

In The Matter Of:

*Nevada Power Company v.
Monsanto Company, et al.*

*Paul Benignus
April 2, 1993*

*Concannon & Jaeger
General Court Reporters
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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA
NEVADA POWER COMPANY)
Plaintiff,)
-vs-) # CV-S-89-555-LDG (LRL)
MONSANTO COMPANY, et al.,)
Defendants.)
DISCOVERY DEPOSITION OF PAUL BENIGNUS
On the part of the Plaintiff
April 2, 1993

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA
NEVADA POWER COMPANY,)
Plaintiff,)
-vs-) # CV-S-89-555-LDG (LRL)
MONSANTO COMPANY, et al.,)
Defendants.)
DISCOVERY DEPOSITION OF WITNESS, to be used in an
action pending in the District Court of the United States,
for the District of Nevada, wherein NEVADA POWER COM-
PANY is
Plaintiff, and MONSANTO COMPANY, et al., are the
Defendants, pursuant to Notice, under the provisions of
Rule 26 of the Rules of Civil Procedure, taken on April 2,
1993, at the law offices of Messrs. Husch & Eppenberger,
100 N. Broadway, St. Louis, Missouri, before Mark D.
Concannon, a Notary Public within and for the State of
Missouri.

APPEARANCES

The Plaintiff was represented by Attorney Ralph A.
Bradley of the law firm of Jones, Jones, Close & Brown,
Chartered, 700 Bank of America Plaza, 300 South Fourth
Street, Ste. 700, Las Vegas, Nevada 89101, and Richard
Hinckley, Vice-President/General Counsel, Nevada Power.
The Defendant, Monsanto, was represented by Attorney
Bruce A. Featherstone of the law firm of Kirkland & Ellis,
1999 Broadway, Ste. 4000, Denver, Colorado 70202.

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APPEARANCES (continuing)

The Defendant, Westinghouse, was represented by
Attorney Laurie Basch of the law firm of Weil, Gotshal &
Manges, 767 Fifth Avenue, New York, New York 10153, and
Peggy A. Leen of the law firm of Thorndal, Backus, Maupin &
Armstrong, 1100 E. Bridger Avenue, Las Vegas, Nevada
89125-2070.
The Defendant, General Electric, was represented by
Attorney Steven R. Kuney of the law firm of Williams &
Connolly, 725 12th Street, N.W., Washington, D.C. 20005.
Also present: Liz Gini, paralegal.

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[1] PAUL BENIGNUS, [2] of lawful age,
being first duly sworn to tell the truth,
[3] the whole truth, and nothing but the
truth, deposes and [4] says on behalf of
the Plaintiff, as follows:

[5] DIRECT EXAMINATION

[6] QUESTIONS BY MR. BRADLEY:

[7] Q: Would you please state your name
and spell [8] your last for the record?

[9] A: Paul Benignus. It's spelled B, as in
boy, [10] B-e-n-i-g-n-u-s.

[11] Q: Mr. Benignus, my name is Ralph
Bradley, and we [12] introduced oursel-
ves to one another a few moments ago;
is [13] that true?

[14] A: That's correct.

[15] Q: You understand that I represent
Nevada Power [16] Company in this law-
suit they've brought against Monsanto,
[17] General Electric, and Westinghouse?

[18] A: Yes.

[19] Q: Are you here today represented
by an attorney?

[20] A: Yes.

[21] Q: All right. Do you know the pur-
poses of a [22] deposition?

[23] A: Yes, sir.

[24] Q: If I ask a question during this
deposition [25] that you don't under-
stand, will you tell me?

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[1] A: Yes, sir.

[2] Q: And if at any time you want to take
a break [3] for whatever reason, you let
us know and we'll accommodate [4] you.
All right?

[5] A: Yes.

[6] Q: Did you review any materials in
preparation [7] for today's deposition?

[8] A: Not specifically. However, I have
seen [9] materials that you have, some of
them. I don't know to [10] what extent.

[11] Q: Well —

[12] A: I have no special preparation to
be here.

[13] Q: What is your residential address?

[14] A: 47 Metcalf, M-e-t-c-a-l-f, Drive, Bel-
leville, [15] B-e-l-l-e-v-i-l-l-e, Illinois 62223.

[16] Q: Have you had your deposition
taken before?

[17] A: Yes, sir.

[18] Q: When is the most recent time you
have had your [19] deposition taken?

[20] A: I can't give you the exact time. I
will [21] estimate this as being two years
ago.

[22] Q: Did that deposition relate to
polychlorinated [23] biphenyls?

[24] A: It related to a transformer that did
contained [25] polychlorinated
biphenyls, an askarel, a-s-k-a-r-e-l, type

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[1] transformer.

[2] Q: Do you remember the name of
that lawsuit in [3] which you had your
deposition taken two years ago?

[4] A: I think it was called one something
plaza in [5] San Francisco.

[6] Q: Have you had your deposition
taken at any [7] other time where the
subject matter of the deposition was [8]
at least in part related to askarel or
polychlorinated [9] biphenyls?

[10] A: Yes.

[11] Q: What other depositions have you
given on that [12] topic?

[13] A: There was a — I'm trying to think
of these. [14] There weren't many. There
was a case — In addition to [15] this one
that I mentioned, there was a case in
Houston [16] where I testified.

[17] Q: Do you remember the name of
that case?

[18] A: I don't know the specific title, but
it [19] involved Westinghouse
employees.

[20] Q: And how did it involve Westin-
ghouse employees?

[21] A: They were people who had
worked with askarel.

[22] Q: Were they alleging that they were
injured by [23] exposure to askarel?

[24] A: This is what they alleged.

[25] Q: Did you testify in the trial of that
case?

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[1] A: No.

[2] Q: Just had your deposition taken?

[3] A: Just had my deposition. I've never
been in [4] any trial.

[5] Q: Do you recall having your deposi-
tion tran- [6] scribed and put in a little
booklet?

[7] A: Yes.

[8] Q: Did you sign an original copy of
that booklet?

[9] A: I would assume so, that I signed it,
yes.

[10] Q: Do you have a copy of that
deposition?

[11] A: I'm not absolutely sure. I may
have. I did [12] have at one time.

[13] Q: All right. Any other cases that you
have [14] given depositions in?

[15] A: There was another case that I
think I gave a [16] deposition on, and that
involved, I think, a landfill in [17]
Bloomington, the City of Bloomington,
Indiana.

[18] Q: All right. Do you know whether
you have a [19] copy of the transcript of
the deposition you gave regarding [20]
the testimony of the landfill in
Bloomington?

[21] A: I'm not sure that I have. I may
have; I'm not [22] sure.

[23] Q: Have you given your deposition
in any other [24] cases where the subject
matter was at least in part related [25] to
PCBs or askarel?

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[1] A: I think I — The total, I don't think,
exceeds [2] four, and I don't keep these
clearly documented in my mind. [3] I
think there was a case in Jacksonville,
Florida — I [4] think; I'm not sure —
where there was a relatively new [5]
building that had askarel transformers in
it.

[6] Q: And what was there about the rela-
tively new [7] building with askarels in it
that resulted in your having [8] your
deposition taken? Did the transformer
explode?

[9] A: No. There was no trouble what-
soever.

[10] Q: Do you know why your deposi-
tion was taken in [11] that case?

[12] A: I would say, yes. As I understood
it, some- [13] one took it upon themselves
to pass judgment, which need [14] not
have been done, as I recall this, and these

perfectly [15] good, normal, operating transformers were removed, and, [16] being removed, they were replaced with other equipment.

[17] Q: And let's go back for a moment to the case in [18] Houston involving the Westinghouse employees. Do you know [19] what the purpose was in having your deposition taken in [20] that case?

[21] A: To testify about askarels and their proper [22] ties.

[23] Q: Did you testify about your work history with [24] Monsanto in the case in Houston?

[25] A: Yes.

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[1] Q: Did you testify regarding any warnings [2] Monsanto may have given to Westinghouse employees regarding [3] askarel?

[4] A: The warnings we gave to everybody was —

[5] MR. FEATHERSTONE: He just asked you whether [6] you testified on that subject.

[7] THE WITNESS: Oh, excuse me. Did I misinter- [8] pret that?

[9] Q: (by Mr. Bradley) The question is not what you [10] said, but whether you testified about that subject, whether [11] you testified about warnings that Monsanto gave to [12] Westinghouse employees regarding askarel.

[13] A: We would have given —

[14] MR. FEATHERSTONE: Paul, the question simply [15] was whether you recall testifying on that subject matter, [16] not the contents of the warnings. Just, do you remember [17] being asked about warnings?

[18] THE WITNESS: I don't recall. Maybe I don't [19] understand the question.

[20] Q: (by Mr. Bradley) Well, if you don't recall, [21] you should tell us you don't recall.

[22] A: Let's leave it I don't recall.

[23] Q: Okay. I want to go into your educational [24] background, and let's start with receiving your Bachelor's [25] Degree.

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[1] A: That was at Illinois College, Jacksonville, [2] Illinois; Bachelors Degree; Major, chemistry; Minors, [3] education and physics; and it was in 1933.

[4] Q: Where did you get your Master's Degree?

[5] A: It was at Washington University, St. Louis, [6] Missouri —

[7] Q: Okay.

[8] A: — 1934, organic chemical synthesis.

[9] Q: Organic chemical synthesis was an area that [10] you studied for receipt of your Master's Degree?

[11] A: Yes.

[12] Q: And was your Major in organic chemistry?

[13] A: Yes.

[14] Q: And you received that in 1934?

[15] A: 1934.

[16] Q: Did you write a paper to enable you to receive [17] a Master's Degree?

[18] A: Yes.

[19] Q: What was the subject matter of your Master's [20] thesis?

[21] A: The oxidation of phthalid, p-h-t-h-a-l-i-d, to [22] orthophthalaldehyde, p-h-t-h-a-l-d-y-d, acid.

[23] Q: What did you do when you completed your [24] Master's Degree?

[25] A: I went to work.

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[1] Q: For whom?

[2] A: I worked for a very brief time at Western [3] Cartridge in Alton.

[4] Q: What work did you do for them?

[5] A: I was running a detonator plant. This is a [6] plant that manufactured powders and explosives and [7] detonators, but I was there only a short period of time.

[8] Q: And what did you do next for work?

[9] A: The next place I went, I went with Monsanto [10] when a job opened there. So I began there in 1934.

[11] Q: What job title did you have when you began [12] work with Monsanto?

[13] A: I began, like all beginners, no title. I was [14] in the analytical laboratory, and was there for two years.

[15] Q: What work were you doing in the analytical [16] laboratory?

[17] A: Analyzing the chemicals that Monsanto pro- [18] duced.

[19] Q: During that period of time did you analyze any [20] chemicals that contained polychlorinated biphenyls?

[21] A: No, sir.

[22] Q: Did you analyze any chemicals that contained [23] chlorinated diphenyl?

[24] A: No, sir.

[25] Q: What was your next — Did if you have a job

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[1] title when you left the analytical laboratory?

[2] A: Really not.

[3] Q: What work did you do after you left the [4] analytical lab?

[5] A: After that I went into advanced sort of [6] specialized analytical laboratory work.

[7] Q: How did that differ, if at all, from the [8] analytical work you did when you began with Monsanto?

[9] A: Essentially, not.

[10] Q: Were you then also working in the analytical [11] laboratory?

[12] A: No. It was in a different separate section.

[13] Q: Which section was it in?

[14] A: I refer to it here merely as a room.

[15] Q: All right. And what work did you do as an [16] advanced analytical lab — in your work with advanced [17] analytical laboratory work?

[18] A: I don't recall specifically what we all worked [19] on, but it would have related to the chemicals that the [20] company was making in some form or another.

[21] Q: Still analyzing chemicals that Monsanto [22] produced?

[23] A: Yes. In essence, correct.

[24] Q: How long did you do advanced analytical [25] laboratory work?

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[1] A: I think, for a year. Not much more.

[2] Q: During that year did you analyze any chemi- [3] cals manufactured by Monsanto that contained chlorinated [4] diphenyl?

[5] A: No, sir.

[6] Q: What did you do next?

[7] A: Next I worked as what they call a plant [8] chemist, where I was more directly working in a production [9] of chemicals.

[10] Q: Where were you a plant chemist?

[11] A: This was all on South Second Street, at St. [12] Louis.

[13] Q: What was the name of the plant, if there was a [14] name, where you were a plant chemist?

[15] A: It was called the John F. Queeny Plant, in [16] honor of the founder of Monsanto.

[17] Q: And when did you begin work as a plant [18] chemist?

[19] A: Well, approximately three years after I [20] started in '34. It must have been somewhere around '37.

[21] Q: What work did you do as a plant chemist?

[22] A: I did the analytical, or control — better [23] call it control analysis required in the manufacturing [24] process of the department I was working for.

[25] Q: Which department were you working for?

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[1] A: I was in a department that produced salicylic [2] acid and another department that was involved in the [3] production of an intermediate for saccharin.

[4] Q: How long were you a plant chemist?

[5] A: I think, approximately two years.

[6] Q: As a plant chemist you did not work with [7] polychlorinated biphenyls or chlorinated diphenyl, I [8] assume?

[9] A: That is correct.

[10] Q: What did you do next?

[11] A: Next, I went into the research department of [12] the organic chemicals division, same location.

[13] Q: Did you have a job title when you went into [14] the research department?

[15] A: Really not. Just chemist.

[16] Q: What work did you do when you went into the [17] research department of the organic chemicals division?

[18] A: Specifically, in the group I was with, was [19] application research.

[20] Q: What is application research?

[21] A: That is applying, working on the use of [22] chemicals, as differentiated from the production or basic [23] research of chemicals.

[24] Q: How long were you in the research department [25] of the organic chemicals division?

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[1] A: From 1939 until, I believe, 1942, early '42, I [2] believe.

[3] Q: During the time you were in the research [4] department of the organic chemicals division, did you do [5] any work with chlorinated diphenyl or polychlorinated [6] biphenyls?

[7] A: Not that I recall. I don't think I did.

[8] Q: What did you do next?

[9] A: Next, in 1942, I was in the organic chemicals [10] division's development department.

[11] Q: Was that also at the John F. Queeny Plant?

[12] A: Yes.

[13] Q: What work did you do in the organic chemical [14] division's development department?

