

IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON, WEST VIRGINIA

JAMES M. ADKINS, Administrator
of the Estate of Ralph E. Adkins,
Deceased, et al,

Plaintiffs,

vs.

MONSANTO COMPANY, a Delaware
Corporation,

Defendant.

No. 81-2098

Deposition of
JAMES P. MIEURE
taken on behalf of
the plaintiffs.

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Reporter: M. Joy Springer

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APPEARANCES:

Messrs. Calwell, McCormick & Peyton,
by W. Stuart Calwell, Jr., Esq., For the Plaintiffs;

Messrs. Bowles, McDavid, Graff & Love,
by P. Michael Pleska, Esq., For the Defendant.
and John Woods, Esq.,

IT IS STIPULATED AND AGREED by and between
counsel for the plaintiffs and counsel for the defendant
that the deposition of JAMES P. MIEURE may be taken pursuant
to Rule 26(a) of the Federal Rules of Civil Procedure, on
behalf of the plaintiffs, on July 14, 1983, at the Radisson
Hotel, Room 215, 9th Street and Convention Plaza, St. Louis,
Missouri, before M. JOY SPRINGER, a Notary Public within
and for the County of Madison, State of Illinois; that the

1 issuance of notice and dedimus is waived, and that this
2 deposition may be taken with the same force and effect as
3 if all Federal rules and statutory requirements had been
4 complied with.

5 IT IS FURTHER STIPULATED AND AGREED that
6 any and all objections to all or any part of this deposi-
7 tion except objections as to form of the questions asked
8 or answers given, are hereby reserved and may be raised
9 on the trial of this cause; and that the signature of the
10 deponent is not waived.

11 * * * * *

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15 JAMES P. MIEURE,
16 produced, sworn and examined on behalf of the plaintiffs,
17 deposes and says as follows:

18 EXAMINATION
19

20 BY MR. CALWELL:

21 (Whereupon the reported marked Plaintiff's
22 Deposition Exhibit #338 (Monsanto's I.D.
23 #232542), consisting of one page; Plaintiff's
24 Deposition Exhibit #339 (Monsanto's I.D.
25 #232553), consisting of one page; Plaintiff's

1 Deposition Exhibit #340 (Monsanto's I.D.
2 #233610 through 233612, inclusive), consisting
3 of three pages; Plaintiff's Deposition Exhibit
4 #341 (Monsanto's I.D. #232571 through 232574,
5 inclusive), consisting of four pages.

6 Q Would you state your name, please?

7 A James P. Mieure, M-i-e-u-r-e.

8 Q And what is your address, Dr. Meiore?

9 A 1408 Rustic View, Ballwin, Missouri.

10 Q You've got a Ph.D., is that right?

11 A That's correct.

12 Q In chemistry?

13 A Yes.

14 Q Doctor, I'm going to ask you briefly about
15 your education. You went to Kenyon College in 1963 with a
16 degree in chemistry?

17 A That's correct.

18 Q Purdue University in '66 with a master's?

19 A Yes.

20 Q And Texas A & M in 1968, Ph.D.?

21 A Right.

22 Q Now, upon getting your Ph.D. you went right
23 to work for Monsanto, is that right?

24 A Yes, I did.

25 Q And Monsanto is the only company you have

1 worked for since getting your Ph.D., right?

2 A Yes.

3 Q What was your first position with Monsanto?

4 A I was Senior Research Chemist.

5 Q And where were you assigned to work?

6 A In St. Louis.

7 Q Were you at the corporate headquarters or

8 at one of the plants?

9 A No. This was at the Queeny Plant.

10 Q That would have been in 1968?

11 A That's correct.

12 Q Now, while you were at the Queeny Plant did

13 you do any work with chlorinated phenols?

14 A Yes.

15 Q Was that in connection with pentachlorophenol?

16 A Yes, it was

17 Q Also chlorophenol crude?

18 A I don't believe so during that time.

19 Q And what were you doing with pentachloro-

20 phenol in 1968?

21 A Nothing.

22 Q After 1968 did you perform some tests on

23 pentachlorophenol?

