 MR. DiMURO: Objection to form.
16 MR. LIPSHUTZ: Same objection.
17 A. It has been used to establish so-called
18 threshold limit values which were originally
19 published by the American Conference of
20 Governmental Industrial Hygienists. It was used
21 as a basis for establishing threshold limit
22 values, and on the basis of that, I would say
23 that they were recognized and accepted.
24 Q. Do you know of any other chronic ingestion
25 studies?

1 rats, and the other one is that the conclusion
2 was it was not carcinogenic under the conditions
3 of the test.
4 Q. And flipping ahead to the same signature line
5 Paul Wright was a signator on this report as
6 well; correct?
7 A. Yes.
8 Q. Flipping ahead to the third document,
9 Three-Generation Reproduction Study, same
10 question, do you have any personal knowledge
11 about what the bottom line conclusions are of
12 this report?
13 A. I really don't recall the reproduction studies
14 that well. I would have to look at the report
15 to refresh my memory, but I don't recall
16 specifically the details on it, the details of
17 findings.
18 Q. I don't remember if I asked this, a global
19 question with regard to all four of these, are
20 all four of these studies that you recall having
21 seen while you were in the medical department of
22 Monsanto?
23 A. I would have seen them later on but not when
24 they came in.
25 Q. Sometime during the mid 1970s, sometime after

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1 1974 but during the 1970s?
2 A. We had one of the earlier documents which
3 summarized Monsanto toxicity test data and I
4 indicated that's the kind of thing I would have
5 written and I would have referred to these to
6 write that summary.
7 Q. Same question with regard to the Levinskas 16-D
8 the Teratogenic study. Do you have any
9 recollection of what the bottom line conclusions
10 were in that report?
11 A. I can't say specifically, but -- I wouldn't
12 hazard a guess. I could look at it and give you
13 a comment on it, but I don't know.
14 Q. Flipping ahead to the signatures page on that
15 document, which is 002244, Paul Wright's name is
16 not listed there. Had he already joined
17 Monsanto as of September of 1971?
18 A. No, he had not been at Monsanto.
19 Q. Do you have any knowledge as to why he was not
20 called upon to sign that when he signed the
21 other IBT reports?
22 MR. DiMURO: Objection to the form.
23 A. Can I speculate?
24 MR. DiMURO: No.
25 A. I don't know why he didn't sign it.

1 one, I think we may have touched upon earlier.
2 It states, at ordinary temperatures the Aroclor
3 chlorinated polyphenols have not presented
4 industrial toxicological problems. Was that
5 your understanding as of the early 1970s when
6 you were employed in the medical department of
7 Monsanto?
8 A. That would be my understanding, yes.
9 Q. Was that also your understanding, say, as of the
10 mid 1980s?
11 A. Yes.
12 Q. Is it still your understanding today?
13 A. Yes.
14 Q. Now, what was your understanding as of the time
15 you came to Monsanto about the adverse health
16 effects that could be caused by exposure to
17 Aroclor 1254?
18 MR. DiMURO: Objection to form.
19 MR. O'CONNOR: Objection.
20 A. I think I've indicated that other than the fact
21 that Joe Trion had done work on these materials
22 and since he had made an offer of employment to
23 me and I wanted to know more about the guy, I
24 looked up some of the work that he had done, and
25 that's about all I knew about the PCBs at that

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1 Q. Each of these reports was also signed by ML
2 Keplinger, Ph.D.
3 A. Yes.
4 Q. Is that correct, as manager of toxicology?
5 A. Yes.
6 Q. And he's one of the ones you indicated was
7 convicted as well?
8 A. Yes.
9 Q. Several of them are also signed by James Plank.
10 Is that the Dr. Plank you referred to?
11 A. Yes, that would be the same James Plank. I
12 don't believe he was a doctor.
13 Q. Just briefly I want to take you through a
14 document that, portion of a document that was
15 marked previously as Exhibit Orem 3, Bates No.
16 MAE 040881 through 934. And I apologize, I'm
17 going to show you my marked up copy. This is
18 the toxicity and safe handling section.
19 (Brief recess.)
20 Q. Dr. Levinskas, I've just handed a couple pages
21 to you, Bates No. MAE 040931 to 932. These are
22 excerpts from a technical bulletin that relates
23 to the Aroclor plasticizers, and this is the
24 section relating to toxicity and safe handling.
25 I want to ask about a few pieces of this. First

1 time. The studies he reported in the literature
2 seemed to be well-done. They had been accepted
3 and used. From what I understood there were no
4 other problems as long as one kept the air
5 levels below those limits specified by the TLV
6 committee.
7 Q. I'm referring to excessive levels, levels in
8 excess of those levels. Was it your
9 understanding that the Trion study suggested
10 that there were adverse health effects that
11 could be caused if one exceeded the ACGIH
12 standards?
13 MR. DiMURO: Object to form. You can
14 answer.
15 A. If a TLV value is set, my feeling would be that
16 under the pending conditions if you stayed below
17 that level you wouldn't have any difficulty. I
18 don't know that I had focused much on what would
19 be the potentiality if you got above that
20 because the question would be how much higher --
21 are you going to go and how long are you going.
22 If the number is .5 and you got .51, I don't
23 think you would see anything go haywire. So
24 it's a question of how much you exceeded and how
25 long you exceeded that gets into play as to what