[15] A: I had a laboratory, my own laboratory, and I [16] did whatever the development department needed or wanted [17] done that required laboratory work.

[18] Q: What kind of work did the development depart- [19] ment ask you to do when you were in the organic chemical [20] division's development department?

[21] A: One of the prime things, if not the prime [22] thing, was working with pentachloro, p-e-n-t-a-c-h-l-o-r-o, [23] phenol, p-h-e-n-o-l.

[24] Q: What work were you doing relative to penta- [25] chlorophenol?

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[1] A: Pentachlorophenol was developed as a wood [2] preserver to protect wood against termites and fungus.

[3] Q: How long were you in the organic chemical [4] division's development department?

[5] A: Until about 1946.

[6] Q: While you were in the organic chemical [7] division's development department did you do any work with [8] chlorinated diphenyl or polychlorinated biphenyl?

[9] A: On a limited basis, I did.

[10] Q: What did you work with?

[11] A: Aroclor was Monsanto's trade name for this.

[12] Q: And back between 1942 and 1946 was Aroclor [13] considered to have chlorinated diphenyl as part of its [14] composition?

[15] A: Well, Aroclor is chlorinated biphenyl, and [16] they're also chlorinated terphenyls, t-e-r-p-h-e-n-y-l-s.

[17] Q: What work did you do with Aroclor when you [18] were in the organic chemical division's development [19] department?

[20] A: I'd like to explain this so that you under- [21] stand it. I'll have to give you a bit of background on [22] this.

[23] Q: That's fine.

[24] A: The Aroclor, as it's now called, PCBs, those [25] were materials at that point in time that were produced in

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[1] the inorganic division, which was Anniston, Alabama. Now, [2] I was in the organic division at this time, in the develop- [3] ment department, and I was asked to run very routine, [4] ordinary things such as physical constants, typical normal [5] things, density, and so on and so forth - that type of [6] work. That was the extent of it.

[7] Q: Explain to me what work you did with Aroclor [8] regarding physical constants?

[9] A: This had to do with specifications which were [10] established by the General Electric Company and the test [11] methodology and procedures originally formulated and [12] specified by the General Electric Company. And then [13] Monsanto, as the supplier of the PCBs, had to arrive at [14] conformity and agreement with General Electric Com- [15] pany that [15] everything was orderly

from the standpoint of our being [16] able to provide what is wanted.

[17] Now, to expand on this, there also was docu- [18] mentation thereafter of these specifications, test methods, [19] at the American Society of Testing and Materials that was [20] in our country. And to expand that still further, that was [21] then disseminated through the International Technical [22] Commission worldwide, to all countries where PCBs were of [23] interest, all in the interest of standardization.

[24] Q: The specifications that you talked about, what [25] would those include?

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[1] A: The complete specification, every- thing that [2] was of interest to the electrical industry.

[3] Q: Give me some examples.

[4] A: You have the bulletin here. I mean, the —

[5] MR. FEATHERSTONE: Well, Paul, give him some [6] examples of what you mean by "complete specifications," and [7] we're talking about the time that you were in the develop- [8] ment department. I mean, for instance.

[9] THE WITNESS: We're now going beyond the time [10] I was in the develop- ment department.

[11] MR. FEATHERSTONE: But that's where he is in [12] his questions.

[13] THE WITNESS: No, he isn't. You're behind.

[14] MR. FEATHERSTONE: I may be, but that's where [15] we are.

[16] THE WITNESS: That's where you are. [17] All right. I already said, going back, [18] retracting, I already said, in the development department I [19] worked on very ordinary, routine things involved with the [20] physical constants and/or specifications of PCB materials. [21] Some of these very ordinary things are: density, color, [22] refractive index, odor - very ordinary things.

[23] Q: (by Mr. Bradley) Including viscosity?

[24] A: Viscosity. thank you. Viscosity.

[25] Q: All right. To whom did you report when you

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[1] worked in the organic chemical division's development [2] department?

[3] A: To Mr. Lynn Watt, W-a-t-t.

[4] Q: Did you also report to Mr. Lynn Watt the [5] results of the standard routine work you were doing with [6] Aroclor?

[7] A: Only from the standpoint that I did this.

[8] Q: Were there any other people that you reported [9] to while you were in the organic chemical division's [10] development department regarding the standard work you were [11] doing with Aroclor?

[12] A: No, sir.

[13] Q: Okay. What did you do next?

[14] A: Next was a relatively brief time in what they [15] call the sales development department of the organic chemical division. And my reason for going to that location, [17] which was in the same area, was stemming from my work in [18] the development department during the war years when my [19] work was confined, restricted, strictly for military work [20] to enhance the war effort.

[21] I had invented and developed a fungistat, [22] badly needed to protect military equipment, meaning things [23] made of cotton. And the problem was largely that in the [24] South Pacific cotton fabrics deteriorated very rapidly. [25] This was before the advent of nylon, polyesters and the

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[1] synthetics which are much more resistant to such degradation [2] by fungi and so forth.

[3] Q: When you went to the sales department, it was [4] related to the development of the fungistat?

[5] A: This is correct.

[6] Q: What did you do next?

[7] A: Next, and this brings us up to October, 1947, [8] I was invited by the inorganic division to join that division. Their business and management offices had been moved [10] from Anniston, Alabama, to our building on South Second [11] Street here in St. Louis.

[12] Q: At the Queeny Plant?

[13] A: At the Queeny Plant, the home office of [14] Monsanto.

[15] Q: What work do you do beginning in October of [16] 1947 with the inorganic division?

[17] A: Specifically, my assignment was to handle all [18] nonelectrical applications for Aroclors, or as we're using [19] the term, PCBs.

[20] Q: What work did you do when you handled all non- [21] electrical applications for Aroclors or PCBs?

[22] A: Whatever there was to pursue and to do with [23] the application of these, or use of these materials for [24] nonelectrical purposes.

[25] Q: Were you involved, then, in developing poten-

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[1] tial uses for Aroclor and PCBs in nonelectrical systems?

[2] A: Essentially. However, it was more a matter of [3] pursuing uses that, an application that people outside of [4] Monsanto had initiated or begun, rather than that Monsanto [5] initiated or developed to use.

[6] Q: How long were you within the inorganic division when you began — Well, let me ask it this way: Did [8] you have a job title when you began your work with the [9] inorganic division in October of 1947?

[10] A: Yes.

[11] Q: What was your job title?

[12] A: The title was assistant director of development.

[14] Q: How long were you the assistant director of [15] development?

[16] A: Until the business was now moved from the [17] inorganic division into the organic division, and that was [18] in 1951 or early 1952.

[19] Q: Who was the director of development for the [20] inorganic division while you were the assistant director?

[21] A: Paul Louge, L-o-u-g-e.

[22] Q: Do you know whether Paul Louge is still [23] living?

[24] A: The last time I spoke with Paul was about [25] three years ago, and I think he was ninety-seven.

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[1] Q: What uses did you develop for Aroclor while [2] you were assistant director of development in the inorganic [3] division?

[4] A: As I said, it was more a matter that we pursued applications rather than that we invented these [6] things. Now, this gets us initially into applications such [7] as plasticizers.

[8] Q: Were you — While you were assistant director [9] of development in the inorganic division, did you work on [10] developing Aroclors as plasticizers?

[11] A: Yes, I pursued this. Yes.

[12] Q: What other uses did you pursue relative to [13] Aroclor between October of 1947 and the end of 1951?

[14] A: These materials were used in sealing compounds, in adhesives, in lacquers, in paints. One would [16] include varnishes.

[17] Q: All right. Do you recall why it was that [18] during this four-year period of time you worked on the [19] development of Aroclor with plasticizers?

[20] A: Why it was?

[21] Q: Yes. You had indicated that sometimes, or [22] maybe all of the time — it's not clear to me — you were [23] responding to interests outside of Monsanto.

[24] A: Yes.

[25] Q: So I'm interested in knowing if there was some

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[1] business outside of Monsanto that asked Monsanto to develop [2] Aroclors for plasticizers?

[3] A: Not specifically. However, when those uses [4] were recognized, like the — an early use was the use of [5] Aroclor as a plasticizer for nitrocellulose, for example. [6] What we would do is provide compatibility data and information [7] and other physical-property information of interest. [8] We were merely providing a service.

[9] Q: Do you recall whether the development of [10] Aroclor in plasticizers was a use that was brought about [11] through outside interests to Monsanto or whether it was [12] developed through inside interests within Monsanto?

[13] A: From outside interests, I would say.

[14] Q: Do you recall who it was outside of Monsanto [15] that requested Aroclor's application or use within plasticizers?

[17] MR. FEATHERSTONE: Requested or developed? [18] Your first question was developed and now you are to [19] requested.

[20] A: Many people.

[21] Q: (by Mr. Bradley) Okay. Do you recall the [22] names of any of the people?

[23] A: Oh, I could, yes, sir. Aroclor was perhaps [24] the most widely used family of chemical compounds in the [25] history of organic chemistry. They were very widely used.

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[1] Q: Do you recall whether your work as assistant [2] director of development with Aroclors and sealing compounds [3] was brought about from interests outside of Monsanto?

[4] A: That would have been interests outside of [5] Monsanto, yes.

[6] Q: While you were the assistant director of [7] development, did you have your own laboratory?

[8] A: At that point in time I did not have my own [9] laboratory. I had an office in St. Louis, and the [10] laboratory facilities were in the plant, research, and so [11] forth, at Anniston, Alabama.

[12] Q: In your work as assistant director of development [13] in the organic division, would you —

[14] A: Excuse me. Inorganic division.

[15] Q: Let me start that again.

[16] A: Oh, wait a minute.

[17] MR. FEATHERSTONE: Paul, let him ask his [18] question.

[19] Q: (by Mr. Bradley) In your work as assistant [20] director of development in the inorganic division, I take [21] it, then, that you did not develop the plasticizers that [22] contained Aroclor, correct?

[23] A: Correct.

[24] Q: Your work was limited to determining [25] compatibility data and other physical-property information

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[1] requested outside of Monsanto.

[2] A: This is correct.

[3] Q: What work did you do next?

[4] A: Next, and I think we already said in 1951 or [5] '52, Aroclor products, PCBs, were moved out of the [6] inorganic chemicals division and placed into the organic [7] chemicals division.

[8] Q: What job title did you have when that move [9] occurred?

[10] A: I really don't think any.

[11] Q: All right. So whenever this move occurred, [12] you then were the assistant director of development for the [13] organic division?

[14] A: No. That's what I meant by I didn't have a [15] title. We were moved, and I didn't use that title that I [16] had prior, and we were moved to the organic chemicals [17] division. Up to that period of time I had been working on [18] non-electrical applications. But now, starting in 1952, [19] let's say, I then specialized — began to specialize in [20] electrical applications.

[21] Q: To whom did you report when the inorganic [22] chemicals division was placed into the organic chemicals [23] division? What I mean is, after the move occurred, to whom [24] did you report?

[25] A: Sy Newcombe, N-e-w-c-o-m-b-e.

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[1] Q: And after that move occurred, did you have a [2] job title?

[3] A: I don't recall.

[4] Q: All right. And do you know whether Sy [5] Newcombe is still living?

[6] A: I don't know. I think so; he's not an old [7] man.

[8] Q: When is the last time you saw Mr. Newcombe?

[9] A: Years ago.

[10] Q: Okay.

[11] A: He wasn't there long after I was put into his [12] area.

[13] Q: All right. Did you report to someone other [14] than Sy Newcombe after the move from the inorganic to the [15] organic chemicals division?

[16] A: Yes. There were many, supposedly, that I [17] reported to.

[18] Q: Who did you report to after Mr. Newcombe?

[19] A: George Buchanan took over from Newcombe, and [20] they were what they called the oil additives department.

[21] Q: The oil additives department of the organic [22] chemicals division?

[23] A: Yes.

[24] Q: How long did you work in the organic chemicals [25] division specializing or beginning to specialize in

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[1] electrical applications for Aroclor?

[2] A: Until I retired in 1974.

[3] Q: Did you ever have a job title while you worked [4] in the organic chemicals division?

[5] A: From time to time there were several titles [6] bestowed. I didn't request any.

[7] Q: During — Following the transfer in 1951 or [8] '52, were you always specializing in electrical applica- [9] tions for Aroclor?

[10] A: Yes, sir. Strictly.

[11] Q: So your job functions remained the same. You [12] just may have had a different title or two in there?

[13] A: Yes. Through those years from '52 to '74.

[14] Q: Since your retirement in 1974, have you con- [15] sulted for Monsanto?

[16] A: For a period of six months they asked me to [17] consult. Now, at that time, people sixty-five years old [18] weren't supposed to work anymore.

[19] Q: And did you consult with Monsanto following [20] the six months after you retired in 1974?

[21] A: No.

[22] Q: Have you done any work following 1975 for any- [23] one other than Monsanto?

[24] A: Meaning what?

[25] MR. FEATHERSTONE: Have you consulted for any-

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[1] one else other than Monsanto, for instance? Or any busi- [2] ness employment, I think, is also covered by his question.

[3] Q: (by Mr. Bradley) That's correct. Any busi- [4] ness —

[5] A: No. Not any business connections. I was [6] retired. And the reason I ask you instead of just answer- [7] ing, I'm still a lifetime member of the American Society [8] for Testing and Materials and have followed things and was [9] active to some extent in these technical organizations, but [10] no commercial.

[11] Q: Did you get paid for the work that you did [12] with these technical organizations?

[13] A: No.

[14] Q: So, relative to salary and income, you've been [15] retired since '74 or '75, when you stopped your consulting [16] work with Monsanto?

[17] A: That's correct.

[18] MR. BRADLEY: Would this be a good time to [19] take a short break?

[20] MR. FEATHERSTONE: Sure.

[21] MR. BRADLEY: Let's do that. [22] (Thereupon, a short recess was taken.)

[23] Q: (by Mr. Bradley) I'm going to go back over [24] the period of time that you worked for Monsanto and try to [25] flush some things out, so that you know what I'm doing.

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[1] When you began work for Monsanto, did you have [2] occasion to meet Dr. Emmett Kelly?

[3] A: Yes.

[4] Q: When did you meet Dr. Kelly?