24 A Yes.

25 Q You know when that was?

1 A Probably started in '69 or '70.

2 Q And was that at the Queeny Plant?

3 A Yes.

4 Q Was that part of some department, was there

5 a chlorophenol department or something you were assigned to

6 at the Queeny Plant?

7 A No, I was not assigned to a chlorophenol

8 department.

9 Q Was this work being performed for another

10 manufacturing facility of Monsanto's?

11 A I was given a project to work on. I'm not

12 sure where the project originated.

13 Q What was the project.

14 A The project was to develop a method for

15 determining the dioxin content of pentachlorophenol.

16 Q In 1969?

17 A Approximately.

18 Q Now, did you do any work along those lines

19 with trichlorophenol?

20 A Two or three years later there was some

21 attempt to extend the methodology, and we were asked to

22 participate in the study by, I believe, the Food and Drug

23 Administration was sponsoring that study.

24 Q On trichlorophenol?

25 A Yes. So we did participate in a round robin

1 study.

2 Q What is a round robin study?

3 A Several labs would analyze several samples

4 sent out by one laboratory.

5 Q On the trichlorophenol, you were determining

6 dioxin content also?

7 A In that round robin study?

8 Q In the round robin study.

9 A Yes.

10 Q You know what other laboratories were

11 involved in that?

12 A The FDA had a laboratory involved, the

13 USDA, Dow Chemical. I've forgotten where there were others.

14 Q And, of course, Monsanto?

15 A Yes.

16 Q You think that would have been in 1970, '71,

17 something like that?

18 A Possibly even later than that. Might have

19 been '72, '73. I'm not certain of the time frame.

20 Q But at least the early '70's?

21 A Yes.

22 Q Maybe as late as '74 and as early as '72,

23 something like that?

24 A That's a reasonable range to apply to it.

25 Q Now, do you know why the trichlorophenol

1 tests were undertaken, why the request was made and the
2 purpose?

3 A Well, the USDA was interested in that
4 material.

5 Q Do you know why it was interested in that
6 material?

7 A Well, I think they had a general interest
8 in chlorophenols, and the dioxin content of chlorophenols
9 at that time was part of the general interest.

10 Q Now, let me ask you about orthochlorophenol.
11 Did you do any of this kind of work with orthochlorophenol
12 during this time period?

13 A I don't recall doing it during that time
14 period.

15 Q Did you do it at a later time?

16 A Yes.

17 Q And when was that?

18 A A group that I was involved with analyzed
19 orthochlorophenol crude at some point in the mid-'70's and
20 then again in '78 or '79.

21 Q Okay. Now, in the middle '70's, which would
22 be for a fair range of, say, late '74 to early '77, some-
23 thing like that, would that be a fair time period, you
24 think?

25 A Late '74 to early '77.

1 Q For the orthochlorophenol program?

2 A Approximately.

3 Q And were you likewise trying to develop a

4 methodology to identify dioxins in the orthochlorophenol

5 crude at that time?

6 A Yes.

7 Q And do you know why that particular project

8 was undertaken?

9 A It was a general process study just to

10 assure ourselves we didn't have dioxin present in the process

11 at that time.

12 Q And what means did you use to test the

13 orthochlorophenol for the presence of dioxins?

14 A We used an extraction and g.c. mass

15 spectrometry method.

16 Q You know where the orthochlorophenol crude

17 came from that you were testing?

18 A No.

19 Q How long did the period of testing occur?

20 Was it a one-shot situation or was there a series of samples

21 that extended over a period of time?

22 A I don't recall.

23 Q Did you find the presence of dioxin in the

24 orthochlorophenol crude?

25 A No.

1 Q Do you remember what detection level you
2 were able to get down to?

3 A No, I'm afraid I don't.

4 Q But you do recall you did not find any?

5 A That's right.

6 Q Let me ask you that same question about the
7 trichlorophenol tests. Did you locate or identify dioxin
8 in the trichlorophenol?

9 A The trichlorophenol samples we were analyzing
10 in the round robin study, dioxin had been added to some of
11 those as part of the experiment.