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1 the effects would be. In chlorinated 2 hydrocarbons, as a rule they tend to be liver 3 factors, I would expect there may be some liver 4 damage. Beyond that, I don't know that I would 5 speculate. 6 Q. How about the occurrence of chloracne, is it 7 your understanding that chloracne could occur 8 from excessive exposure to Aroclor 1254? 9 A. Chloracne has been a point of dispute. It 10 occurs, there is no disputing it occurs, but the 11 causative agent, in the early days there were 12 mixtures of other chlorinated terphenyls, not 13 just biphenyls, in a class of compound called 14 halowaxes which were notorious for producing 15 chloracne. And because of the analytical 16 methods being used, some of those early mixtures 17 were probably contaminated with the 18 polychlorinated terphenyls and other materials, 19 so it's hard to say. I'm of the opinion that a 20 pure biphenyl probably would not produce 21 chloracne. 22 Q. Could a polychlorinated biphenyl? 23 A. When I say pure, a biphenyl without a 24 chlorinated triphenyl or polyphenol, the halowax 25 compound, I don't know it would produce	1 liver, breakdown of liver cells which could be 2 life threatening if it would be prolonged in 3 duration, but basically a liver failure, not a 4 cancer effect. 5 Q. Did you have an understanding back in the mid 6 1970s that the liver damage that could result 7 was reversible on removal from the exposure 8 source? 9 A. In most cases, if not all, certainly in many 10 cases, if the exposure ceases, the condition 11 will either stay as it is or will improve. 12 There may be cases, but it's hard for me to 13 think of any, where removing some of the 14 exposure, the thing continues to intensify and 15 get worse. Stopping the exposure usually will 16 stop the progression or result in regression. 17 Q. What if one is exposed to levels of Aroclor 18 vapors above the ACGIH standard, must one 19 necessarily feel irritation to the eyes or 20 throat? 21 MR. DAVIDSON: Object to the form. 22 MR. DiMURO: You can answer. 23 A. I think if you're dealing, in the first place to 24 get levels of above the -- that approach TLVs, 25 you have to do one of two things, you have to
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1 chloracne or not. 2 Q. Is Aroclor 1254 a pure biphenyl as you've 3 described it? 4 A. To my understanding, I think that probably is a 5 clean biphenyl. I don't think it has a 6 chloracne. 7 Q. Other than liver damage or chloracne, with the 8 caveats you've stated about what may be required 9 to produce chloracne, are there any other 10 adverse health effects that you understood back 11 in the 1970s could be caused by elevated 12 exposures to Aroclor 1254? 13 MR. DiMURO: Object to the form. 14 A. If there were vapors it could be irritating to 15 the eye or the respiratory tract, but I would be 16 of the opinion that the sentinel sign of 17 exposure would be liver damage and if one kept 18 the exposure low enough to prevent liver damage 19 it would be most unlikely you would see serious 20 biological effects in people. 21 Q. The liver damage you're referring to now is 22 benign as opposed to malignant? 23 A. I'm not talking about cancer; I'm talking about 24 just frank liver damage, cirrhosis of the liver 25 is what some people call frank damage to the	1 either aerosolize it or heat it. And I think 2 either one of those would produce sensory 3 irritation to the eyes, nose and respiratory 4 tract. I think it would be noticeable, either 5 noticeable or downright uncomfortable, depending 6 on the degree. And I wouldn't expect people to 7 tolerate that for any length of time. 8 Q. That's to reach a level that exceeds the ACGIH 9 standard? 10 A. If you get appreciably above it, if the level is 11 constant. You get short increases, I don't know 12 that would be noticeable, but if there is a 13 consistent elevated number, I think respiratory 14 tract, sensory irritation of the eyes and throat 15 and such would be noticeable. 16 Q. If there is, again, a buildup of vapors beyond 17 the ACGIH levels, would there also be an 18 associated odor that would be detectable? 19 MR. DiMURO: Objection to the form. 20 You can answer. 21 A. I really don't know about the odor. I would 22 think there could be an odor, but I really don't 23 know. I think you would get somewhat of a sharp 24 and acrid odor, something that would be not as 25 objectionable in my opinion as the sensory

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1 irritation would be, but that's just sort of
2 trying to put together lots of different things.
3 Q. Have you ever personally smelled vapors that
4 have resulted from any of the Aroclor PCB
5 products?
6 MR. DAVIDSON: And lived to tell
7 about it?
8 A. I smelled some Aroclors at room temperatures and
9 I don't have a recollection that they smelled
10 particularly bad, but I haven't worked in an
11 elevated -- biphenyl itself has been used as a
12 coolant around nuclear reactors and there have
13 been complaints of irritation and odors from
14 biphenyl itself and that's where I draw my
15 conclusions about the chlorinated biphenyls.
16 Q. You may have been joking a moment ago, but did
17 you actually smell Aroclor products?
18 A. I've sniffed the products. The lower
19 chlorinated ones tend to be liquid and the 1260
20 I think is a solid. You don't smell much of a
21 wax. And I've sniffed a couple of samples and I
22 don't recall -- nothing striking about the odor,
23 at least at room temperature, at least not to
24 me.
25 Q. Who is Dan Bishop?

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1 A. Dan Bishop was in public relations with Monsanto
2 Company at different parts of the company at
3 different times.
4 Q. And did you ever serve as a source of
5 information for Mr. Bishop on toxicological
6 issues for his PR publications?
7 A. We have talked about the issues, yes.
8 Q. Was there a standard set of information that was
9 supplied for public relations purposes when
10 required back in the mid 1970s, let's say?
11 A. I don't ever recall writing a statement
12 specifically for public relations. Some of the
13 statements I had written would be analogous to
14 some we had in earlier exhibits, may have been
15 picked up and used by PR people. But I don't
16 recall writing a statement that was intended for
17 use only by PR people.
18 Q. Was the information that was supplied to
19 customers with regards to toxicity or safe
20 handling of Aroclor products also used for
21 public relations purposes?
22 MR. DiMURO: I'll object to the form,
23 but you can answer.
24 A. When I wrote summaries of what -- pulled
25 together information, I attempted to do this, to

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1 pull together and evaluate the information
2 presented as a package. And that would go to
3 the operating units. On occasion we might
4 condense it or rephrase it to put in a product
5 bulletin. In later years we would put the
6 information in the material safety data sheet.
7 Whether that information then was given to PR
8 and how it was distributed, I'm really not
9 involved. I would answer queries that came to
10 me but I was not in charge of distributing
11 information. We relied on the operating units,
12 our technical information and assessment of it
13 to the operating units and others who want to
14 use it.
15 Q. Were there others in the public relations of
16 Monsanto that you remember consulting you about
17 the information about Aroclor PCB products?
18 A. I think Larry O'Neil was one that I had some
19 dealings with. I've talked on one occasion or
20 another with others in PR, people I can't recall
21 specifically what ones, talking about PCBs.
22 Q. How about Jim McKee?
23 A. I don't really recall talking to Jim McKee. I
24 may have, but I don't have a recollection of
25 talking to him about it.