[5] A: He was the medical director, and Mr. Watt, my [6] boss — Watt reported to Mr. Queeny, and Watt brought in [7] Kelly.

[8] Q: I'm sorry. I didn't hear that. Watt reported [9] to?

[10] A: Mr. Queeny, Edgar Queeny.

[11] Q: Okay.

[12] A: So Watt had a position of authority, and he [13] brought in Emmett Kelly, setting up the medical department.

[14] Q: Was there a medical department within Monsanto [15] when you began work there?

[16] A: When I began work there, it wasn't really a [17] hundred percent within Monsanto. We had medical facilities [18] and advisement on a shared basis. There was, as I remem- [19] ber, a doctor on Broadway, a few blocks away, he had his [20] practice.

[21] Q: Do you recall roughly when Emmett Kelly was [22] brought into Monsanto?

[23] A: Roughly, in 1935, let me say. I'm not sure.

[24] Q: Do you know whether Dr. Kelly was the first [25] director of the medical department of Monsanto?

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[1] A: A hundred percent, yes.

[2] Q: Did you ever have any job responsibilities in [3] the 1930s that caused you to work with Dr. Kelly?

[4] A: No.

[5] Q: Did you ever have job responsibilities that [6] caused you to work with Dr. Kelly?

[7] A: To the extent, certainly, as medical director, [8] anything that I compiled or published, I was subject to [9] having him

review and approve any medical matters.

[10] Q: When was the first time that you published [11] something that Dr. Kelly approved for medical matters?

[12] A: I believe 1954 would be my best estimate.

[13] Q: And do you recall whether the material that [14] you submitted to Dr. Kelly for his review and approval on [15] medical matters involved Aroclor?

[16] A: This is what the publication was about.

[17] Q: And what publication was it?

[18] A: I think it's entitled, and I'm sure you have [19] it, "The Proper Handling of Aroclors in the Electrical [20] Industry."

[21] Q: Do you know whether in the 1930s Monsanto [22] provided chlorinated diphenyl to the Halowax Corporation?

[23] A: I don't recall anything like that. In the [24] 1930s? No. I don't know. I wouldn't be in a position to [25] know.

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[1] Q: Have you heard of the term "halowax"?

[2] A: Well, certainly.

[3] Q: When did you first hear that term?

[4] A: Halowax, chlorinated naphthalene is a long [5] known organic compound.

[6] Q: Is it your understanding that halowax was [7] chlorinated naphthalene?

[8] A: Yes.

[9] Q: Was there ever a halowax that was a combina- [10] tion of chlorinated naphthalene and chlorinated diphenyl?

[11] A: I would say no. They're separate entities.

[12] Q: Who informed you that halowax was chlorinated [13] naphthalene?

[14] A: Well, I guess I knew that from my chemical — [15] my background in chemistry.

[16] Q: Is halowax a trade name?

[17] A: Halowax is a trade name, yes. I have somewhat [18] misinterpreted your question. Halowax is a trade name for [19] chlorinated naphthalene. Nebranon wax is the German trade [20] name, N-e-b-r-e-n-o-n.

[21] MR. BRADLEY: I'm going to be about two [22] minutes, so we can go off the record briefly.

[23] (Thereupon, a short recess was taken.)

[24] Q: (by Mr. Bradley) During your work at [25] Monsanto, were you familiar with the Halowax Company?

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[1] A: I knew of their existence. That's all.

[2] Q: Did you know that they worked with chlorinated [3] naphthalene?

[4] A: I knew that they produced it.

[5] Q: Did you know that their workmen also used [6] chlorinated diphenyl?

[7] A: No. This was before my time.

[8] Q: Did you discuss Aroclor with Dr. Emmett Kelly [9] before 1954?

[10] A: I would have to say yes.

[11] Q: All right. And you have used Aroclor and PCBs [12] interchangeably. Is that how you understand them?

[13] A: Yes.

[14] Q: If I refer to one, it means both, and I will [15] assume your answers do, as well.

[16] A: Okay.

[17] Q: When was the first time that you discussed [18] Aroclor with Dr. Kelly?

[19] A: I think the first formal, let me say, occasion [20] was when he would, or some member of his staff would pass [21] judgment on the suitability of using PCB for a given appli- [22] cation where there was some question, it was not clear [23] whether it would be an appropriate use.

[24] Q: When Dr. Kelly or a member of his staff would [25] pass judgment, would that come in a written form, or

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[1] through an oral presentation, or some other way?

[2] A: Just a discussion.

[3] Q: When is the first time you remember having a [4] discussion with Dr. Kelly or some member of his staff where [5] they would pass judgment on the suitability of using PCB [6] for a given application?

[7] A: This was a rare occurrence, to begin with. [8] There were very few of that kind. I'm trying to recollect [9] what there was. One thing that I recall specifically was [10] the proposed use, the consideration of use of PCB as [11] plasticizer for styrene butadiene paint.

[12] Q: Would you spell that? Styrene butadiene.

[13] A: S-t-y-r-e-n-e, buta, b-u-t-a, diene, [14] d-i-e-n-e, paint system. And — this is the important [15] thing — this was a very good paint system, but now it was [16] being considered for use indoors as a wall paint. Now, [17] this is when the new paint, styrene butadiene and latex [18] paints were — had just become popular.

[19] Q: Do you recall, roughly, the year in which Dr. [20] Kelly and you had a discussion upon the proposed use or [21] consideration of the use of PCB as a plas-

ticizer for the [22] styrene butadiene paint system?

[23] MR. FEATHERSTONE: I think he said it was con- [24] sidered indoors, so I object to the form of the question as [25] misstating the testimony.

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[1] Q: (by Mr. Bradley) Go ahead and answer the [2] question. The way it works — I don't know if you know [3] this — if your attorney makes an objection, you're still [4] required to answer the question unless he instructs you not [5] to answer, and then you should not answer.

[6] A: Well, what happened? I don't know.

[7] Q: All right. Do you recall when you had this [8] discussion with Dr. Kelly that you referred to that [9] involved styrene butadiene paint?

[10] A: Right.

[11] Q: When did that discussion occur?

[12] A: It occurred between 1947 and '52. I can't [13] pinpoint — I'm trying. I can't pinpoint the exact time. [14] Let's say in the middle of it.

[15] Q: Okay. Prior to that had Dr. Kelly communi- [16] cated to you what he knew, if anything, regarding the medi- [17] cal or toxicological information relative to Aroclor?

[18] A: I was acquainted with it, yes.

[19] Q: When did you become acquainted with the medi- [20] cal and toxicological information related to Aroclor?

[21] MR. FEATHERSTONE: He didn't say that, so I [22] object to the form of that question.

[23] Q: (by Mr. Bradley) Go ahead and answer.

[24] A: The bottom line, and then I will expand on [25] this if you need. The bottom line was that we've always

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[1] said on labels, and my creed has always been, "Do not [2] breathe the fumes or the vapors emitted from PCBs at [3] elevated temperatures." Additionally, "Do not" — or [4] "Avoid prolonged exposure with the skin." That is the [5] bottom line.

[6] MR. BRADLEY: Okay. I move to strike as non- [7] responsive.

[8] MR. FEATHERSTONE: Would you read the answer [9] back that he gave to the preceding question.

[10] (Thereupon, the reporter propounded a portion of the [11] testimony.)

[12] Q: (by Mr. Bradley) Were you ever acquainted [13] with the medical or toxicological information relating to [14] Aroclor?

[15] A: Yes.

[16] Q: When were you first acquainted with that [17] medical and toxicological information?

[18] A: We covered that. I reported to Mr. Louge. [19] Now, when I reported to him, he had the published medical [20] literature.

[21] Q: And did he have the published medical literature on PCBs?

[23] A: Yes.

[24] Q: Back then they were called chlorinated [25] diphenyl; is that correct?

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[1] A: Yes.

[2] Q: And you reported to Mr. Louge beginning in [3] October of 1947?

[4] A: Yes.

[5] Q: Did you review any of the published medical [6] literature on PCBs prior to October of 1947?

[7] A: No.

[8] Q: Do you recall why it was in 19 — Do you [9] recall whether you reviewed published medical literature in [10] 1947? Was it shortly after you began your work in 1947?

[11] MR. FEATHERSTONE: I object. Compound.

[12] Q: (by Mr. Bradley) Let me ask it, then, this [13] way, Mr. Benignus: Do you recall whether you reviewed the [14] published medical literature on Aroclor in 1947?

[15] A: Not in any formalized way. I knew that such [16] information was available, and I knew all I needed to know [17] about it.

[18] Q: When you began work as assistant director of [19] development for the inorganics division, had you reviewed [20] the published medical literature that Mr. L-o-u-g-e had [21] assembled on Aroclors?

[22] A: Not before, no.

[23] Q: Was there ever a time after you became assistant [24] director of development for the inorganics division [25] when you reviewed the published medical literature on

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[1] Aroclor that Mr. Louge had assembled?

[2] A: As I've already said, not in any formal way.

[3] Q: Okay. You also indicated you knew everything [4] that you needed to know about it. What leads you to that [5] conclusion?

[6] A: We have also covered that early on. When I [7] was in the development department of the organic division I [8] had a laboratory and did work with PCBs in that labora- [9] tory, so I had some

materials on PCB available in my lab. [10] I had worked with them in my lab. I had a use for it in [11] the lab, and this use, I want to explain, is that I had [12] used Aroclor 1248 as a melting point bar in my laboratory.

[13] Now, I had at times a need to determine the [14] melting point of organic chemicals at relatively quite high [15] temperatures. One thing a chemist can use is glycerin. [16] That withstands fairly high temperature, but it can catch [17] on fire. Another thing one can pick is sulfuric acid, and [18] heat that in a Pyrex beaker with a Benson burner under it [19] to quite high temperature. But it's not too desirable to [20] think of having a beaker crack full of very high temperature sulfuric acid, so a convenient thing was to use [22] Aroclor 1248, to name one specifically, as a melting point [23] bar medium.

[24] Now here's what happens: When you heat the [25] PCBs to elevated temperatures, fumes are evolved. These

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[1] fumes are irritating to the eyes, to the mucous, they're [2] not pleasant, and one should not be exposed, because they [3] are toxic, as are most fumes. Now, to do this, the thing [4] should be put under a hood that is evacuated, and I have so [5] used it.

[6] The reason I'm going through this is to point [7] out that I have had early experience of exposure to fumes [8] of PCBs, long before I read anything in the medical literature [9] and so forth. It's not the thing to do, and I did it [10] at my own risk, but under a hood and so forth. It's not to [11] be recommended.

[12] There was a publication in some chemists' [13] analyst journal actually recommending this. We asked this [14] to be withdrawn and not be recommended as the thing to do. [15] But that was my early experience.

[16] Now, in addition, I have had PCB-plasticizer, [17] or other formulations, on my skin, and a logical thing to [18] do was to not have prolonged exposure and to remove it with [19] soap and water.

[20] So here are the two fundamentals that I personally, early on, had: Let me say, avoid breathing the [22] fumes emitted at elevated temperatures, avoid prolonged [23] contact with the skin. And, in later years, this is the [24] exact wording that appears on the labels of our containers.

[25] MR. BRADLEY: Would you read the question back

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[1] for me.

[2] (Thereupon, the reporter read back the question.)

[3] MR. BRADLEY: I move to strike the last portion [4] of his answer indicating what was on the labels.

[5] As I understand your testimony, then, it's [6] that you began work with PCBs in 1942 when you were in the [7] — you had your own lab in the organic department, correct?

[8] A: Yes.

[9] Q: (by Mr. Bradley) And prior to working with [10] PCBs in your own lab in the organic department, you did not [11] review any published medical literature on PCBs?

[12] A: Right.

[13] Q: You only reviewed the published medical literature [14] on PCBs when you became assistant director for the [15] inorganics department, sometime between 1947 and 1952; is [16] that correct?

[17] MR. FEATHERSTONE: I object to the form of [18] that question. He has not said he reviewed the literature.

[19] Q: (by Mr. Bradley) My question to you is, did [20] you review the published medical literature on PCBs during [21] the period of time you were the assistant director of the [22] inorganics division?

[23] A: Not in a formalized — that this was my [24] assignment and so on and so forth. I was aware of — As I [25] explained to you, I was aware of the characteristics of —

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[1] MR. FEATHERSTONE: He's asking about the [2] literature. Did you read the literature published in the [3] journals and books about the medical and toxicological [4] consequences of exposure to PCB?

[5] A: To some extent I would have to say yes, of [6] course, to some extent, but not that that was my concern — [7] of any prime concern to me. It was of general interest, [8] and I would have read what might be around, yes.

[9] Q: (by Mr. Bradley) And that review of the [10] medical and toxicological literature began when you had the [11] job title assistant director of development for the [12] inorganics division?

[13] MR. FEATHERSTONE: Object to the form of the [14] question.

[15] Q: (by Mr. Bradley) Is that correct?

[16] A: Yes.

[17] Q: All right. What, if anything, did you do as [18] part of this informal review of the medical and toxicological [19] information?

[20] MR. FEATHERSTONE: I object to the characterization of an "informal review." What he said was, he [22] read to some extent some of the literature because it was [23] of interest.

[24] MR. BRADLEY: What he said was that he didn't [25] review it in any formalized way. If you have an objection

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[1] to the form of the question, go ahead and make it. I don't [2] want you to argue with me.

[3] MR. FEATHERSTONE: I'm not trying to argue [4] with you. I'm stating the grounds for my objection, and [5] you keep mischaracterizing what this witness said.

[6] Q: (by Mr. Bradley) Did you informally review [7] the published medical and toxicological literature on PCBs [8] when you became assistant director of development for the [9] inorganics division?

[10] A: On a casual basis. I had no formal basis or [11] incident that would require this. It was literature that [12] Mr. Lounge had available.

[13] Q: And what did you do as part of your casual [14] review of this literature?

[15] A: I don't understand this question.

[16] Q: Well, I take it you didn't go in and sit down [17] and review all of the medical and toxicological literature [18] that Mr. Lounge had; is that correct?

[19] A: That's correct.

[20] Q: Did you review any of the medical and toxicological literature that Mr. Lounge had on PCBs?

[22] A: I think I already said yes, I did.

[23] Q: All right. And why was it that you reviewed [24] certain of that literature?

[25] A: Because it was there in the file.