12 Q Did you test any of the trichlorophenols
13 from Monsanto at that period of time?

14 A These samples were sent out by the Food
15 and Drug Administration and we didn't know where they came
16 from.

17 Q Aside from those samples, did you test any
18 other trichlorophenol that might have been Monsanto's?

19 A Not to my recollection.

20 Q Now, back to the pentachlorophenol. Did
21 you detect any dioxin content in the pentachlorophenol?

22 A At this point we have to define what we
23 mean by dioxin.

24 Q Okay. How do you define dioxin in connec-
25 tion with the pentachlorophenol study?

1 A Well, there are, what is it, seventy-five
2 isomers of chlorinated dioxins.

3 Q And were you testing for all of them in
4 pentachlorophenol?

5 A As many as we could.

6 Q So if I understand what you're saying, the
7 undertaking with reference to pentachlorophenol was as broad
8 gauged as possible with reference to the family of substances
9 generally referred to as dioxins, is that correct?

10 A That's right.

11 Q How many of those substances were you able
12 to identify?

13 A I don't recall the exact number. I would
14 estimate ten or twelve.

15 Q Now, do you recall which of the isomers you
16 did identify or one or two of them?

17 A Octylchloro, two isomers of heptachloro,
18 three isomers of hexachloro. Beyond that I don't recall.

19 Q Did you identify any 2,3,7,8 TCDD?

20 A No.

21 Q Now, with reference to the pentachlorophenol
22 testing that you did, in preparation for that did you con-
23 sult the Monsanto research libraries and look to see if
24 there were any previous tests done by the company along
25 those lines?

1 A Yes, I'm sure we did a literature survey.

2 Q Is that common practice when you're going

3 to undertake a project such as these chlorophenol projects

4 we have just been talking about?

5 A Yes, it is.

6 Q Do you rely on the Monsanto libraries

7 pretty much extensively for that?

8 A That's certainly where we would start. If

9 we were aware of a reference that was not available in our

10 library, we would have our library obtain that reference

11 for us.

12 Q Now, part of the reason for identifying the

13 dioxin content, let's say, of pentachlorophenol was con-

14 nected to safety and handling of products, that kind of

15 thing?

16 A Yes.

17 Q In connection with your literature search,

18 did you look at anything on the toxicology relating to the

19 dioxins, its effect, perhaps, on animals or humans?

20 A No.

21 Q So as far as you can recall, you didn't

22 look at anything like that?

23 A No. My responsibilities on the project was

24 an analytical chemist.

25 Q I understand what your responsibilities were.

1 You said you did a literature search. Was it literature
2 specifically just for analytical procedures or did it
3 include any toxicology or any studies identifying what
4 effect dioxin may have had on animals or humans?

5 A Many of the studies I would have looked at
6 would have been toxicological studies which would have had
7 an analytical section in them.

8 Q Now, were you working with the section in
9 toxicology at Monsanto in '69 when you were looking at the
10 pentachlorophenol?

11 A No.

12 Q As far as you know, there was no involvement
13 of the toxicology section, then, in this undertaking?

14 A I am not sure what you mean by a toxicology
15 section.

16 Q Well, I talked to Dr. Levinskas this morning
17 and he said since 1971 he has been, oh, the head, I think
18 he called it, of the toxicology section, and he said
19 although the names have changed over the years here and
20 there that essentially the job is the same. He said really
21 what it is is a toxicology department that services the
22 entire company. My question to you is whether or not when
23 you were undertaking your analytical inquiry into the
24 presence of dioxins in pentachlorophenol you had any con-
25 nection with or coordinated with a toxicology department in

1 Monsanto?

2 A There would have been meetings which we
3 might have attended together.

4 Q You create like a lab report or some such
5 document when you do these experiments, right?

6 A Yes.

7 Q And you created those records, I guess, in
8 your pentachlorophenol inquiry?

9 A Yes.

10 Q Do you know what happens to them after they
11 are created, those records?

12 A We have an Information Center and we have
13 a Records Center within the Information Center, and those
14 records would normally be made a part of that Record Center.

15 Q If you wanted to go retrieve those records
16 for some reason, how would you do that? Is there some
17 person you'd go to?