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1 Q. One last document to show you, Dr. Levinskas.
2 (Report dated 10/14/81
3 marked as Exhibit No. 17
4 for identification.)
5 Q. Dr. Levinskas, I'm showing you a document that's
6 entitled Toxicity of Aroclor Products 1242, 1254
7 and 1260 to the Liver of Albino Rats, dated
8 October 14, 1981, and Bates number MAE 014404.
9 Is this a document that you recognize, Dr.
10 Levinskas?
11 A. Yes.
12 Q. What is it?
13 A. It's a review, compilation to some extent of the
14 liver sections, all of the liver sections from
15 the original 1242, 1254 and 1260 Aroclor studies
16 in rats that were reevaluated by IBT and, let me
17 check before I go too far out, and it presents
18 the findings on each of those studies for rats
19 that were sacrificed at three, six, 12 months on
20 test and at the end of the study. And it gives
21 an accountability, if you will, for all the rats
22 that presumably, that we believe were on that
23 study and what happened to them.
24 Q. And just very quickly, a footnote 1 on Page 1,
25 right at the very bottom paragraph, talks about

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1 information being made available to various
2 government groups and if you look in the
3 footnote there are dates of correspondence and
4 contact.
5 A. Yes.
6 Q. Where are those drawn from?
7 A. These would have come from the records we had at
8 Monsanto. You'll see the first one is Wheeler,
9 October '69, April, '70, on Page 8 I think it
10 is. These are dates that predated my time with
11 Monsanto, so they would have had to come out of
12 the company files. No. 2, R.D. Kimbrough that
13 personal communication, that's where I began to
14 get into the act. It's an attempt to summarize
15 what -- where we stood and how we got there, if
16 you will, and also what our position was at the
17 time, to make this information available to
18 somebody that wanted to look at it. I don't see
19 a date on this thing.
20 Q. Right on the front under your name?
21 A. October 14, 1981. I got to get my bifocals
22 changed. I had cataract surgery on one eye and
23 I do have to get my prescription changed.
24 MR. TURET: I have no further
25 questions at this time.

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1
2 EXAMINATION
3 QUESTIONS BY MR. O'CONNOR:
4 Q. Doctor, I was introduced earlier in the day. My
5 name is Brian O'Connor. I'm an attorney and I
6 represent the plaintiffs in this case that have
7 bought a lawsuit against Armstrong World
8 Industries. How many times have you been
9 deposed related to PCB litigation?
10 A. In total for all the things, I don't know,
11 probably a dozen or 14, 15 times.
12 Q. Have you testified in court at all?
13 A. No, I have not testified in court.
14 Q. Have you been videotaped, any of your testimony
15 been videotaped to show to a jury?
16 A. Yes.
17 Q. When was that?
18 A. About 10 years ago in Texas, two-day deposition
19 that was videotaped.
20 Q. What was the basis of your testimony in that
21 case?
22 A. Some of it was more or less rehashed here now.
23 It was the same thing, what did Monsanto do,
24 what did they know, what was my part in it. Did
25 I request changes to be made in reports and

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1 talked about one of them here. And I was trying
2 to explain my position, my understanding of it,
3 so it was a more extended version but it was --
4 Q. Of a similar nature?
5 A. Of a similar nature.
6 Q. What are the plaintiff's claims in that
7 particular case, personal injury or property
8 damage?
9 A. The deposition that was videotaped was personal
10 injury.
11 Q. What was the specific claim itself?
12 A. Counsel will have to help me. That was a
13 cancer, a person that died from cancer wasn't
14 it?
15 Q. You don't have to guess. I can get hold of the
16 transcript.
17 A. I think --
18 MR. DAVIDSON: There was more than
19 one plaintiff.
20 A. I think there was a cancer, but I'm not positive
21 about that. The reason I say that is we were
22 shown Polaroids, colored Polaroids of a wasting
23 individual in the deposition. They were passed
24 around and that's why that sticks in my memory,
25 Scott's widow was suing for alleged cancer.

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1 Q. Do you know what kind of PCB exposure was
2 alleged in that case?
3 A. No, I don't. I think it was used in the
4 dielectric industry. I don't know whether -- I
5 think it was one of the PCB containing
6 dielectric fluids. I don't think this was pure
7 PCB alleged in that case, but I don't remember.
8 Q. Were you paid for the testimony you gave in
9 that?
10 A. I was working for Monsanto when I gave that
11 deposition and Monsanto paid my regular salary.
12 Q. How about today, are you being paid?
13 A. I have not been paid for my testimony for
14 Monsanto since I retired.
15 Q. Did you review any documents prior to today's
16 deposition?
17 A. Yes, I met with attorneys and they did show me a
18 few documents to refresh my memory.
19 Q. I don't want to know about any specific
20 conversations you had with the attorneys, but --
21 could you tell me and identify any documents you
22 reviewed?
23 A. Some of these are in this pile. I was -- I did
24 look at the copy of the Scott deposition. There
25 was some others but in that general vein.

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1 Q. When were you first contacted about appearing
2 for a deposition in this case?
3 A. Three or four weeks ago more or less, I had a
4 call from one of the paralegals at Monsanto and
5 then the attorneys.
6 Q. Contacted by counsel?
7 A. Yes, they asked me if I would be willing to be
8 deposed and I said yes and then I was contacted,
9 these meetings were set up.
10 Q. How many times have you met with counsel prior
11 to today's deposition for the purpose of the
12 deposition today?
13 A. I met with them Tuesday last week a couple hours
14 and this morning.
15 Q. You are a toxicologist, correct, you're not an
16 M.D.?
17 A. I'm not an M.D.
18 Q. In that case in Texas did you offer any opinions
19 or were you basically just giving the facts as
20 you recall them with regard to your contact with
21 PCBs at Monsanto?
22 A. I was not --
23 MR. DiMURO: For the record, he was
24 not identified as an expert witness. Subject to
25 that you can answer.