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[1] Q: Why didn't you review all of the literature?

[2] A: It was beyond my interest. I wasn't a medical [3] person. I had no occasion.

[4] Q: Do you recall how many of the published arti- [5] cles on the medical and toxicological information relating [6] to PCBs you reviewed while you were assistant director of [7] development for the inorganics division?

[8] MR. FEATHERSTONE: Pure guesswork. All he's [9] said is he reviewed some of the things in Mr. Lounge's file. [10] Unless you establish that somehow that's everything that [11] was published, I don't see how he can answer the question. [12] It's pure guesswork. Objection.

[13] THE WITNESS: I agree to that.

[14] MR. BRADLEY: Mr. Featherstone, I object to [15] your giving the witness a grounds for not responding to my [16] question by the nature of your objections. If you have an [17] objection as to the form of the question, of course I want [18] you to state it, but I do not want you to go into your [19] rambling discour-

ses that don't do anything more than [20] educate a witness in what to say.

[21] MR. FEATHERSTONE: Well, I won't respond to [22] that, Mr. Bradley, other than to say I'll object the way I [23] see fit.

[24] MR. BRADLEY: Well, then, you and I are going [25] to have a problem, because I'm going to start interrupting

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[1] you.

[2] My question is, do you recall how many of the [3] published articles on the medical and toxicological liter- [4] ature on PCBs you reviewed while you were assistant direc- [5] tor of development for the inorganics division?

[6] MR. FEATHERSTONE: Objection. Calls for pure [7] guesswork.

[8] A: I can't answer it categorically.

[9] Q: (by Mr. Bradley) Well, I'm interested in a [10] general idea. Three articles, a hundred articles? If you [11] have any way of estimating.

[12] A: First of all, I'm not a medical person, num- [13] ber one, and literature that was there dealt with things [14] before my time, for example, so I wasn't greatly concerned [15] on arrival with that.

[16] Q: Is it — Do you know — Is your best estimate [17] that you reviewed more or less than ten of those articles [18] during the time you were assistant director of development [19] for the inorganics division?

[20] A: This is just a guess, but maybe something like [21] that.

[22] Q: All right.

[23] A: Four, five, six. I don't know.

[24] Q: Now, I'm going to show you Plaintiff's Exhibit [25] 979.

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[1] A: Well, I have seen the title and the date, [2] 1937.

[3] Q: Do you recall whether that is an article that [4] you reviewed during the time that you were assistant direc- [5] tor of development for the inorganics division?

[6] A: This, as I said, was before my time. I see [7] here — As you know, I didn't get there until — What did [8] we say?

[9] Q: Well, I know —

[10] MR. FEATHERSTONE: The question is whether [11] this exhibit, Plaintiff's Exhibit 979, is one of those [12] documents or articles you reviewed while you were assistant [13] director.

[14] A: I may have, but in no manner of specific con- [15] cern to me. I'm aware that this kind of work was going on, [16] and I'm aware that this was published. Drinker, his name [17] is familiar to me before this — well, not before this [18]

point in time. It's September 1937. I was still in the [19] analytical area. So later. This is all stuff that was [20] before my time, and I had no direct involvement nor concern [21] with this. So, the best I can say to you is that I was no [22] doubt aware of this, but had no specific immediate interest [23] in this thing.

[24] Q: (by Mr. Bradley) When you say you were aware [25] of the Drinker — you were aware of it, do you mean you

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[1] were aware of the Drinker study?

[2] A: I was aware of Dr. Drinker's name because it [3] was started. Dr. Kelly was hired by my boss, and my boss [4] provide the funds that Drinker did work for Monsanto, so I [5] was familiar with the name Drinker. I may not have known [6] that he did this work, or whether that was done — I don't [7] know who this was for. He did work for Monsanto, is what [8] I'm saying.

[9] Q: Do you know whether Dr. Drinker studied the [10] effects of chlorinated diphenyl?

[11] A: Yes. I would say yes.

[12] Q: When did you become aware that Dr. Drinker [13] studied the effects of chlorinated diphenyl?

[14] A: As I said, I heard the name Drinker mainly [15] because my boss had dealings with Dr. Drinker, not that I [16] was involved with it. I heard the name.

[17] Q: Well, I'm interested in knowing, though, when [18] you became aware that Dr. Drinker was doing work with [19] chlorinated diphenyl?

[20] A: Well, I would say probably in — Well, in 1937 [21] I couldn't have — but let me think, now. Maybe in the [22] early forties I heard, but that's the extent of my — just [23] hearing it.

[24] Q: You just heard that he was doing work with [25] chlorinated diphenyl?

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[1] A: Yes. Nobody told me. I just heard it.

[2] Q: During your work as assistant director of [3] development for the inorganics division, did you become [4] aware of any studies performed by Dr. Drinker regarding the [5] effects of exposure to chlorinated diphenyl?

[6] A: I believe there were studies of rat exposure, [7] animal exposure, if I'm right on this.

[8] Q: Did you review any of those studies that Dr. [9] Drinker worked on?

[10] A: Not specifically, no.

[11] Q: Were you told what Dr. Drinker was finding in [12] his studies of chlorinated diphenyl at any point in time [13] when you were a Monsanto employee?

[14] A: Not that they would formally tell me this. It [15] wasn't my area.

[16] Q: Well, were you ever informally told what Dr. [17] Drinker was reporting in the studies that he was conducting [18] on chlorinated diphenyl?

[19] A: I'm sorry. I didn't really get the question.

[20] Q: All right. My question was, were you ever [21] informally told about what Dr. Drinker was determining [22] based upon his studies of chlorinated diphenyl?

[23] A: Only from reading whatever was published. I [24] think there were some publications by Drinker and maybe [25] some others, and I would have had a chance to see these.

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[1] Q: Okay. Did you review these studies that were [2] published by Dr. Drinker regarding the work he did with [3] chlorinated diphenyl?

[4] A: To the extent that I might be interested that [5] such things are going on, exposure to rats and so on and so [6] forth.

[7] Q: Well, were you interested so that you reviewed [8] the study reports written by Dr. Drinker regarding his work [9] with chlorinated diphenyl?

[10] A: I was interest, as I already pointed out: Do [11] not breathe the fumes and the vapors of PCBs at elevated [12] temperatures, and this work backs that up. Whether it was [13] exposure to rats or mice or bones, or whatever.

[14] Q: Well, I appreciate that. And my question is [15] rather narrow, and the question is, simply, did you ever [16] review the published reports prepared by Dr. Drinker [17] regarding his work with chlorinated diphenyl?

[18] A: I have seen reports. I don't know how to [19] interpret your question, did I review them. To what pur- [20] pose and so forth?

[21] Q: Well, let me ask it this way: Did you ever [22] read any of the reports prepared by Dr. Drinker regarding [23] his work with chlorinated diphenyl?

[24] A: I would think I did.

[25] Q: Would you review, then, 979 and tell me

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[1] whether this is a report that you've ever read on a prior [2] occasion?

[3] A: After looking at this specific one, I would [4] say, no, I didn't, not this one. I would have to say no to [5] your question.

[6] MR. FEATHERSTONE: The witness is referring to [7] Plaintiff's Exhibit 979.

[8] A: It was before my time.

[9] MR. FEATHERSTONE: You've answered the ques- [10] tion, Paul.

[11] THE WITNESS: Okay.

[12] Q: (by Mr. Bradley) Mr. Benignus, did you ever [13] learn that Dr. Drinker, as a result of his experiments, [14] reported that there is no doubt as to the possibility of [15] systemic effects from the chlorinated naphthalenes and [16] chlorinated diphenyl?

[17] MR. FEATHERSTONE: Object to the form.

[18] A: What?

[19] Q: (by Mr. Bradley) Were you ever informed that [20] Dr. Drinker, as a result of his studies, determined that [21] there was no doubt that there was the possibility of [22] systemic effects from exposure to chlorinated diphenyl?

[23] MR. FEATHERSTONE: Object to the form.

[24] MR. BRADLEY: What's wrong with the form?

[25] MR. FEATHERSTONE: You now want me to

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[1] elaborate on my objection? You just lectured me that I [2] shouldn't. I was trying to help you.

[3] MR. BRADLEY: Are you having a good morning, [4] Bruce?

[5] MR. FEATHERSTONE: Yes.

[6] MR. BRADLEY: Good. Now, what is the nature [7] of your objection?

[8] MR. FEATHERSTONE: I object to the form.

[9] Q: (by Mr. Bradley) Go ahead and answer the [10] question, then.

[11] A: Excuse me, I lost the question.

[12] Q: The question is, were you ever informed that, [13] as a result of Dr. Drinker's — some of Dr. Drinker's [14] studies, that he reported that there was no doubt as to the [15] possibility of systemic effects from exposure to [16] chlorinated diphenyl?

[17] MR. FEATHERSTONE: Object to the form. Mis- [18] characterizes the studies.

[19] Q: (by Mr. Bradley) Were you ever informed that [20] experiments by Dr. Drinker resulted in him concluding that [21] there was no doubt as to the possibility of systemic [22] effects from the chlorinated naphthalenes and chlorinated [23] diphenyl?

[24] A: No one came to me with this. It wasn't in my [25] area.

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[1] Q: Okay.

[2] A: There was no occasion for anybody to come to [3] me. It doesn't mean that I wasn't aware of it at some [4] point in time.

[5] Q: Were you ever aware that PCBs get absorbed [6] through the skin?

[7] A: I would say yes, they can be.

[8] Q: When did you become aware of that?

[9] A: Most solvents are susceptible to being [10] absorbed through the skin. Liquid — You're asking about [11] liquid PCBs, thin PCBs. Some of the higher chlorinated, [12] probably not.

[13] Q: So you knew this from an early point in time?

[14] A: Yes, I would assume so.

[15] Q: Knew it when you were working in your lab in [16] 1942?

[17] A: Right.

[18] Q: Do you know whether Monsanto ever told its [19] customers that PCBs can be absorbed through the skin?

[20] A: Monsanto certainly told everybody, "Avoid [21] prolonged skin contact," and this is the reason. That was [22] part of the labeling, my creed, and historically, "Do not [23] have prolonged exposure to the skin. If it's spilled on [24] the skin, wash it off with soap and water."

[25] Q: When Monsanto gave that information to its

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[1] customers, do you know whether Monsanto was intending to [2] tell customers that PCBs get absorbed through the skin?

[3] A: I would assume so.

[4] Q: How would a customer know that PCBs get [5] absorbed through the skin by a statement that, if you're [6] exposed to PCBs or get it on your skin, you should wash it [7] off with soap and water?

[8] MR. FEATHERSTONE: Object to the form.

[9] THE WITNESS: I get a little bit lost between [10] the legal jargon here. Give me the question again.

[11] Q: (by Mr. Bradley) Well, you indicated that [12] Monsanto — and I don't want to put words in your mouth, [13] but whatever your answer was regarding what Monsanto told [14] its customers about washing.

[15] A: Avoid prolonged contact with the skin

[16] Q: How would that information tell a customer [17] that PCBs get absorbed through the skin?

[18] A: I'd assume that this is what it meant. I [19] don't know what somebody else would assume.

[20] Q: All right. Do PCBs, if they're on the skin, [21] cause irritation for certain people?

[22] MR. FEATHERSTONE: Well, I object to the lack [23] of foundation to that question of this witness.

[24] Q: (by Mr. Bradley) Go ahead and answer.

[25] A: Obviously, when you say "Avoid prolonged

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[1] exposure to the skin," that means all people, to me. That [2] means all people. Now, it's well-known that certain very [3] blond people with very fair skin are more susceptible than [4] dark-skinned people - that kind of thing. And you're [5] asking whether the implication is that some people might be [6] more - Let me say this in answer to your question: All [7] people wouldn't be affected exactly the same.

[8] Q: For some people, if PCBs get on their skin, is [9] it an irritant?

[10] A: PCBs were skin-patch tested, and the results [11] of the those skin-patch tests were that this PCB - the [12] PCBs that were tested according to certain procedures used [13] that seemed to be standard procedures used for this kind of [14] a thing, that it was proclaimed PCBs are neither a skin [15] irritant nor a skin sensitizer. I've often had it on my [16] skin without being irritated or sensitized.

[17] Q: Do you know whether anyone has ever reported [18] having PCBs on their skin and having an irritation to the [19] skin?

[20] A: We had no reports of that, to my knowledge, [21] until, as we said, this lawsuit with Westinghouse in [22] Houston, and that was one of the things implied there.

[23] Q: And -

[24] A: But we didn't get complaints about this at [25] Monsanto.

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[1] Q: Did you ever talk with anyone, either within [2] or outside of Monsanto, where they informed you that people [3] who get PCBs on their skin sometimes get a skin irritation?

[4] A: Not to me, that I recall.

[5] Q: Did Dr. Kelly ever report to you that some [6] people who get PCBs on their skin have a skin irritation?

[7] A: I don't recall that.

[8] Q: Did Dr. Kelly ever tell you that, for some [9] people who get PCBs on their skin, that they develop a skin [10] rash?

[11] A: I don't recall that, but there's a reason why [12] our labels and our literature says "Avoid prolonged skin [13] contact. Wash it off."

[14] Q: Is that because PCBs can cause a rash?

[15] A: I would have to assume. You don't want to [16] leave it long-term exposure to the skin. All solvents [17] carry this label - most all solvents carry this label.

[18] Q: Did Dr. Kelly or anyone ever report to you [19] that, if you get PCBs on your skin - Let me rephrase the [20] question. Did Dr. Kelly or anyone ever report to you that, [21] for some people, if they get PCBs on their skin, it can [22] because a condition called chloracne?

[23] A: I have heard of this, but there was an iso- [24] lated incident of chloracne.

[25] Q: When was that?

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[1] A: This goes way back to when PCBs were first [2] manufactured at Anniston, Alabama. There was an incident, [3] as I heard - this was long before my time - in our plant [4] at Anniston, Alabama where there had occurred chloracne.

[5] Now, when I inquired about this I was told, [6] and I'm sure this is correct, no one ever knew why, [7] specifically, what the reason was for this, yet it did [8] occur. And it went away, and nobody really knew why it [9] went away, but I'd be inclined to say, and this is con- [10] jecture on my part -

[11] MR. FEATHERSTONE: Well, you shouldn't engage [12] in conjecture.