18 A I'm sure there is. I don't know who that
19 person is.

20 Q You've never had occasion to go to the
21 Records Center and look up past experiments or lab results
22 or that sort of thing?

23 A I've done it many years ago.

24 Q But not in recent time?

25 A No.

1 Q When you did it many years ago, how did you
2 do it?

3 A I went to a person in the library and asked
4 them what the procedure was. They told me who to see, who
5 to make my request to, and I subsequently did that.

6 Q So if I ask the librarian, that would be a
7 good place to start?

8 A They could certainly tell you how to access
9 the Records Center.

10 Q Now, there is a library in the Medical
11 Department, is there not?

12 A I believe there is.

13 Q Do you use that library?

14 A Not routinely.

15 Q Is there a library that you use with some
16 degree of regularity in connection with your work?

17 A Yes.

18 Q And which library is that?

19 A It's located in the R Building. It's
20 commonly called the Research Library.

21 Q The library in the Medical Department, is
22 that just the Medical Library, is that what it's called?

23 A I'm not sure of the official title. That's
24 as good a title as any.

25 Q The library you work in in the R Building

1 is commonly referred to as the Research Library?

2 A That's correct.

3 Q And that's where I would go to find out
4 about the Records Center, right?

5 A Yes.

6 Q You know if it's Monsanto's policy to main-
7 tain and preserve lab tests such as the ones you performed
8 on pentachlorophenol?

9 A Monsanto has specific guidelines on record
10 retention.

11 Q Do you know what those guidelines are with
12 reference to test results such as those that you created in
13 the pentachlorophenol, trichlorophenol and orthochlorophenol
14 inquiries?

15 A No, I don't.

16 Q Have there been any other times that you
17 have analyzed chlorophenols, penta-, ortho-, trichlorophenols
18 for dioxins other than the times that you have just testi-
19 fied about?

20 A We have discussed a fair range of times.

21 Q The first one started in 1969?

22 A Okay.

23 Q That was with the penta inquiry. Then we
24 moved into what we agreed on as a fair range for the early
25 '70's, like, '72 to '74 time period or thereabouts, and

1 that was the trichlorophenol?

2 A Trichlorophenol was analyzed during that
3 time, but what you just said implied that we had an exten-
4 sive effort under way during that time.

5 Q I didn't mean to. Was it not an extensive
6 effort?

7 A It was not.

8 Q So what you're saying is for some short
9 period of time within the time period of '72 to '74?

10 A That's correct.

11 Q And then the orthochlorophenol time period,
12 and correct me, was this also just a short time period when
13 you tested the orthochlorophenol in what we called late
14 '74 to early '77 time period, was there just a short period
15 of time within that time period that you looked at ortho-
16 chlorophenol crude?

17 A I believe so.

18 Q Now, aside from this time period, were
19 there other times when you tested one or all of these
20 phenolic compounds for dioxin?

21 A Yes.

22 Q And when were those times?

23 A Periodically samples would be brought to us
24 for routine analysis during most of that time frame.

25 Q So aside from these, can we call them

1 special projects, related specifically to pentachlorophenol,
2 trichlorophenol and orthochlorophenol, that throughout that
3 time period there were some routine tests that were made on,
4 if not a regular, a recurrent basis of various samples for
5 dioxin, is that accurate?

6 A I would quibble with the word "routine."
7 The analyses were never routine, but we did this on a
8 periodic basis.

9 Q On a recurring basis?

10 A Recurring basis.

11 Q Okay. Now, would you be testing specific
12 products for dioxin content, like, 2,4,5 T, for example?

13 A I don't recall testing 2,4,5 T.

14 Q Was there any specific Monsanto product
15 that you can recall testing on this recurrent basis for
16 dioxin?

17 A Pentachlorophenol.

18 Q So aside from the special pentachlorophenol
19 project in '69, there was also a recurrent kind of testing
20 over the years of pentachlorophenol?

21 A Yes.

22 Q Now, does that time extent through to today?

23 A No. My involvement does not.

24 Q When did your involvement in this recurrent
25 situation end?

1 A About 1980.

2 Q Was that because you changed jobs?

3 A Yes.

4 Q During this time period of '69 through '80

5 could you just briefly tell me what your job titles were?