1 Annual Review of Pharmacology and Toxicology, a
2 bound volume annually, and in about '89, '88,
3 '89, Renate Kimbrough wrote a review on the
4 health effects -- and Renate Kimbrough is an
5 M.D., a pathologist, and the title was something
6 like The Chronic or Health Effects of
7 Polychlorinated Biphenyls and Polybromated
8 Biphenyls and she is doing a review of
9 information, animal studies as well as human
10 data, and towards the end of the review she
11 makes the statement more or less, it's not a
12 direct quote, but the gist of it was while they
13 are interesting chemicals biologically, they do
14 not appear to present significant human health
15 hazards at the current levels of exposure. So
16 taking Kimbrough, keeping in mind she is the
17 woman that first raised the serious queries
18 about carcinogens in PCBs has come around to
19 saying, I don't think there is a serious health
20 risk for man. So between her data and Bill
21 Gaffey's review is what I relied upon.
22 Q. Have you ever talked to Dr. Kimbrough personally
23 about PCBs in relationship to the allegation
24 that they're carcinogenic?
25 A. Yes. She came to Monsanto, presented her

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1 A. I was not asked for -- the questions -- the
2 discussions were limited to the animal toxicity
3 testing, Monsanto's relationships with IBT, the
4 IBT situation and so forth. I don't think that,
5 having reviewed the documents just recently, I
6 still don't recall, I don't think I was asked
7 anything about causation in terms of humans,
8 trying to establish that it was a carcinogen in
9 animals, how good were the data, that sort of
10 thing.
11 Q. You don't hold yourself out as an expert on the
12 effect of PCBs on human beings, do you?
13 A. No.
14 Q. So the opinions that were elicited here today
15 that you believe that PCBs may cause liver
16 abnormalities but not necessarily cancer, what
17 training do you have to offer that opinion?
18 A. Well, there are two things that I would say that
19 lead me to that. One is Dr. Gaffey, he is an
20 epidemiologist, he reviewed the available
21 epidemiological data and in his report he
22 concluded that the evidence for carcinogenicity
23 of PCBs in humans under these conditions that
24 existed was flimsy or nonexistent. The other
25 one that's sort of interesting, there is an

1 findings.
2 Q. Since then have you talked to her?
3 A. Yes, I've seen her off and on over the years and
4 we've talked along those lines.
5 Q. The data that you made reference to, you stated
6 at certain levels of exposure, what levels of
7 exposure was Dr. Kimbrough dealing with in the
8 latter piece of literature that you just cited?
9 A. Kimbrough did one study. In her study she had
10 one level of exposure which was, I think a
11 hundred parts per million, and she had only
12 female rats. The Monsanto studies were done at
13 1, 10 and a hundred parts per million. So we
14 had multiple levels. So Kimbrough had one level
15 in a high dose and, you know, we've talked back
16 and forth, but just on the same basis of trying
17 to see what would be a basis for the different
18 conclusions and the different opinions that were
19 being held on that subject.
20 MR. LIPSHUTZ: Sorry to interrupt, --
21 I'm having a little trouble hearing. If you
22 could try to speak up a little louder.
23 THE WITNESS: I said that --
24 MR. O'CONNOR: That's all right. He
25 can get the transcript.

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1 Q. Doctor, can you tell us generally what your
2 understanding was of the relationship between
3 Monsanto and IBT back in the early '70s?
4 A. Well, IBT had a large testing laboratory which
5 was used extensively by various people, various
6 companies. It had been used by Cyanamid before
7 I got to Cyanamid, but when Cyanamid built its
8 lab, they kept their work in-house. But most of
9 the major chemical companies had used IBT. The
10 government agencies institute had used IBT and
11 my understanding of them on the basis on which
12 we proceeded was they were a competent
13 laboratory whose competency was recognized by
14 various people and they were being used by them
15 and we were just another customer of theirs.
16 Q. Do you know roughly what Monsanto paid IBT for
17 all the studies and testing they did on lab
18 animals and PCBs?
19 A. No. And the reason I would say that is that,
20 first of all, these were all contracts set up
21 before I got to Monsanto, so I don't know what
22 arrangements were made or how they were made.
23 Until later in the game, when virtually all
24 testing was being conducted through the auspices
25 of the medical department, then we would have

1 ultimately came to me, asking if we could
2 identify studies on this list that we had
3 submitted to them. So we did that and the
4 studies that we had submitted to support
5 registration of pesticides or food contact
6 chemicals were on the list so we started to go
7 back and look at IBT, to get the information
8 from IBT so we could verify those studies. So
9 many people descended on, apparently on IBT at
10 that time, that IBT basically went out of
11 business; they closed them down. So we spent a
12 good deal of time trying to retrieve records
13 from IBT to reconstruct and validate the
14 studies. Monsanto took a three-step approach.
15 We said that anything that we sent to an agency
16 that was used to request an agency take action
17 such as a food additive petition, that we had an
18 obligation to determine whether or not the data
19 we had submitted to the government was valid.
20 So those became our high priority items. The
21 second category was items that had not been
22 subject to regulatory action, but we thought
23 were important, either from a commercial
24 standpoint or potential health, we'd make a
25 attempt to validate those studies. And the