[13] THE WITNESS: Excuse me. Scratch the word [14] "conjecture."

[15] MR. BRADLEY: The law entitles you to make [16] best estimates, but no conjecture or guesswork.

[17] THE WITNESS: Well, I'm sorry. I don't know [18] - My view, to answer your question, this was newly made. [19] Whether there was a discrepancy in the raw material, in the [20] biphenyl, whether there was, nobody knows for sure. It [21] went away. It never recurred. Or whether - Maybe they [22] paid a little more attention than they had been for avoid- [23] ing prolonged contact with the skin. Whether they maybe [24] took a few showers, you know, I don't know. But that was [25] an isolated incident.

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[1] What I do wish to add, as far as I know, I [2] never heard of anyone that came to me and said, "You get [3] chloracne," but I do know of this incident of chloracne.

[4] Q: (by Mr. Bradley) Did Dr. Kelly ever tell you [5] that he participated in a round-table discussion in 1937 [6] where it was reported that GE employees who were exposed to [7] chlorinated naphthalene and chlorinated diphenyl developed [8] severe cases of acne?

[9] A: No, I don't know that specifically. You're [10] saying in 1937?

[11] Q: Yes.

[12] A: No. That was before my time, and Kelly had no [13] reason to tell a starting analytical chemist any of this.

[14] MR. FEATHERSTONE: Why don't we take a break.

[15] MR. BRADLEY: All right. That's fine. [16] (Thereupon, a short recess was taken.)

[17] Q: (by Mr. Bradley) I believe you indicated when [18] talking about your work in the lab in the organic depart- [19] ment that fumes from the heated PCBs are irritating to the [20] eyes?

[21] A: Right.

[22] Q: That they're irritating to mucous?

[23] A: Right.

[24] Q: That they're not pleasant?

[25] A: Right.

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[1] Q: And that one should not be exposed because the [2] fumes are toxic, as are most fumes?

[3] A: Right.

[4] Q: What did you mean when you said that they are [5] toxic?

[6] A: At that point of my knowledge with PCBs, it's [7] a generalization that the fumes from most any solvent are [8] toxic.

[9] Q: All right. How were the fumes toxic of the [10] PCB mixture or mixtures you were working with in your lab [11] beginning in 1942.

[12] A: My knowledge in 1942 is as I just said, the [13] fumes of any solvent, any chemical, should not be breathed.

[14] Q: How would the fumes from the PCB mixtures you [15] were working with in your lab beginning in 1942 be toxic? [16] What I'm interested in is, what would they be - I'm trying [17] to figure out a way to ask the question so I can get the [18] answer that I'm looking for. Sometimes it seems easy, but [19] it's very difficult.

[20] How were the vapors - or how were the fumes [21] of the PCB mixture or mixtures you were working with [22] beginning in 1942 toxic?

[23] MR. FEATHERSTONE: Objection. Compound and [24] it's cumulative.

[25] A: Specifically, I didn't know. My answer to

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[1] that question is as I already gave it: To me, any fumes [2] from any chemicals or any solvent, et cetera, in general [3] should not be breathed - only as a generality. I didn't [4] know any of the details of this.

[5] Q: (by Mr. Bradley) Well, you indicated during [6] your testimony that the fumes from the - I think you said [7] that you were working with Aroclor 1242 in

your lab in the (8) organic department; is that correct?

[9] MR. FEATHERSTONE: Inorganic.

[10] A: That was in the organic department. I said [11] 1248, I believe.

[12] Q: (by Mr. Bradley) All right.

[13] A: It was a liquid Aroclor.

[14] Q: Did you work with Aroclor other than 1248 when [15] you had your own lab in the organic department beginning in [16] 1942?

[17] A: On any that I was asked to work on these [18] physical constants, yes.

[19] Q: What other Aroclors did you work with in your [20] own lab in the organic department beginning in 1942?

[21] A: Well, it's quite reasonable that I would have [22] been asked to do certain things with Aroclor 1254, maybe [23] Aroclor 1260.

[24] Q: All right. I now want to ask specifically [25] about 1248. How were the fumes from the Aroclor 1248

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[1] toxic?

[2] MR. FEATHERSTONE: Object. Cumulative.

[3] A: Specifically, I had no answer at that time. I [4] didn't know. Except everything is toxic when you breathe [5] the fumes of everything.

[6] Q: (by Mr. Bradley) All right. Would it have [7] been toxic because it would harm the liver or some other [8] organ?

[9] MR. FEATHERSTONE: Objection. Calls for [10] speculation.

[11] A: I didn't know that at that point in time.

[12] Q: (by Mr. Bradley) All right. Well, I'm [13] interested in knowing what you meant, basically, when you [14] said one should not be exposed because they are toxic when [15] talking about these fumes. So, when you said they were [16] toxic, what I want to know is, what part of the body would [17] they be toxic to?

[18] A: To the liver and the kidney. [19] Now, may I expand on this?

[20] Q: If you'd like to.

[21] A: We're having a bit of trouble here. You're [22] asking did I know this in 1942. The answer is no. I [23] learned this later on, and later on, yes, as we sit here [24] today, those fumes are toxic, primarily because they can [25] attack the liver and kidney, from a medical point of view,

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[1] according to the medical literature.

[2] Q: And back in 1942 did you believe that fumes [3] from heated Aroclor 1248 would be toxic?

[4] A: Certainly. I believe fumes from any chemical [5] would be toxic.

[6] Q: Back in 1942, how — to what organ, if any, [7] did you believe Aroclor 1248 fumes would be toxic?

[8] A: In 1942 I did not know.

[9] Q: Would the same be true if I asked you the [10] question regarding Aroclor 1254 and Aroclor 1260?

[11] A: Certainly.

[12] Q: Did you have any involvement in the develop- [13] ment of instruction manuals for Monsanto products that [14] contain PCBs?

[15] A: Some, yes.

[16] Q: I'm now going to show you Exhibit 437 and ask [17] you to review that.

[18] A: Okay.

[19] Q: This is a 1955 document that's —

[20] A: '56.

[21] Q: On the outside does it indicate it's a March, [22] 1956 document?

[23] A: Uh-huh.

[24] Q: And it's titled "Tentative Process for [25] Continuous Chlorination of Biphenyl?"

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[1] A: Yes.

[2] Q: Is that a document that you've seen prior to [3] today's deposition?

[4] A: I could have. I know what it refers to, [5] continuous chlorination, but I would not be in the direct [6] line of this work. This is a plant document.

[7] Q: All right. What do you mean when you say it's [8] a plant document?

[9] A: It's evolved from plant people, no doubt, at [10] Anniston. That's where these people were located, and it's [11] continuous chlorination of biphenyl as a plant operation.

[12] Q: Do you know who the intended readers are of [13] that document — Excuse me. Were?

[14] A: Yes. The plant people.

[15] Q: Okay.

[16] A: Not myself.

[17] Q: Okay.

[18] A: I'm not copied in on this.

[19] Q: This information, then, wasn't intended to be [20] distributed to Monsanto customers, for example?

[21] A: No. This is an in-house thing about [22] continuous chlorination versus batch chlorination. It's of [23] no interest to me.

[24] Q: Were PCBs ever manufactured at a Monsanto [25] plant through continuous chlorination of biphenyl?

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[1] Let me show you a section of the exhibit that [2] might help you give an answer to it.

[3] MR. FEATHERSTONE: Well, wait. What's the [4] question?

[5] (Thereupon, the reporter read back the question.)

[6] MR. FEATHERSTONE: All right. Now, you're [7] showing a page of this exhibit, Mr. Bradley, supposedly to [8] help him answer that question. What is it on this page [9] that you want him to look at?

[10] MR. BRADLEY: Well, he can look at any part of [11] that page or none of it. If he doesn't need any help, [12] that's fine.

[13] MR. FEATHERSTONE: Okay.

[14] A: I don't know whether they adopted continuous [15] chlorination or didn't. I was not a part of this.

[16] Q: (by Mr. Bradley) On page five of this [17] exhibit, which is marked STR 005255, there is a section [18] relating to chlorinated biphenyl, and in parentheses it has [19] the word Aroclors. That's at the bottom of that page. Do [20] you see that there?

[21] A: Yes.

[22] Q: Would that indicate to you that Aroclors were [23] manufactured in a Monsanto plant using continuous chlori- [24] nation of biphenyl?

[25] MR. FEATHERSTONE: Object to the form of the

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[1] question.

[2] A: I read what it says, but I don't know if they [3] adopted it or didn't adopt it. I wasn't in the plant.

[4] Q: (by Mr. Bradley) All right.

[5] MR. FEATHERSTONE: Was that 436?

[6] MR. BRADLEY: 437 is what I just referred to. [7] Are you familiar with a document developed by [8] Monsanto entitled "Organic Chemicals Division Research [9] Report, Standard Manufacturing Process"?

[10] A: No. I was not connected with the plant.

[11] Q: (by Mr. Bradley) And if there were reports [12] written on standard manufacturing processes within [13] Monsanto, can you tell by that title whether those reports [14] were intended just for Monsanto employees?

[15] A: Yes. Just for Monsanto. Yeah.

[16] Q: All right. Do you know whether Monsanto [17] Company's Anniston Plant's standard operating instructions [18] relating to Aroclors were intended just for Monsanto [19] employees?

[20] Would you like to review?

[21] A: I would like to see what it is.

[22] Q: I'm going to hand you, then, Plaintiff's [23] Exhibit 1466 and ask you to review that.

[24] A: Well, this is obviously a plant document [25] intended for the plant people in the production of PCB, of

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[1] which Monsanto was the sole manufacturer, but —

[2] Q: Have you ever seen that document before?

[3] A: I have never seen this, no.

[4] Q: So you wouldn't know whether it's a true and [5] accurate copy, if you've never seen it before?

[6] A: I assume it's accurate. It's for the com- [7] pany's own use.

[8] Q: I'm now going to show you Plaintiff's Exhibit [9] 1467, which, if you compare it with the prior exhibit as a [10] different month, the same date, is that also a document [11] that was prepared solely for review by other Monsanto [12] employees?

[13] A: It's a plant document for the plant people.

[14] Q: Let me take that one back.

[15] A: It's for the operators, the operators down [16] there at Anniston.

[17] Q: I'm now going to show you Plaintiff's Exhibit [18] 1464, Mr. Benignus, and ask you if you have ever seen that [19] document before.

[20] A: Well, that is another plant document.

[21] Q: This is a plant document?

[22] A: Yes.

[23] Q: And it's intended for review just by Monsanto [24] employees?

[25] A: By the plant people.

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[1] Q: All right.

[2] A: I was not involved in this.

[3] Q: Had you ever seen that exhibit before today, [4] that you recall?

[5] A: I can't recall that I did, this particular [6] thing, no.

[7] Q: All right. I'm now going to show you Plain- [8] tiff's Exhibit 1463. Actually, for the record, I should [9] indicate that 1464 is entitled "Organic Chemicals Division [10] Research Report," with the date of January of 1969 — I [11] can't read the date — written by J. D. Sullivan.

[12] Now I'm going to show you 1463, Mr. Benignus, [13] and it has the same title as 1464, but a different date, [14] and the date is September 16th, 1968. Is that also a [15] document that was intended for review by Monsanto plant [16] personnel?

[17] A: I would have to say yes, but you're in an area [18] that I was not in.

[19] Q: Okay. If I had any documents that were [20] entitled, at least in part, "Standard Manufacturing Process [21] for

Pyranols or Interteens," could you tell me whether [22] those were documents prepared for Monsanto personnel work- [23] ing at plants?

[24] A: I would say so. That's how I would interpret [25] it.

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[1] Q: I'm going to show you Plaintiff's Exhibit 1472 [2] and ask if you have seen that document before.

[3] A: Same thing.

[4] Q: All right. I'm now going to refer to Plain- [5] tiff's Exhibit 1464, beginning with Bates number 738247. [6] There is also a Bates number above that that has NEV 024992 [7] under the section called "Toxicity and Hazards." That [8] section indicates that Aroclor is a liquid, under normal [9] conditions, having a medium toxicity range for liquid [10] ingestion and a high toxicity range for vapor inhalation. [11] The maximum allowable concentration is 1 mg per cubic [12] meter. This material can cause dermatitis, systemic [13] poisoning from the fumes and yellow atrophy of the liver. [14] There are skin, mucous membranes, and eye irritation [15] encountered in handling Aroclors. And it goes on.

[16] Mr. Benignus, do you know whether Monsanto [17] ever informed its customers about the information that I [18] just read to you from this exhibit?

[19] A: I'll answer your question. Monsanto informed [20] everyone, avoid breathing, inhalation of the vapors, avoid [21] prolonged contact with the skin in our publications [22] published to everyone. This one milligram — five-tenths [23] of a milligram per cubic meter of air as being a safe [24] concentration limit for an eight-hour workday. That [25] defines it a little more than in here. So, fundamentally,

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[1] yes, that's what this is based on: Do not inhale the [2] vapors and avoid prolonged contact with the skin. This [3] is background for that.

[4] Q: Let me break this down a little bit. During [5] the course of your employment with Monsanto did you ever [6] have meetings with General Electric regarding the physical [7] properties of Aroclor?

[8] A: Oh, yes. Yes.

[9] Q: During any of the meetings that you had — [10] Strike the question.

[11] Would you read back the last question to me? [12] (Thereupon, the reporter propounded the previous [13] question.)

[14] Q: (by Mr. Bradley) During the course of your [15] early employment with Monsanto did you ever have meetings [16] with Westinghouse regarding the physical properties of [17] Aroclor?

[18] A: Yes.

[19] Q: During the course of your employment with [20] Monsanto, in the meetings with General Electric, did [21] Monsanto employees ever inform General Electric employees [22] that Aroclor can cause dermatitis?

[23] A: That was not discussed in our area of activi- [24] ty. It didn't come up.

[25] Q: Did it ever come up in your area of activity

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[1] where Monsanto informed General Electric that Aroclors can [2] cause systemic poisoning from the fumes and yellow atrophy [3] of the liver?

[4] A: General Electric and Westinghouse, as did [5] Monsanto, Dr. Kelly, and the industrial hygiene people, [6] they had their counterparts. They knew as much about this [7] as we knew.