6 Did you change jobs during that period of time?

7 A I believe we covered some of that earlier

8 and got up probably through Group Leader. Did we get to

9 Group Leader? I was Group Leader of an analytical group.

10 I was made that in approximately 1975.

11 Q Still in the same field in essentially the

12 same job? It's just more responsibility and that kind of

13 thing, right?

14 A Yes. And in 1979, I believe, I was given

15 the title of Manager in the Environmental Sciences Section.

16 Q Is that still the same kind of work?

17 A Basically the same kind of work.

18 Q And then in 1980 you became what?

19 A Manager, Product Acceptability.

20 Q During your course work did you become

21 familiar with this group of substances called dioxins when

22 you were in college?

23 A No.

24 Q When did you first get an inkling when these

25 things existed?

1 A When the project was assigned to me at
2 Monsanto.

3 Q That would have been in '69?

4 A Approximately.

5 Q Is that the first time you even knew these
6 things were around?

7 A Yes.

8 Q If you had never heard of dioxins before on
9 this 1969 project, you had to undertake some degree of study
10 on the matter to get yourself oriented and familiarized with
11 the subject, is that right?

12 A Yes.

13 Q In doing that, aside from looking at the
14 literature, did you also take a look at what Monsanto had
15 then by the way of information about TCDD or the dioxins
16 and methods for analyzing for them?

17 A I don't recall seeing any Monsanto methods.

18 Q Have you been able to determine that there
19 has been some considerable amount of research that Monsanto
20 has done, say, in 1972, for example, in analyzing for TCDD
21 and those kinds of things, dioxins?

22 A As I previously mentioned, Monsanto was
23 actively involved in measuring dioxins during significant
24 time frame that we identified earlier.

25 Q All right. Going on with the continuing

1 testing in Monsanto, apparently, in these periods of time
2 where you have the special projects related to penta-, tri-,
3 and orthochlorophenols, you were not analyzing specifically
4 for 2,3,7,8 TCDD, is that right?

5 A We were analyzing for as many dioxins as
6 we could, as the analytical methodology would permit.

7 Q On those projects did you ever identify any
8 2,3,7,8 TCDD?

9 A Part of the validation of an experiment
10 required us to add TCDD to 2,3,7,8 TCDD to samples.

11 Q I'm not interested in that. What I'm
12 interested in is a non-spiked sample. Did you identify any
13 2,3,7,8 TCDD in any product that came from Monsanto that
14 was not spiked on purpose with a TCDD? Did you ever identify
15 2,3,7,8 TCDD in any of those samples?

16 A Not to my recollection.

17 Q Did anybody working for you?

18 A Not to my recollection.

19 Q Now, when you say, "not to my recollection,"
20 does that mean you just don't remember or that it never
21 occurred?

22 A I can't be certain. I think I would recall
23 it if it occurred.

24 Q The fact that you don't recall it, then,
25 leads you to believe that you never identified any 2,3,7,8

1 TCDD in those samples we have been talking about?

2 A Well, I can't be completely certain at this
3 time.

4 Q Let me ask you this, Monsanto in a number
5 of documents refers to TCDD. You know what that means in
6 those Monsanto documents?

7 A Well, there are twenty-two isomers of TCDD.

8 Q I understand that.

9 A It would be speculation on my part to try
10 to stipulate what someone else meant when they used that
11 acronym.

12 Q Okay. You have used that acronym, right?

13 A I'm sure I have.

14 Q Let me show you Exhibit 339 (Monsanto's
15 I.D. #232553), which is a letter, apparently, written by
16 you to H. J. Horner and W. G. Krummrich, dated December 26th,
17 1974, and ask you to take a look at that.

18 In the first paragraph of Document 339 reference is
19 made to TCDD. How is it used in that paragraph?

20 A In the same way that I used it in the
21 definition of the subject.

22 Q So you were talking about all of the isomers
23 or any one of the isomers of the tetra-level dioxin, is
24 that what you were talking about?