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1 some idea of what was being negotiated, if you
2 will, or the prices, but at that time the
3 operating units were paying the bills and that
4 was part of their fiscal responsibility and we
5 had no involvement in it.
6 Q. Earlier you had made reference to the IBT trial
7 and the IBT business, what were you making
8 reference to?
9 A. I was asked a question about whether Paul Wright
10 was indicted and was found guilty. The
11 allegations were made that IBT had submitted
12 data on, first it was one or two drugs and as I
13 recall there were four different compounds
14 involved, and the allegations were somewhat
15 similar in each case, that they had submitted
16 false data, and that they had used the wires or
17 the mail to do it. A case of fraud, I guess,
18 using the mails to commit that fraud, and
19 submitting false data to agencies. This, in a
20 different connection some EPA inspectors had
21 gone up to look at IBT studies and they started
22 raising questions and basically the government
23 came down and said anybody submitted -- they
24 sent out lists of various studies to various
25 companies, to Monsanto, not directly to me but

1 third category was either discontinued products
2 or products that never became a reality and we
3 would not worry about those. Similar letters
4 went to many companies. We went in with the
5 first validation studies on the pesticides, and
6 EPA not only accepted our proposed validation
7 procedure, they subsequently held it out for a
8 model for the rest of the industry to follow.
9 So as a result, these four studies that were
10 from four different companies that were
11 requested by the government, those are the basis
12 of the charges brought against the IBT officials
13 that we mentioned.
14 Q. What time frame are we talking about where IBT
15 was alleged to have submitted false data?
16 A. Boy, so many things were going on about that
17 time, I have trouble. There were so many things
18 because we were opening up the lab and various
19 other things -- this would be in the latter
20 '70s, '77, '8, later than '77; '78, '79, '80.
21 Q. Do you know if Monsanto did anything to go back
22 and validate the studies that IBT had performed
23 on the lab rats with reference to the PCBs?
24 A. This is part of the endeavor. We had never
25 submitted -- the agencies that asked Monsanto

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1 for PCB data, and that was made available to
2 them, some of the references in here refer to
3 it, but these are made at the request of the
4 FDA, for instance, and EPA. We had never
5 submitted them to an agency, asked them for any
6 regulatory action on PCBs. And at that time
7 they were taking no regulatory action. Since
8 they were not the basis, they were not our high
9 priority item, but they were of sufficient
10 interest as environmental contaminants and
11 health risk we made an effort to do something,
12 and rather than do the entire study, we looked
13 at this question of the liver tumors. The IBT
14 data were cited by FDA when they set up
15 tolerances on food levels for PCBs, but the
16 levels were set predominantly on the basis of
17 the Yusho experience which are the human poison
18 cases in Japan. The Monsanto data on animals
19 were consistent with and in a sense supportive
20 of human data, but they were not the basis that
21 FDA used to set the food tolerances, although
22 there had been newspaper articles and magazines
23 alleging that Monsanto sent false data to FDA
24 for that purpose. They asked for the data, we
25 gave it to them and we continued to try to keep

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1 them posted as developments went on with PCBs.
2 Q. If I'm understanding your testimony, then, other
3 than the endeavor that you just described to
4 validate the testing and data that IBT provided
5 to Monsanto, is the answer no, then, that the
6 tests were never validated in full?
7 A. That's right, sir, we never went back to look at
8 the complete.
9 Q. Dr. Calandra, he appeared with a gentleman named
10 Papageorge at a seminar in Chicago with the
11 Environmental Protection Agency in 1975; were
12 you aware of that?
13 A. Yes.
14 Q. Did you attend that seminar?
15 A. No.
16 Q. Do you know what the basis of the information
17 was that Calandra provided or what the
18 substance, I should say, at that seminar?
19 A. I don't recall specifics of the discussion he
20 had but the intent was -- well, Monsanto had
21 paid for the data and it was probably Monsanto
22 data, Joe Calandra had developed the data in his
23 laboratory and he should be the man who should
24 present it because he should be in the better
25 position to defend it or explain it if either

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1 was necessary to the symposium at Chicago.
2 Q. What data did he present?
3 A. I think he presented the dog results and I don't
4 know whether he presented the feeding studies on
5 the rats. My recollection is, I have some
6 recollection that he talked about the dog
7 feeding studies, and I really don't recall the
8 details of his presentation.
9 Q. Well, do you know whether or not you had
10 requested that Dr. Calandra change some of the
11 studies that he had written with regard to 1242,
12 1254 and 1260, the slightly tumorigenic and
13 changed that language to does not appear to be
14 carcinogenic, did he do that before he went to
15 Chicago?
16 A. I can't remember. I don't know.
17 Q. What is the difference in your mind between
18 slightly tumorigenic and carcinogenic?
19 A. Tumorigenic to me is a more general term. A
20 mole such as this is a tumor. And cancer of the
21 lip would be a tumor. So it's a generic term.
22 And a carcinogen is a very specific, or
23 carcinoma is a very specific type of tumor.
24 Since the discussion was focused on whether or
25 not the materials produced cancer, and since I

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1 saw in the second set of reports that I had that
2 we talked about earlier, that they had used the
3 term "is not carcinogenic."
4 Q. Does not appear to be carcinogenic?
5 A. Does not appear to be carcinogenic. My request
6 to him was based on the fact that if we are
7 trying to deal with the issue of carcinogenicity
8 we should be as specific in the terminology as
9 we could. And since it was more directly to the
10 cancer and he had made the change twice already,
11 it would be preferable to have the third change
12 read the same way, since tumorigenic is a less
13 specific term and didn't quite deal with the
14 issues under discussion.
15 Q. Do you know when Dr. Calandra appeared in front
16 of the EPA in Chicago in 1975 whether or not he
17 discussed his opinion that the Aroclor lines
18 were tumorigenic in the lab animals that they
19 worked on?
20 A. I don't recall exactly what the proceedings were
21 in the large volume. I don't recall exactly
22 what Joe Calandra said. I do have a vague
23 recollection that he talked about the dog
24 studies and I don't know what he said about the
25 rat studies.