[8] Q: So General Electric —

[9] A: Excuse me.

[10] Q: I didn't mean to interrupt you. Go ahead.

[11] A: It was not at my interest or level of activity [12] or function to discuss this.

[13] Q: What leads you to conclude that both General [14] Electric and Westinghouse knew that Aroclors can cause [15] dermatitis and systemic poisoning from the fumes and yellow [16] atrophy of the liver?

[17] A: It's published in medical literature.

[18] Q: Where is it published in medical literature [19] that Aroclors can cause dermatitis?

[20] I take it that's outside of your area and you [21] couldn't lead me to any particular publication; is that [22] true?

[23] A: Yes. That's correct. I would try, but I may [24] miss the mark a bit.

[25] Q: Can you help me here, though? Where was it

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[1] recorded in the published literature that Aroclor material [2] can cause systemic poisoning from the fumes and yellow [3] atrophy of the liver?

[4] A: Again, in the medical literature.

[5] Q: Did that appear in the medical literature [6] prior to January, 1969?

[7] A: Oh, yes. Way back.

[8] Q: Did Dr. Kelly ever indicate to you that he had [9] discussions with General Electric and Westinghouse regard- [10] ing Aroclor and its causing dermatitis and systemic poison- [11] ing from the fumes and yellow atrophy of the liver?

[12] A: I don't think he discussed that specific thing [13] that you asked about, no.

[14] Q: And during — Before you retired, Dr. Roush [15] was the — Was Dr. Roush the head of the medical department [16] when you retired?

[17] A: Dr. Roush was there as, I believe, the head, [18] yes. And I believe; I'm not — I believe. I'm not sure, [19] but I believe. You said in — I retired in '74.

[20] Q: My memory is that Dr. Roush took over about [21] the time that you retired, but we're not here to figure out [22] my memory. Do you know — Your best estimate is that Dr. [23] Roush was the medical department at the time you retired?

[24] A: That or the assistant.

[25] Q: Well, let's —

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[1] Bruce, do you know?

[2] MR. FEATHERSTONE: Well, Dr. Kelly retired at [3] the end of November of '74, and you retired at the end of [4] October of '74.

[5] THE WITNESS: Yes.

[6] Q: (by Mr. Bradley) Did you ever have discussions with Dr. Roush regarding the ability of Aroclor to [8] cause dermatitis, systemic poisoning from the fumes, and [9] yellow atrophy of the liver?

[10] A: No.

[11] Q: Did Dr. Roush ever indicate to you that he [12] spoke with General Electric and Westinghouse about [13] Aroclor's ability to cause dermatitis, systemic poisoning [14] from the fumes, and yellow atrophy of the liver?

[15] A: No.

[16] Q: You don't know what discussions Dr. Roush or [17] Dr. Kelly had with GE or Westinghouse about those medical [18] conditions?

[19] A: That's correct.

[20] MR. BRADLEY: Let's break for lunch. [21] (Thereupon, a short recess was taken.)

[22] Q: (by Mr. Bradley) Mr. Benignus, I'm now going [23] to show you a series of exhibits, and I want you to review [24] them, and then I'm going to ask you whether you have seen [25] them before.

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[1] MR. FEATHERSTONE: Off the record. [2] (Thereupon, a short colloquy was had.)

[3] Q: (by Mr. Bradley) Back on the record. [4] Mr. Benignus, I have put on the table for your [5] review Plaintiff's Exhibits 1632, 1633, 1634, 1636, 1637, [6] 1638, 818, 1202, 1586, 1474, 820, 872, 415, 1171, 833, and [7] 828. I'm going to request, and I think that your attorney [8] has agreed to this procedure, that you review those docu- [9] ments, and when

you're finished reviewing them, you let me [10] know.

[11] I will be asking you questions such as whether [12] you've ever seen the document before; if you have seen it, [13] if you know what it is; and if it's a true and accurate [14] copy of whatever you've seen before, if you've seen it [15] before; and whether it is a record that was made as part of [16] the regular business activity of Monsanto; and whether it [17] was kept in the ordinary course of Monsanto's regularly- [18] conducted business.

[19] I have more exhibits, but since I don't know [20] how long it's going to take us to get through these, I'm [21] going to start with the ones that I have just identified.

[22] And we'll go off the record now while you make [23] your review, unless you have questions for me.

[24] A: I have no questions.

[25] Q: All right. Thank you.

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[1] (Thereupon, a short recess was taken.)

[2] Q: (by Mr. Bradley) Mr. Benignus, I'm going to [3] not use the exact order of the documents that I gave to [4] you; hopefully I'm going to be close, though. Would you [5] look at Exhibit 1634.

[6] A: Okay.

[7] Q: Have you seen this document before?

[8] A: Yes.

[9] Q: Is this a copy of a memorandum written to you [10] and others by Jim Bryant, dated April 11th, 1969?

[11] A: Yes.

[12] Q: Is that the Monsanto letterhead on the top [13] left-hand corner?

[14] A: Yes.

[15] Q: Is this a true and accurate copy of the letter [16] Jim Bryant sent to you and others on April 11th, 1969?

[17] A: Yes.

[18] Q: Let me ask it this way: What job did Jim [19] Bryant have, if you know, in April of 1969?

[20] A: He was a specialist in the marketing group, [21] and he was specializing in dielectrics.

[22] Q: And was he specializing in dielectrics which [23] contained polychlorinated biphenyl?

[24] A: Yes.

[25] Q: Does that exhibit appear to relate information

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[1] that Jim Bryant had on or about April 11, 1969, regarding [2] scrap Pyroclor disposal?

[3] A: Yes.

[4] Q: Is this the type of record that Monsanto em- [5] ployees would make as part of the regular business activity [6] of Monsanto?

[7] A: Yes.

[8] Q: And do you know whether this record was kept [9] by you in your file as part of Monsanto's ordinary course [10] of conducting its business?

[11] A: I would have said this is from the central [12] file, not my personal file.

[13] Q: It would be maintained in the central file?

[14] A: Yes.

[15] Q: All right. Mr. Benignus, you now have in [16] front of you Plaintiff's Exhibit 872. Is this a letter [17] from W. B. Papageorge to you, dated January 19, 1973?

[18] A: Yes.

[19] Q: Is this a document you have seen before?

[20] A: Yes.

[21] Q: Is this a true and accurate copy of the letter [22] Mr. Papageorge sent to you January 9th, 1973?

[23] A: Yes.

[24] Q: Was this letter written after completion of [25] the final draft of guidelines regarding the proper use,

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[1] handling, and disposal of askarels by the ANSI, A-N-S-I, [2] Committee, C-107?

[3] A: This was preparatory to the inception of that.

[4] Q: All right. And was this the kind of record [5] that Monsanto regularly made as part of its business [6] activity?

[7] A: Yes.

[8] Q: Was this record kept in the ordinary course of [9] Monsanto's regularly-conducted business?

[10] A: Yes.

[11] MR. BRADLEY: Off the record. [12] (Thereupon, a short colloquy was had.)

[13] Q: (by Mr. Bradley) Mr. Benignus, you now have [14] in front of you Plaintiff's Exhibit 820. Is this a July [15] 24, 1973 letter, with attachments, from A. M. Salazar, [16] Secretary of ANSI C-107 Committee, to all members of the [17] ANSI Committee, C-107?

[18] A: Yes.

[19] Q: Were you a member of the ANSI Committee, [20] C-107, on use and disposal of askarel and askarel-soaked [21] materials?

[22] A: Yes.

[23] Q: On page two of the letter from Mr. Salazar, in [24] the second paragraph there is a reference to "Exhibit A." [25] Do you see that?

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[1] A: Yes.
[2] Q: The next three pages of that exhibit have in [3] the bottom right-hand corner "Exhibit A" stamped onto them; [4] is that true? Down at the bottom.
[5] A: I believe that's true.
[6] Q: And the third page of the Exhibit A, which is [7] the last page of the entire exhibit, is entitled "Propo- [8] sal;" is that true?
[9] A: Yes.
[10] Q: And looking, now, back at the second page of [11] the exhibit, the second paragraph says, "The Chairman also [12] requested the Working Groups to prepare recommendations for [13] the first revision..." Do you see it there? Let me start [14] all over again: "The Chairman also requested the Working [15] Groups to prepare recommendations for the first revision, [16] with respect to the new proposals contained in EXHIBIT [17] 'A'." Do you see that?
[18] A: Yes.

[19] Q: Do you know whether the proposal which is the [20] last page of this exhibit was the proposal that was [21] referred to in the second paragraph of page two of this [22] exhibit?
[23] Do you know the answer to my question? Does [24] the last page of that exhibit which has the word "Proposal" [25] on the top, which you have now reviewed, I believe, is that

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[1] the proposal that was referred to as Exhibit A in the [2] second paragraph of page two of the letter from A. M. [3] Salazar to committee members?
[4] A: This is only a section of it. It's part of [5] it, but it's certainly not the entire thing referred to [6] here in that second paragraph. This is merely one facet.
[7] Q: Well, the facet that is discussed in the last [8] page of that exhibit has to do with a system for handling, [9] shipping, and disposing of transformer grade sample service [10] askarel wastes to provide environmental safety; is that [11] correct?
[12] A: Correct.
[13] Q: And looking at page three of the exhibit, [14] which is a May 2, 1973 letter from W. B. Papageorge to Dr.
[15] A: Pozefsky, P-o-z-e-f-s-k-y, and Mr. E. L. Raab, R-a-a-b, [16] both of General Electric Company —
[17] A: Yes.
[18] Q: — this letter discusses the need for specific [19] instructions for private and public carriers of askarel [20] fluid to instruct them in the proper handling of askarels [21] during emergency conditions; is that correct?

[22] A: I lost it.

[23] MR. FEATHERSTONE: I think, Paul, when Mr. [24] Bradley is asking you a question, you're going have to [25] listen to the question and then read the document, if you

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[1] need to read it to answer the question.
[2] Q: (by Mr. Bradley) Let me do it this way, Mr.
[3] Benignus: Do you know whether the three pages marked [4] Exhibit A —
[5] A: Uh-huh.

[6] Q: — were the Exhibit A that was attached to the [7] cover letter from A. M. Salazar to committee members and [8] that was discussed in the second paragraph of page two of [9] the cover letter?
[10] A: As I said, I don't think so. I think this is [11] one facet, one detail of what is mentioned here on page [12] two.
[13] MR. BRADLEY: All right. Then let's go off [14] the record for a moment.
[15] (Thereupon, a short recess was taken.)
[16] Q: (by Mr. Bradley) Mr. Benignus, we have now [17] separated Plaintiff's Exhibit 820, with the agreement of [18] all counsel, so that it now is a two-page document from A. [19] M. Salazar, Secretary, ANSI C-107 Committee, to all members [20] of the ANSI Committee, C-107, on use of askarel and [21] askarel-soaked materials, dated July 24th, 1973; is that [22] true?

[23] A: Yes.
[24] Q: Is this a document that you have seen before?
[25] A: Yes.

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[1] Q: Is this a true and accurate copy of the letter
[2] A: M. Salazar sent to members of the ANSI Committee, as [3] indicated, on July 24, 1973?
[4] MR. FEATHERSTONE: Without Exhibit A.
[5] Q: (by Mr. Bradley) Without Exhibit A that's [6] referenced.
[7] A: Yes.
[8] Q: Okay. And is this — Let me ask: Who was —
[9] A: M. Salazar was the Secretary of the ANSI C-107 [10] Committee?
[11] A: Yes.
[12] Q: What was the ANSI C-107 Committee in July of [13] 1973?
[14] A: ANSI is abbreviated. It's the American [15] National Standards Institute. This is the group, the [16] organization, immediately underneath Congress, and what is [17] developed at ANSI, the American National Standards [18] In-

stitute, a standard, which is what is being worked on [19] here, goes into the Federal Register in Congress as the [20] function and the next step by ANSI. That's where it goes. [21] It's delivered. That's the end of the line, Congress.

[22] Q: And was a vote solicited by ballot from [23] committee members as part of this July 24th, 1973 letter?
[24] A: Yes.
[25] Q: And was this exhibit written by Mr. Salazar at

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[1] or about the time of the — I take it it was written at the [2] time he was soliciting the voting.
[3] A: I would think so.
[4] Q: Okay. And was this exhibit maintained by [5] Monsanto in the regular practice of Monsanto's business [6] activity?
[7] A: Yes.
[8] Q: And was it kept in the ordinary course of [9] Monsanto regularly-conducted business?
[10] A: Yes.
[11] Q: Would you now look at Plaintiff's Exhibit [12] 820-A. That is a letter from W. B. Papageorge to Dr. [13] Pozefsky and E. L. Raab, of General Electric Company, dated [14] May 2nd, 1973; is that correct?
[15] A: Yes.
[16] Q: And at the bottom it shows that you were one [17] of two people who received a copy; is that correct?
[18] A: Yes.
[19] Q: And it shows you were a Steering Committee [20] Chairman of the ANSI Committee, C-107; is that correct?
[21] A: Yes.
[22] Q: Had you seen this letter prior to today?
[23] A: Yes.
[24] Q: Is this a true and accurate copy of the letter [25] W. B. Papageorge sent to Dr. Pozefsky and Mr. Raab May 2nd,

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[1] 1973?
[2] A: Yes.
[3] Q: Is this a letter that was made as part of [4] Monsanto's regular practice of business?
[5] A: Yes.
[6] Q: And was this record kept in Monsanto's ordi- [7] nary course of its regularly-conducted business?
[8] A: Yes.
[9] Q: Will you now look at Plaintiff's Exhibit [10] 820-B. Is this a document you have seen before today?
[11] A: I can't say categorically.

[12] Q: All right. Would you now look at Exhibit [13] 1474? Is this a letter that you wrote to Mr. Donald [14] McClain —

[15] A: Yes.

[16] Q: — of Westinghouse, in April of 1970?

[17] A: Yes.

[18] Q: Is this a true and accurate copy of the letter [19] you sent to Mr. McClain on that date?

[20] A: Yes.

[21] Q: Is this a record that you made in response to [22] a March 31, 1970 letter from Mr. McClain?

[23] A: Yes.

[24] Q: Was this record made as part of the regular [25] practice of Monsanto's business?

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[1] A: Yes.