25 A No. I was talking about the 2,3,7,8.

1 Q Is that what that document's about, testing
2 for 2,3,7,8 TCDD?

3 A Apparently so.

4 Q Do you remember what the occasion of those
5 tests were?

6 A No, I don't.

7 Q But that's something you were, apparently,
8 doing in 1974, right?

9 A Yes.

10 Q Would it have been in connection with your
11 orthochlorophenol project?

12 A I don't know.

13 Q If you needed to find out what that was
14 about, where would you go to?

15 A To the Record Center.

16 Q And that's the place in the library, the
17 Research Library we have been talking about earlier, right?

18 A Yes.

19 Q What would you know to ask for? Would you
20 go by date, or how is it you would identify what you're
21 looking for?

22 A I would ask for the notebook, laboratory
23 notebook.

24 Q How would you know which laboratory notebook
25 to look for?

1 A By identification number.

2 Q Is there an identification number in that

3 Document 339?

4 A Yes.

5 Q Which number is that?

6 A The number in the first line.

7 Q Would you read that?

8 A OR 256315.

9 Q If I communicated that number to the

10 library person at the Record Center, they could locate that

11 lab notebook, is that right?

12 A I presume so.

13 Q Is that the only way to access those lab

14 notebooks is to know the number?

15 A I think they could probably be accessed by

16 time frame also, but you'd have to know the individual.

17 Q Whose book it was?

18 A (Nods head affirmatively.)

19 Q Like, if I used your name, if I said, I want

20 all of Dr. Mieure's lab books for '74, that would allow them

21 to probably identify them just with that information, isn't

22 that right?

23 A Probably.

24 Q Okay. Let me hand you what's been marked

25 Plaintiff's Exhibit 338 (Monsanto's I.D. #232542), which,

1 for the record, is a letter apparently signed by you and
2 addressed to R. E. Keller, but that may be Kelly, I'm not
3 sure, dated August 11th, 1972, on Monsanto letterhead?

4 A Okay.

5 Q In the second paragraph of Document 338
6 reference is made to extensive files. Would you read that.
7 I don't have a copy before me.

8 A "Our research in the area of analyzing for
9 TCDD and related chloro dioxins in chlorophenol products is
10 fairly extensive."

11 Q Now, do you know what records or files or
12 what you're referring to there in that paragraph?

13 A I'd be speculating at this time. Do you
14 want me to speculate?

15 Q Yeah. I want to know what you think that's
16 about.

17 A I think it would be what's in the library
18 plus the methods that we developed.

19 Q If you wanted to go find those records
20 you're referring to, how would you go identify them?

21 A That would be very difficult to do at this
22 time.

23 Q Well, were they all in one place there --
24 what's the date of that document?

25 A August the 11th, 1972.

1 Q Were they all together in 1972? I mean,
2 how did you know that? I mean, it sounds incredible you
3 come in here and say you don't know what you're talking
4 about and you wrote the letter and you're talking about a
5 big field of studying dioxin for ten years and you don't
6 know what you're talking about. Surely you can identify
7 what files and records that Monsanto has. You were inti-
8 mately connected with it, weren't you?

9 A I was at that time.

10 Q Tell me what you know about it?

11 A I really don't know what the files were
12 that I was referring to.

13 Q Did you talk to anybody in preparation for
14 the deposition today?

15 A Yes.

16 Q Anybody tell you to say you don't know about
17 specific questions?

18 A No.

19 Q Did you get any instructions at all on how
20 to answer questions?

21 A Yes.

22 Q What was that?

23 A Tell the truth.

24 Q If you wanted to go back behind that docu-
25 ment, would you go to the same library and Research Center

1 and try to reconstruct it?

2 A Yes.

3 Q Are there some areas that you would try to
4 ask for that might get you into those records, like, lab
5 bookswould be one, I assume?

6 A Lab books would be one.

7 Q And what else?

8 A Reports.

9 Q What kind of reports?

10 A Methods, methods that we developed.

11 Q Would those reports and methods have a name,
12 or how would you identify those?

13 A Well, they would be called analytical methods.

14 Q Would you say a report on an analytical
15 method for 2,3,7,8 TCDD, for example?

16 A That would be one code word I think you'd
17 want to use for the search.

18 Q Now, aside from specific reports related to
19 specific substances and the reports you have identified as
20 lab books, would there be some other area you would ask for?