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1 Q. Do you know at any time, if Monsanto ever made
2 any effort to let a governmental or state agency
3 know that Mr. Calandra's preliminary opinion was
4 that the Aroclor 1242, 1254 and 1260 were
5 slightly tumorigenic?
6 A. They -- trying to think of -- I don't recall the
7 phrasing in the original two-year rat reports.
8 But they could have the two-year rat reports.
9 Q. And you don't recall the specific --
10 A. And I don't recall how this was phrased in the
11 two-year rat reports, they do have the original
12 reports.
13 Q. You came on with Monsanto in what year, sir?
14 A. 1971.
15 Q. Do you recall seeing any literature that was
16 provided by Monsanto to customers who had
17 purchased PCBs from Monsanto?
18 A. I don't recall that I saw any such literature.
19 Q. Did you in your working with PCBs at Monsanto
20 ever come across an article from the journal
21 referred to as Chemical Week?
22 A. I'm sure things from Chemical Week have been
23 sent across my desk more than once, but I don't
24 know specifically what you're referring to.
25 Q. Specifically I'm referring to an article on PCBs

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1 that appeared in the early '70s that was
2 provided to customers of Monsanto who had
3 purchased PCBs. Do you have any recollection
4 other personal knowledge of that particular
5 article?
6 A. No, I do not.
7 Q. Did you see any of the letters that were
8 generated by Monsanto informing customers that
9 Monsanto was ceasing to manufacture and
10 distribute the Aroclor lines?
11 A. I know that that decision -- I heard the
12 decision was made. I do not recall seeing the
13 letters sent to customers.
14 Q. Was it within your purview in the medical
15 department in the role that you were filling in
16 Monsanto at that time?
17 A. I think not, not my involvement at that time.
18 My involvement at that time, such as it was,
19 with PCBs did not include seeing anything like
20 that.
21 Q. Let me ask you, earlier this morning you were
22 asked when you first learned about PCBs, and I
23 believe you responded to one of Mr. Turet's
24 questions you first heard of PCBs in the context
25 that PCBs were environmental contaminants;

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1 correct?
2 A. Yes.
3 Q. What was your understanding back in the '70s as
4 to what was the basis for the allegation that
5 PCBs were an environmental contaminant?
6 MR. DAVIDSON: Just in the '70s?
7 MR. O'CONNOR: Yeah, just in the
8 '70s.
9 A. They were being described -- first there was a
10 DDT in the environment and then there was --
11 reports were beginning to come out from
12 different places, a few reports at least from a
13 few place that something other than PCBs was in
14 that mixture. Then it says the analytical
15 methodology got better -- I should say that
16 something other than DDT was involved in this
17 environmental contamination. As they refined
18 their analytical methods, they identified the
19 PCBs which probably were mixed in with the DDT
20 earlier and weren't recognized as separate. So
21 they were beginning to have an awareness that
22 there were PCBs as environmental contaminants
23 and that was done probably in the late '60s and
24 early '70s.
25 Q. Your focal point was not PCBs in the 1970s?

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1 A. Right. As I said, I was to work on new products
2 and new uses of existing products. PCBs were in
3 existing products, no new uses, so they really
4 were not in my purview.
5 Q. The studies that were done on employees at
6 Monsanto that were working in the area or
7 working with the manufacture of the Aroclors, do
8 you know the name of the outside contractor that
9 performed those studies?
10 A. No.
11 Q. And was there data that was collected that was,
12 was it Dr. Johannsen that interpreted that data?
13 A. No, my recollection is Dr. Johannsen was given
14 the assignment to look at the records and see
15 what information was there and was there enough
16 information to work with. And as I was reading
17 his -- I really hadn't remembered while I was
18 reading it earlier, Frederick's assignment was
19 to see what's available and is there enough
20 information there that we could make some sense
21 out of it, or it would be useful. Because like
22 everything else, the fact that you've got a
23 number of people working in an area and nobody
24 has a history of what they have been doing or
25 what their exposures or are what their health,

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1 is it meaningful having so many bodies without
2 some indication as to what they're related to,
3 isn't a meaningful exercise.
4 Q. I guess I should have asked you whether or not
5 you knew whether an independent contractor had
6 been hired to collect the data or was that
7 strictly an in-house study performed by Dr.
8 Johannsen?
9 A. My recollection is that Dr. Johannsen's initial
10 effort was to see what was available, was there
11 enough material that we could work with to do
12 something further.
13 MR. O'CONNOR: I don't have anything
14 else.
15 MR. DIMURO: Gary?
16
17 EXAMINATION
18 QUESTIONS BY MR. LIPSHUTZ:
19 Q. Dr. Levinkas, my name is Gary Lipshutz. I'm
20 speaking to you from New Jersey on the
21 telephone. Can you hear me okay, sir?
22 A. Yes.
23 Q. Mr. O'Connor, the attorney just asked you some
24 questions, asked you whether you recalled ever
25 seeing any brochures distributed to customers of

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1 Monsanto regarding PCBs. I believe your answer
2 was that you had not recalled seeing any
3 brochures; is that correct?
4 A. Yes, that's correct.
5 Q. Would that be correct also in regards to
6 distributors for PCBs, Monsanto distributors?
7 A. I guess I have some difficulties with the
8 question.
9 Q. Let me rephrase it for you, sir. Do you recall
10 ever seeing brochures that Monsanto gave to
11 distributors, that Monsanto gave to its
12 distributors regarding PCBs?
13 A. My answer of not seeing brochures is absolute.
14 I did not know they had such separate ones for
15 customers and distributors. I have not seen any
16 such bulletins that I can recall.
17 Q. I'm trying to understand what you said. You're
18 saying that you don't recall seeing any
19 brochures which would have been given by
20 Monsanto to either customers or distributors; is
21 that correct?
22 A. That's right. I don't recall seeing any product
23 bulletins on PCBs shortly after I came to
24 Monsanto.
25 Q. Have you ever heard of American Mineral Spirits

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1 Company?
2 A. I've had heard the company in -- I've seen the
3 name in various chemical magazines that I've
4 read, but I don't know anything about it.
5 Q. Have you ever discussed PCBs with any
6 representative of American Mineral Spirits?
7 A. Not that I can recall.
8 Q. Do you have any knowledge of Monsanto's sales to
9 American Mineral Spirits as a distributor of
10 PCBs?
11 A. No.
12 Q. Do you know the name of any Monsanto current
13 employee or former employee who would know the
14 types of warnings or brochures which were given
15 to distributors of Monsanto PCBs products?
16 A. I would not know who would have been in charge
17 of such things that would have handled that,
18 other than to say somebody in the functional
19 fluids business group that handled PCBs, but I
20 don't know who would have had responsibility for
21 it.
22 MR. LIPSHUTZ: I have no further
23 questions.
24 MR. TURET: I have no questions.
25 MR. DAVIDSON: I have one question.