[2] Q: And was the record kept in the ordinary course [3] of Monsanto's regularly-conducted business?

[4] A: Yes.

[5] Q: Would you now look at Plaintiff's Exhibit [6] 1586. Do you have that exhibit in front of you?

[7] A: Yes.

[8] MR. BRADLEY: Let's go off the record for a [9] moment.

[10] (Thereupon, a short colloquy was had.)

[11] Q: (by Mr. Bradley) Do you have Plaintiff's [12] Exhibit 1586 in front of you?

[13] A: Yes.

[14] Q: Is this a copy of a letter that you wrote to [15] Ms. Valyrie Wendt, W-e-n-d-t, on February 11, 1972?

[16] A: Yes.

[17] Q: Is this a true and accurate copy of the letter [18] that you sent to Ms. Wendt on that date?

[19] A: Yes.

[20] Q: Is this a letter that responds to a January [21] 26th, 1972 inquiry from Ms. Wendt regarding Aroclor 1016?

[22] A: Yes.

[23] Q: Did you generate this letter as part of [24] Monsanto's regular business activity?

[25] A: Yes.

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[1] Q: And was the record kept in the ordinary course [2] of Monsanto's regularly-conducted business?

[3] A: Yes.

[4] Q: Would you now look at Plaintiff's Exhibit [5] 1202. Is this a three-page letter from you to Mr. Edward [6] L. Raab, at General Electric, dated June 9th, 1970?

[7] A: Yes.

[8] Q: Is this a true and accurate copy of that [9] letter?

[10] A: Yes.

[11] Q: Is this letter a response to a June 2nd, 1970 [12] letter that you received from Mr. Raab?

[13] A: Yes.

[14] Q: Did you make this letter as part of the regu- [15] lar practice of Monsanto's business activity?

[16] A: Yes.

[17] Q: Was this letter kept in the ordinary course of [18] Monsanto's regularly-conducted business?

[19] A: Yes.

[20] Q: Would you now look at Exhibit 1633?

[21] A: Yes.

[22] Q: In March of 1970 was Jim Bryant a Monsanto [23] employee?

[24] A: Yes.

[25] Q: And was this exhibit a letter from Jim Bryant,

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[1] dated March 3rd, 1970, to Mr. Kenneth Carlson in Milwaukee, [2] Wisconsin?

[3] A: Yes.

[4] Q: And was this letter — Is this a letter you [5] have seen before?

[6] A: Yes.

[7] Q: Was this letter a response to a request from [8] Mr. Carlson regarding In-
[9] [10] [11] [12] [13] [14] [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [25]

[9] A: Yes.

[10] Q: And was this letter made as part of the regu- [11] lar practice of Monsanto's business activity?

[12] A: Yes.

[13] Q: And was it kept in the ordinary course of [14] Monsanto's regularly-conducted business?

[15] A: Yes.

[16] Q: Will you now look at Plaintiff's Exhibit 1632. [17] Is this the document you have seen before?

[18] A: Yes.

[19] Q: This is a letter from Jim Bryant again, this [20] time to Dr. Lyon Mandlecorn, L-y-o-n M-a-n-d-l-e-c-o-r-n, [21] of Westinghouse, dated February 16, 1972; is that correct?

[22] A: Yes.

[23] Q: Up at the top right-hand portion of this [24] exhibit it shows that you received a blind carbon copy of [25] the letter; is that true?

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[1] A: Yes.

[2] Q: And did Mr. Bryant apparently create this [3] exhibit in response to a telephone conversation he had with [4] Dr. Mandlecorn?

[5] A: Yes.

[6] Q: And was this letter generated as part of the [7] regular practice of Monsanto's business activity?

[8] A: Yes.

[9] Q: Was the letter kept in the ordinary course of [10] Monsanto regularly-conducted business?

[11] A: Yes.

[12] Q: Would you now look at Plaintiff's Exhibit 818.

[13] A: Okay.

[14] Q: Is this a document you've seen before?

[15] A: Yes.

[16] Q: Is this a March 29, 1972 letter from E.L. [17] Raab of General Electric to you and others?

[18] A: Yes.

[19] Q: Is this a true and accurate copy of the March [20] 29, 1972 letter received by you from Mr. Raab?

[21] A: Yes.

[22] Q: Was there an ANSI C-107 working group on [23] transformer meeting that resulted in the development of a [24] questionnaire on askarel transformers?

[25] A: Yes.

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[1] Q: Was this letter generated following distribu- [2] tion and computation of the questionnaire on askarel trans- [3] formers?

[4] A: Yes.

[5] Q: Was this record made as part of the regular [6] practice of — Let me rephrase the question. Did Monsanto [7] maintain a copy of this letter as part of its regularly- [8] conducted business activity?

[9] A: Yes.

[10] Q: During the — Did you work for Monsanto for [11] forty years?

[12] A: Yes. Forty-one.

[13] Q: During the forty-one years you worked for [14] Monsanto, did you have occasion to exchange letters with [15] General Electric?

[16] A: Yes.

[17] Q: And you did that as part of Monsanto regular [18] business activity?

[19] A: Yes.

[20] Q: Did you receive from General Electric letters [21] that they generated as part of their regular business [22] activity?

[23] A: Yes.

[24] Q: Is this a letter that you received from Mr. [25] Raab that was generated as part of General Electric's

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[1] regular business activity?

[2] MR. KUNEY: Objection, No foundation for [3] that.

[4] A: Yes.

[5] MR. BRADLEY: And you want to talk about [6] cooperation and stipulations.

[7] MR. KUNEY: Ask me for a stipulation. Don't [8] ask Monsanto witnesses about whether GE documents were [9] generated in the ordinary course of GE business.

[10] MR. BRADLEY: Will you stipulate that that [11] exhibit was generated in the ordinary course of GE's [12] business?

[13] MR. KUNEY: Yes.

[14] Q: (by Mr. Bradley) Will you now look at 415?

[15] A: Okay.

[16] Q: Mr. Benignus, do you have Plaintiff's Exhibit [17] 415 in front of you?

[18] A: Yes.

[19] Q: Is this a document you have seen before?

[20] A: Yes.

[21] Q: Is this a copy of a letter written by W. B. [22] Papageorge to Mr. Jenkins, dated July 8th, 1970?

[23] A: Yes.

[24] Q: And in the top right-hand corner it indicates [25] you received a blank carbon copy of this letter; is that

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[1] true?

[2] A: Yes.

[3] Q: Did Monsanto have biodegradation studies on- [4] going as of July 8th, 1970 regarding its Aroclors?

[5] A: I think so.

[6] Q: Does this letter discuss Monsanto's knowledge [7] of biodegradability of Aroclors as of July 8th, 1970?

[8] A: Yes.

[9] Q: And does it discuss Monsanto's knowledge of [10] the toxicity, disposal, and analytical methodology of [11] Aroclors as known to Monsanto as of July 8th, 1970?

[12] MR. FEATHERSTONE: Object to the form of the [13] question.

[14] Q: (by Mr. Bradley) Does this letter discuss [15] Monsanto's knowledge on those subjects as of July 8th, [16] 1970?

[17] A: Yes.

[18] Q: And was this letter generated as part of the [19] regular practice of Monsanto's business activity?

[20] A: Yes.

[21] Q: Was the letter kept in the ordinary course of [22] Monsanto's regularly-conducted business?

[23] A: Yes.

[24] Q: Would you now look at Plaintiff's Exhibit [25] 1636?

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[1] MR. FEATHERSTONE: Did you say 1636?

[2] MR. BRADLEY: Yes. [3] Is this a document you have seen before?

[4] A: Yes.

[5] Q: (by Mr. Bradley) Can you tell who the author [6] was of this exhibit?

[7] A: Randy Graham.

[8] Q: Did you receive a copy of this exhibit from [9] Mr. Graham?

[10] A: Yes.

[11] Q: Is this a true and accurate copy of the docu- [12] ment you received from Mr. Graham that's referring to a [13] date of call of 11-12-70?

[14] A: Yes.

[15] Q: Was this record made as part of the regular [16] practice of Monsanto's business activity?

[17] A: Yes.

[18] Q: Was this record kept in the ordinary course of [19] Monsanto's regularly-conducted business?

[20] A: Yes.

[21] Q: Will you now look at Plaintiff's Exhibit 1637. [22] Is this a document you have seen before?

[23] A: I believe I've seen it. I was copied in on [24] it.

[25] Q: All right. This is a letter from W. R.

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[1] Richard to the file, dated March 10, 1969; is that correct?

[2] A: Right.

[3] Q: And it shows that you received a copy of it, [4] among others?

[5] A: Yes.

[6] Q: On March 10, 1969, was W. R. Richard a [7] Monsanto employee?

[8] A: Yes.

[9] Q: What work did he do on March 10, 1969 with [10] Monsanto?

[11] A: He was director of research of the fluids [12] group.

[13] Q: And did Mr. Richard generate this document? I [14] mean, did Dr. Richard generate this exhibit regarding a [15] meeting held March 6th, 1969 with Industrial Bio-Test [16] Laboratories, Inc., regarding Aroclor - Wildlife?

[17] A: Yes.

[18] Q: Was this exhibit made as part of the regular [19] practice of Monsanto's business activity?

[20] A: Yes.

[21] Q: Was it kept in the ordinary course of [22] Monsanto's regularly-conducted business?

[23] A: Yes.

[24] Q: Would you now look at Plaintiff's Exhibit [25] 1638.

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[1] MR. FEATHERSTONE: Would you give me just ten [2] seconds.

[3] (Thereupon, a short colloquy was had.)

[4] Q: (by Mr. Bradley) Is this a document you have [5] seen before?

[6] A: Yes.

[7] Q: Is this a letter from Elmer Wheeler to James [8] Nelson of General Electric Corporation, dated July 21, [9] 1969?

[10] A: Yes.

[11] Q: It has a handwriting in the top right-hand [12] corner. Do you see that?

[13] A: Yes.

[14] Q: Is that your handwriting?

[15] A: No.

[16] Q: Do you know whose handwriting that is?

[17] A: No.

[18] Q: Absent the handwriting, is this a true and [19] accurate copy of the letter sent by Elmer Wheeler to James [20] Nelson, dated April 21, 1969?

[21] MR. FEATHERSTONE: The contents of 1638 [22] denotes certain attachments. Do you want to rephrase that [23] question?

[24] MR. BRADLEY: I will rephrase it. [25] Absent the attachments that are referred to in

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[1] this exhibit, is it a true and accurate copy of the letter [2] sent by Elmer Wheeler to James Nelson, dated July 21, 1969?

[3] A: Yes.

[4] Q: (by Mr. Bradley) And other than the handwrit- [5] ing, correct?

[6] A: Yes.

[7] Q: Is this a letter that was made as part of [8] Monsanto's regular practice of business?

[9] A: Yes.

[10] Q: Was it kept in the ordinary course of [11] Monsanto's regularly-conducted business?

[12] A: Yes.

[13] Q: Would you now look at Plaintiff's Exhibit 828? [14] Excuse me. [15] (Thereupon, a short colloquy was had.)

[16] Q: (by Mr. Bradley) Mr. Benignus, have you seen [17] Plaintiff's Exhibit 828 prior to today's deposition?

[18] A: Yes.

[19] Q: The first two pages of the exhibit indicate [20] that it's a cover letter from A. M. Salazar, again, Secre- [21] tary of ANSI C-107 Committee, to all members of the

ANSI [22] Committee, C-107, on use and disposal of askarel and [23] askarel-soaked materials, dated August 19, 1972; is that [24] correct?

[25] A: Yes.

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[1] Q: Would you now look at page — or excuse me, [2] paragraph four of the first page? Do you see there at the [3] very end of the paragraph it refers to Appendices 2 and 3?

[4] A: Yes.

[5] Q: Would you now look at the last two pages of [6] this exhibit?

[7] A: Yes.

[8] Q: Do the last two pages of Exhibit 828 have [9] written on them at the bottom, "Appendix 2," on one page, [10] and on the last page, "Appendix 3"?

[11] A: Yes.

[12] Q: Do those appear to be the Appendices 2 and 3 [13] referred to at paragraph four of page one of Exhibit 828?

[14] A: Yes.

[15] Q: Also, attached to the cover letter from Mr. [16] Salazar is what is referred to on the bottom of page one as [17] "Appendix #1." Do you see that?

[18] A: Yes.

[19] Q: Do you know if that appendix is the draft pro- [20] posal for guidelines for handling and disposal of capacitor [21] and transformer grade askarels containing polychlorinated [22] biphenyls which is referred to in the first sentence of the [23] fourth paragraph of the first page of Plaintiff's Exhibit [24] 828?

[25] A: This is a roster.

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[1] MR. FEATHERSTONE: Yeah. He wants to know if [2] that is the draft proposal.

[3] THE WITNESS: That's not a draft proposal. [4] It's a list of the people.

[5] Q: (by Mr. Bradley) So, I take it — Let me give [6] some assistance. Does it appear that appendix number one [7] is not the guidelines for handling and disposal of capaci- [8] tor and transformer grade askarels containing polychlori- [9] nated biphenyls that's referred to in the first sentence of [10] the fourth paragraph of Plaintiff's Exhibit 828?

[11] A: Yes.

[12] Q: It's not the same?

[13] A: It's not the same.

[14] Q: Do you recall receiving this document?

[15] A: Yes.

[16] Q: When you received it, do you recall whether it [17] had an appendix number one attached to a cover letter by A. [18] M. Salazar?

[19] A: I can't recall, but that's the idea.

[20] Q: Okay. Do you know whether the appendix number [21] one and the appendix number [22] three were attached to the August 18, 1972 cover letter [23] sent by A. M. Salazar to members of the ANSI Committee?

[24] MR. FEATHERSTONE: All right. Let's go off [25] the record.

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[1] (Thereupon, a short colloquy was had.)

[2] MR. FEATHERSTONE: On behalf of the Defen- [3] dants, we stipulate that Plaintiff's Exhibit 828, as its [4] constituted, in fact was part of the transmittal of August [5] 18, 1972 from ANSI to its members.

[6] Q: (by Mr. Bradley) And the portion that was [7] missing from the August 18, 1972 transmission is the pro- [8] posal for the guidelines for handling and disposal of [9] capacitor and transformer grade askarels containing poly- [10] chlorinated biphenyls; is that correct?