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1 EXAMINATION
2 QUESTIONS BY MR. DAVIDSON:
3 Q. Dr. Levinkas, Mr. Turet asked you about bunch
4 of questions about Exhibit 3 which was Dr.
5 Kimbrough's letter to you providing some
6 information about her studies, do you recall
7 that?
8 A. Yes.
9 Q. My only question is, was the data and her study
10 subsequently published in the scientific
11 literature?
12 A. Her study was published, yes.
13 MR. DIMURO: We'll read and sign.
14 MR. TURET: Tomorrow we start at
15 nine.
16 (Witness excused)
17
18
19
20
21
22
23
24
25

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1 STATE OF _____)
2 COUNTY OF _____)
3 I, GEORGE LEVINSKAS, do hereby certify:
4 That I have read the foregoing deposition;
5 That I have made such changes in form
6 and/or substance to the within deposition as
7 might be necessary to render the same true and
8 correct;
9 That having made such changes thereon, I
10 hereby subscribe my name to the deposition.
11 I declare under penalty of perjury that
12 the foregoing is true and correct.
13 Executed this _____ day of
14 _____, 1997,
15 at _____,
16 _____
17 _____
18 NOTARY PUBLIC
19
20 My Commission expires: _____
21
22
23 _____
24 GEORGE LEVINSKAS
25

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1 CERTIFICATE OF REPORTER
2 STATE OF MISSOURI)
3) SS
4 COUNTY OF ST. LOUIS)
5 I, NANCY A. KUNCAITIS, a Registered
6 Professional Reporter and Notary Public in and
7 for the State of Missouri, the officer before
8 whom the foregoing deposition was taken, do
9 hereby certify that the witness whose testimony
10 appears in the foregoing deposition was duly
11 sworn by me; that the testimony of said witness
12 was taken by me to the best of my ability and
13 thereafter reduced to typewriting under my
14 direction; that I am neither counsel for,
15 related to, nor employed by any of the parties
16 to the action in which this deposition was
17 taken, and further that I am not a relative or
18 employee of any attorney or counsel employed by
19 the parties thereto, nor financially or
20 otherwise interested in the outcome of the
21 action.
22
23 NOTARY PUBLIC in and for the
State of Missouri
24 My commission expires 11-22-01
25

-\$- \$1,000 [1] 108:14 \$2,500 [1] 107:10 \$28,980 [1] 107:7 -'- '2 [2] 80:8 120:10 '58 [1] 8:4 '59 [1] 8:4 '60s [1] 159:23 '68 [2] 9:21 120:14 '69 [2] 120:14 141:9 '7 [1] 9:21 '70 [1] 141:9 '70s [8] 28:6 149:3 152:20 158:1 159:3,6,8 159:24 '71 [4] 13:12 80:8 120:10 124:25 '72 [10] 15:18 19:7,24 20:12 22:15 27:15 34:20 98:5,6,8 '73 [4] 27:15 28:25 34:20 111:23 '74 [5] 27:15 28:13,25 52:1,1 '75 [4] 28:13 57:10 81:14 89:18 '76 [1] 28:8 '77 [2] 152:20,20 '78 [2] 28:8 152:20 '79 [1] 152:20 '8 [2] 9:21 152:20 '80 [1] 152:20 '80s [1] 35:2 '87 [1] 16:7 '88 [1] 147:2 '89 [2] 147:2,3 '9 [2] 9:21 28:8 '91 [2] 16:9 36:25 '93 [1] 112:5 -.- .5 [1] 132:22 .51 [1] 132:22 -0- 001342-56 [1] 78:7 001344 [1] 82:10 001743 [1] 124:9 002241 [1] 124:14 002244 [1] 129:15 003505 [1] 124:12 014404 [1] 140:8 022030 [1] 93:23 022089 [1] 112:23 027812 [1] 65:24 02849 [1] 2:4	033 [1] 93:23 038398 [1] 124:6 038402 [1] 127:11 040881 [1] 130:16 040931 [1] 130:21 051687 [1] 55:18 051688 [1] 57:19 051691 [1] 58:2 051695 [1] 75:1 051697 [1] 115:23 051966 [1] 84:6 052975 [1] 88:23 054084-085 [1] 45:4 07101-3174 [1] 3:9 07102-5311 [1] 3:22 08054 [1] 3:5 -1- 1 [8] 1:7 44:23 45:1 89:19 124:24 140:24,24 148:13 1/13/75 [1] 1:9 1/14/75 [2] 1:9 63:1 1/31/75 [1] 65:18 10 [11] 1:12 51:1 53:8 93:16,20,24 107:1,8,11 142:18 148:13 10/13/71 [2] 1:7 44:25 10/14/81 [2] 1:17 140:2 10/16/75 [2] 1:14 112:16 10/17/75 [2] 1:14 115:17 100 [1] 82:13 101 [2] 1:13 3:4 1016 [1] 54:23 1043 [2] 55:4,8 107 [1] 1:13 10th [1] 2:12 11 [2] 1:13 101:21 11-22-01 [1] 166:24 112 [1] 1:14 115 [1] 1:14 117 [1] 1:15 12 [5] 1:13 9:15 107:18 107:24 140:19 12-72-A [1] 57:23 12/17/74 [2] 1:8 55:10 12/6/74 [2] 1:8 50:18 124 [4] 1:15,16,16,17 1242 [12] 79:16 87:11,11 87:21,24,25 123:21 125:17 140:6,15 155:11 157:4 1254 [33] 54:5,25 61:16 61:23 79:12 81:6,13 82:11 83:7 84:24 85:8 89:6,20 92:2,3 120:3 123:21 124:6 124:8,11,13 125:17,18,21 127:4 131:17 133:8 134:2 134:12 140:6,15 155:12 157:4 1260 [38] 28:24 46:1,13 51:20,24 56:23 58:21	60:19 61:3,18,22,25 65:23 68:10 70:3 78:21 79:14 85:15,22 86:5,5,11,16 87:3,5,22,24,25 89:20 95:8 123:17,21 125:17 137:19 140:7,15 155:12 157:4 13 [7] 1:14 45:5,16 46:9 63:8 112:17,22 14 [9] 1:14 35:4,4 63:5 115:18,21 140:8 141:21 142:11 140 [1] 1:17 1400 [1] 3:12 142 [1] 1:3 15 [7] 1:15 9:15 35:4 69:8 117:22,25 142:11 153 [1] 60:7 154 [4] 60:5,17 61:10,15 16 [4] 35:3,4 112:22 123:25 16-A [4] 1:15 124:2,4,17 127:18 16-B [5] 1:16 124:2,7,17 127:18 16-C [4] 1:16 124:2,9,17 16-D [5] 1:17 124:3,12 124:17 129:7 161 [1] 1:4 164 [1] 1:4 17 [4] 1:17 55:14 115:21 140:3 18 [2] 84:4,11 19103-7396 [1] 3:17 1950s [1] 126:13 1953 [1] 6:6 1958 [2] 7:11 8:2 19643 [1] 118:6 1969 [1] 120:12 1970s [10] 16:6 34:1 36:7 128:25 129:1 131:5 134:11 135:6 138:10 159:25 1971 [34] 7:18 8:7 13:12 14:10 19:7,24 20:12 22:15 23:21 27:10,12 30:23 33:1 33:8,16 34:8 35:11 36:24 45:5,16 46:9 47:10 80:7 82:24 99:1 120:6,8,13,15 124:21,24 127:6 129:17 157:14 1971-ish [1] 80:22 1972 [4] 15:17,21 98:23 99:11 1974 [7] 28:13 29:11 51:2 51:16 53:23 55:14 129:1 1975 [24] 51:16 63:5 65:8 65:23 69:9 70:6 74:25 78:6,12 79:19 80:9 83:19 84:4,11 88:22 89:2 93:21 94:4 112:22 113:2 115:21 116:2 154:11 156:16 1976 [1] 119:7 1977 [2] 30:15,16 1980 [1] 36:6 1980s [1] 131:10	1981 [2] 140:8 141:21 1985 [1] 16:7 1991 [1] 13:12 1993 [1] 112:4 1997 [2] 2:13 165:14 1st [1] 74:25 -2- 2 [7] 1:8 50:19 53:7 89:5 96:24 122:5 141:12 215 [1] 3:18 21927 [1] 3:12 22 [1] 93:21 23-month [1] 70:2 24 [6] 69:9 78:6 79:19 80:9 81:14 91:21 246 [5] 94:12,15,18 95:5 96:17 25 [1] 107:11 27420 [1] 3:13 29 [1] 118:3 -3- 3 [8] 1:8 55:11,14 86:15 86:16,17 130:15 164:4 3/24/75 [4] 1:10,11 69:2 77:25 30 [3] 9:16 92:14 115:6 300 [1] 3:12 3000 [1] 3:5 31 [2] 65:8,23 -4- 4 [6] 1:3,9 63:2 83:19 88:22 89:13 40 [2] 92:14 115:6 42 [5] 85:16,24 86:17 87:4 123:19 44 [1] 1:7 475 [1] 124:7 -5- 5 [3] 1:9 65:19,21 5/1/75 [2] 1:10 74:21 50 [1] 1:8 54 [3] 85:15,24 123:19 54s [1] 89:22 55 [1] 1:8 -6- 6 [4] 1:10 51:1 69:3,7 60 [1] 123:20 600 [1] 87:2 60s [1] 89:22 63 [1] 1:9 639-7298 [1] 3:10 65 [1] 4:9 69 [1] 1:10 694 [1] 55:19	696 [1] 75:1 -7- 7 [3] 1:10 74:22 86:17 7/18/75 [2] 1:12 83:23 74 [1] 1:10 7494 [1] 2:16 77 [1] 1:11 -8- 8 [5] 1:11 78:1,3 91:21 141:9 8/22/75 [2] 1:12 93:15 8/4/75 [2] 1:11 83:14 800 [1] 87:3 83 [2] 1:11,12 -9- 9 [5] 1:11 83:15,18 88:21 107:1 9-A [6] 1:12 83:22,24 84:2,4,6 93 [1] 1:12 932 [1] 130:21 934 [1] 130:16 973 [1] 3:10 979-1000 [1] 3:18 -A- ABC [5] 88:1,1,4,4,5 ability [3] 100:1 123:12 166:12 able [2] 72:4 94:25 abnormalities [2] 79:3 146:16 above [4] 132:19 135:18 135:24 136:10 abreast [4] 26:13 28:2 38:20 41:3 absence [3] 40:12,22 67:6 absolute [1] 162:13 abstract [1] 18:10 accepted [4] 13:6 126:23 132:2 152:6 accommodate [1] 5:11 accompany [1] 11:10 accomplishment [1] 108:6 accountability [1] 140:21 accuracy [1] 95:23 ACGIH [4] 132:11 135:18 136:8,17 achievement [1] 109:22 acknowledge [1] 89:25 acknowledges [1] 89:25 acquaintances [1] 29:9 acid [1] 136:24 acronym [1] 55:5
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