[11] A: Yes.

[12] Q: And absent the proposal, is this a true and [13] accurate copy of the material sent to you by A. M. Salazar [14] on August 18, 1972?

[15] A: Yes.

[16] Q: Was this exhibit written at or about the time [17] that Mr. Salazar distributed a draft proposal for guide- [18] lines for handling and disposal of capacitor and trans- [19] former grade askarels containing polychlorinated biphenyls?

[20] A: Yes.

[21] Q: Was it the regular practice of ANSI to send [22] out this kind of document?

[23] A: Yes.

[24] Q: And did Monsanto keep a copy of this as part [25] of Monsanto's regular business activity?

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[1] A: Yes.

[2] Q: Would you now look at Plaintiff's Exhibit 833.

[3] MR. FEATHERSTONE: If it matters to you, we [4] just did this one. It's 828.

[5] MR. BRADLEY: We withdraw 833. [6] Would you look at Plaintiff's Exhibit 1171. [7] Is this a document written by you November 11, 1971?

[8] A: Yes.

[9] Q: (by Mr. Bradley) Is this a true and accurate [10] copy of the document you wrote on that date?

[11] A: Yes.

[12] Q: And is this an agenda for a meeting?

[13] A: Yes.

[14] Q: And did you generate this document at or about [15] the time of the meeting?

[16] A: Yes.

[17] Q: And did you generate this document as part of [18] Monsanto's regular business activity?

[19] A: Yes.

[20] Q: And did you maintain a copy of this document [21] in the ordinary course of Monsanto's regularly-conducted [22] business?

[23] A: Yes.

[24] MR. BRADLEY: Let's go off the record one more [25] time.

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[1] (Thereupon, a short colloquy was had.)

[2] Q: (by Mr. Bradley) Mr. Benignus, would you put [3] Plaintiff's Exhibit 1497 before you, please. Is this a [4] September 1, 1970 letter from Mr. Papageorge to Mr. [5] Reinhardt?

[6] A: Yes.

[7] Q: And you're listed down as having received a [8] blind copy?

[9] A: Yes.

[10] Q: Excuse me. Not a blind copy, a regular copy.

[11] A: Yes.

[12] Q: Have you seen this document before?

[13] A: Yes.

[14] Q: Is this a true and accurate copy of the letter [15] sent by Mr. Papageorge to Mr. Reinhardt, dated September 1, [16] 1970?

[17] A: Yes.

[18] Q: Did you inform Mr. Papageorge on or about [19] September 1, 1970, suggesting that he prepare a paragraph [20] or two describing the PCB problem to be handled through [21] ANSI?

[22] A: Yes.

[23] Q: Is the attachment to the September 1, 1970 [24] letter the material prepared by Mr. Papageorge pursuant to [25] your suggestion?

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[1] A: Yes.

[2] Q: Was this exhibit made as part of Monsanto's [3] regular business activity?

[4] A: Yes.

[5] Q: And was the record kept in the ordinary course [6] of Monsanto's regularly-conducted business?

[7] A: Yes.

[8] Q: Would you now look at Plaintiff's Exhibit [9] 1492? Is this a letter from Mr. Papageorge to Mr. V-i- [10] l-a-n-d of Wes-

tinghouse Corporation, dated October 1, 1970?

[11] A: Yes.

[12] Q: And at the top right-hand portion of this [13] exhibit does it indicate that you received a blind carbon [14] copy of the letter?

[15] A: Yes.

[16] Q: Is that a true and accurate copy the letter [17] Mr. Papageorge wrote to Mr. Viland on October 1, 1970?

[18] A: Yes.

[19] Q: Did Monsanto do a study in the Gainesville, [20] Florida area in 1938?

[21] A: That was before my time, but yes.

[22] Q: All right. And was this letter written by Mr. [23] Papageorge generated shortly after he received results of [24] laboratory information relating to the 1938 Monsanto study [25] in the Gainesville, Florida area?

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[1] MR. FEATHERSTONE: Object to the form.

[2] A: Yes.

[3] Q: Did Mr. — Let me phrase it this way: Did [4] Monsanto come into possession of laboratory information re- [5] lating to a study it conducted in the Gainesville, Florida [6] area in '38 on or around October of 1970?

[7] A: I think so.

[8] Q: And was this letter apparently written after [9] receipt of that laboratory information?

[10] A: Yes.

[11] Q: Was this exhibit made as part of the regular [12] practice of Monsanto's business activity?

[13] A: Yes.

[14] Q: Was it kept in the ordinary course of [15] Monsanto's regularly-conducted business activity?

[16] A: Yes.

[17] Q: Did I ask you whether it's a true and accurate [18] copy?

[19] A: Yes.

[20] Q: And it is?

[21] A: Yes.

[22] Q: Would you now look at Plaintiff's Exhibit [23] 1239. Is this a February 7, 1973 letter from E. L. Raab to [24] members of an insulating fluid subcommittee, IEEE trans- [25] formers committee?

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[1] MR. FEATHERSTONE: There's a reference in the [2] third paragraph that attaches a copy of the minutes. That [3] does not seem to be part of this exhibit. You want to re- [4] phrase that to be a cover letter?

[5] Q: (by Mr. Bradley) Is this exhibit a letter [6] sent by Mr. Raab, absent a copy of the minutes of the last [7] meeting that went to the members of the insulating fluid [8] subcommittee?

[9] A: Yes.

[10] Q: Is it a true and accurate copy of the letter [11] sent by Mr. Raab on that date, absent the attachment?

[12] A: Yes.

[13] MR. BRADLEY: Will General Electric stipulate [14] that this record was made as part of the regular practice [15] of General Electric business activity?

[16] MR. KUNEY: Yes, we will.

[17] Q: (by Mr. Bradley) Was this exhibit maintained [18] by Monsanto in the ordinary course of its regularly- [19] conducted business?

[20] A: Yes.

[21] Q: Would you now look at Plaintiff's Exhibit [22] 1158. Is this a copy of a February 23rd, 1971 letter from

[23] A: M. Salazar regarding minutes of the committee on use and [24] disposal of askarel of the board of directors of the power [25] equipment division of the National Electrical Manufacturers

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[1] Association, dated February 23rd, 1971?

[2] A: Yes.

[3] Q: Is this a true and — Have you seen this docu- [4] ment before?

[5] A: Yes.

[6] Q: Is this a true and accurate copy of that docu- [7] ment prepared by A. M. Salazar on February 23rd, 1971?

[8] MR. FEATHERSTONE: The document, Mr. Bradley, [9] refers to exhibits A through H, right next to his signature [10] block.

[11] Q: (by Mr. Bradley) Absent any exhibits that [12] this document says are attached, is this a true and [13] accurate copy of the letter sent by Mr. Salazar on February [14] 23rd, 1971?

[15] A: Yes.

[16] Q: Was it the regular practice of the National [17] Electrical Manufacturers Association to generate documents [18] such as Plaintiff's Exhibit 1158?

[19] A: Yes.

[20] Q: And did Monsanto keep a copy of this in the [21] ordinary course of its regularly-conducted business?

[22] A: Yes.

[23] Q: Now would you now examine Exhibit 1141? [24] Steve, I'm showing you a copy. The one I have [25] handed the witness has no highlighting on it.

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[1] Is this a March 1, 1972 letter with an [2] attachment to ANSI C-107 working group members on capaci- [3] tors, in- cluding you?

[4] A: Yes.

[5] Q: Is this a document you have seen before?

[6] A: Yes.

[7] Q: And is this document with its at- tachment a [8] true and accurate copy of a document with its attachment [9] that was sent by A. Pozefsky to ANSI C-107 working group [10] members on capacitors, including you, on March 1, 1972?

[11] A: Yes.

[12] MR. KUNEY: Ralph, could I just ask, is the [13] wit- ness saying that with the handwriting is how it came? [14] There are some handwritten notations in the attachment, and [15] I would say more than one handwriting, to my observa- tion.

[16] Q: (by Mr. Bradley) All right. Would you look [17] at page nine of the attach- ment?

[18] A: Okay.

[19] Q: Do you see the wording up there, "I do not [20] believe this is acceptable to enforcement agencies," and [21] there's a signature, initials, and it looks like "WBP"?

[22] A: Yes.

[23] Q: And when you received this document did it [24] have any handwrit- ing on it?

[25] A: I don't know.

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[1] Q: Would you turn the page to page ten of the [2] attachment? Do you see the handwriting of words on that [3] page?

[4] A: Yes.

[5] Q: Do you recall whether, when you received this [6] document, there were any handwritten words?

[7] A: No.

[8] Q: Well, other than the handwritten words that [9] appear on that exhibit, is this a true and accurate copy of [10] the letter and attachment sent to you and others by Mr. [11] Pozefsky on March 1, 1972?

[12] A: Yes.

[13] MR. BRADLEY: And will General Electric stipu- [14] late that this record was made as part of the General [15] Electric regular business activity?

[16] MR. KUNEY: I guess in the present form we [17] could only so stipulate as to the cover letter.

[18] MR. BRADLEY: Can you stipulate that the cover [19] letter and the attach- ment, minus any handwritten words, [20]

were generated by GE as part of its regular business [21] activity, so that if I went through and I removed the [22] handwriting, you would be satisfied?

[23] MR. KUNEY: The problem that I have, Ralph, is [24] that I don't know whether it was or wasn't sent with any of [25] the handwritten notations, so I can't do that at this

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[1] point.

[2] Q: (by Mr. Bradley) All right. Was the first [3] page of this exhibit, the letter without the attachment, [4] maintained by Monsanto in the ordinary course of its [5] regularly-conducted business?

[6] A: Yes.

[7] Q: Okay. Would you now look at Plaintiff's [8] Exhibit 1153? Is this a letter from Paul W. Gann to Clancy [9] E. Jayne, dated June 7, 1972?

[10] A: Yes.

[11] Q: At the bottom there is a blind note; do you [12] see that?

[13] A: Yes.

[14] Q: Also at the top of this it indicates that you, [15] among others, received a blind carbon copy; is that true?

[16] A: Yes.

[17] Q: Have you seen this exhibit before?

[18] A: I'm not certain that I did. It was not in my [19] area. This Gann is in the heat transfer fluids area.

[20] Q: Do you know if Mr. Gann is still a Monsanto [21] employee?

[22] A: No. I didn't know him.

[23] Q: Would you now look at Plaintiff's Exhibit [24] 1152? Have you seen this document before?

[25] A: Well, again it's this Paul Gann, heat transfer

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[1] area. I'm not certain whether I'm — Although I got a [2] blind copy, I'm not certain that I saw it. It was out of [3] my area.

[4] Q: All right. Would you now look at Plaintiff's [5] Exhibit 1593? Is this a letter sent by W. B. Papageorge to [6] W. R. Richard?

[7] A: Yes.

[8] Q: Have you seen this document before?

[9] A: Yes.

[10] Q: Is this a true copy of a letter dated [11] September 13th, 1971, from Mr. Papageorge to Dr. Richard?

[12] A: Yes.

[13] Q: Is this a document that was made as part of [14] Monsanto's regular practice of business?

[15] A: Yes.

[16] Q: And was the record kept in the ordinary course [17] of Monsanto's regularly-conducted business?

[18] A: Yes.

[19] Q: Would you now look at Plaintiff's Exhibit [20] 1254? Is this a copy of a letter from W. B. Papageorge, [21] dated November 4, 1971, to Mr. Edward L. Raab of General [22] Electric Company?

[23] A: Yes.

[24] Q: Is this a true and accurate copy of the letter [25] sent by Mr. Papageorge to Mr. Raab on that date?

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[1] A: Yes.

[2] Q: Was this — Is this a record that was made as [3] part of Monsanto's regular practice?

[4] Yes? What?

[5] MR. FEATHERSTONE: Well, that letter refers to [6] attachments.

[7] MR. BRADLEY: All right. Fine. [8] Is this a true and accurate copy, absent any [9] attachments, that was sent by Mr. Papageorge on November 4, [10] 1971 to Mr. Raab?

[11] A: Yes.

[12] Q: (by Mr. Bradley) And was this exhibit, and [13] again minus any attachments referred to, made as part of [14] the regular practice of Monsanto's business activities?

[15] A: Yes.

[16] Q: Was the record kept in the ordinary course of [17] Monsanto's regularly-conducted business?

[18] A: Yes.

[19] Q: Now look at Plaintiff's Exhibit 1508. Is this [20] a letter written by you on October 13th, 1971 to Dr. Dakin [21] of Westinghouse?

[22] A: Yes.

[23] Q: Did you write the letter in response to a [24] telephone call you received by Dr. Dakin on that date?

[25] A: Yes.

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[1] Q: Is this a true and accurate copy of the letter [2] you wrote to Mr. Dakin on that date?

[3] A: Yes.

[4] Q: Did you write this letter as part of the [5] regular practice of Monsanto's business activity?

[6] A: Yes.

[7] Q: Was the record kept in the ordinary course of [8] Monsanto's regularly-conducted business?

[9] A: Yes.

[10] Q: Would you now look at Plaintiff's Exhibit 336. [11] Is this a copy of a letter from T. K-a-t-a-y-a-m-a to you, [12] dated March 22nd, 1972?

[13] A: Yes.

[14] Q: Is this a true and accurate copy of the letter [15] sent by that gentleman to you on that date?

[16] A: Yes.

[17] Q: Was this letter written in response to a March [18] 20th, 1972 question that you posed in a letter?

[19] A: Yes.

[20] Q: Was this letter made as part of the regular [21] practice of Monsanto's business activity.

[22] MR. FEATHERSTONE: Which one, now, PX 336?

[23] MR. BRADLEY: Yes.

[24] A: Yes.

[25] Q: (by Mr. Bradley) And was the letter kept in

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[1] the ordinary course of Monsanto's regularly-conducted [2] business?

[3] A: Yes.

[4] MR. BRADLEY: It is now a little after 4:00, [5] and I understand that your attorney would like you to leave [6] so that you can avoid the rush-hour traffic. So, we still [7] have a few more questions for you, but we'll arrange them [8] on another occasion to fit your convenience. Thank you [9] very much.

[10] THE WITNESS: Thank you. [11] (Thereupon, the deposition was adjourned, to be [12] reconvened at a future date.)

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