21 A Not at this time.

22 Q What do you mean, not at this time?

23 A As you pointed out earlier, we had files
24 collected during that time. I doubt if those files are
25 collected in any one place now.

1 Q Did those files have a name?
2 A Not that I recall.
3 Q Do you know where they came from and were
4 they there when you got to the project or did you create
5 them?
6 A I created most of them.
7 Q Was it part of your job to pull together
8 what Monsanto had pertaining to the subject
9 matter of TCDD?
10 A Yes.
11 Q And did you write up some kind of report
12 or study based on all of those files and the conclusions
13 you reached, I guess, after your testing procedures there?
14 A I don't recall writing a report of the type
15 you just mentioned.
16 Q Well, did you write anything up? You just
17 did this work --
18 A I wrote reports on the work that I did.
19 Q And you'd get that under your name, right?
20 A Yes.
21 Q Now, did you ever test any substance from
22 the Nitro Plant for 2,3,7,8 TCDD?
23 A Not that I recall.
24 Q Did you ever analyze any samples from the
25 Nitro Plant to see if there were any technical limits of

1 2,3,7,8 TCDD?

2 A Not that I recall.

3 Q Do you know if anyone under your supervision
4 did?

5 A Samples from the Nitro Plant?

6 Q Yes.

7 A What do you mean by samples?

8 Q Well, any water, any samples of substances
9 from the Nitro Plant, whether it be product, dirt, earth,
10 water?

11 A Yes. People under my management did analyze
12 some.

13 Q And when did that happen?

14 A I believe in the early '80's. About 1980,
15 plus or minus a year.

16 Q Do you know why you were doing that?

17 A My recollection is part of a survey of the
18 environment around the plant.

19 Q You don't know why that survey was under-
20 taken?

21 A No.

22 Q Do you know what the results of those tests
23 were?

24 A My recollection is that we did not find any
25 dioxin.

1 Q Did you perform those tests on more than
2 one occasion?

3 A I don't recall.

4 Q And if we wanted to find out -- I assume
5 you made lab notebooks based on that, right?

6 A I assume so.

7 Q And the same routine would apply, you'd go to
8 the library and ask for the lab report?

9 A Yes.

10 Q Those lab books under the people that do
11 the actual hands-on testing, or would they also be referenced
12 the supervisor?

13 A They would be the notebook for the person
14 who did the hands-on work.

15 Q So even though a fellow might be under you,
16 if you didn't actually do the work, there's no way I can
17 find that particular lab book unless I had the fellow's
18 name who actually did it?

19 A You need his name.

20 Q Or the lab book number?

21 A Yes.

22 Q Is your department or whatever it is you do,
23 is that a corporate-wide service that you supplied?

24 A No.

25 Q Who do you take care of?

1 A I'm responsible for the products covering
2 the plasticizers and rubber chemicals products areas.

3 Q That's now, right?

4 A Yes.

5 Q Now, in earlier times you had obviously
6 something to do with the herbicides, I suppose?

7 A No.

8 Q Chlorophenols, then?

9 A Yes.

10 Q That was in connection with the Krummrich
11 Plant?

12 A The chlorophenols are manufactured at the
13 Krummrich Plant.

14 Q I think what I'm trying to ask you is the
15 department that you're assigned to or the organizational
16 unit that you worked in -- I realize you're not the head of
17 it -- does it provide the analytical services for all the
18 companies that make up Monsanto?

19 A No.

20 Q All right. What's the organizational unit
21 of the one that you're in, what's its name?

22 A I'm in what's called Environmental Opera-
23 tions.

24 Q Now, Environmental Operations services what
25 Monsanto organizations?

1 A Monsanto Polymer Products, and included in
2 the polymer products are the two products I just mentioned,
3 the plasticizers and rubber chemicals.

4 Q And doesn't take care of anything else?

5 A That's correct.

6 Q Now, before you got the job you have now
7 what group were you with?

8 A Environmental Sciences section.

9 Q Okay. And you were in analytical chemistry
10 with that section, and that would have been in '79?

11 A Yes.

12 Q All right. And what does that take care of?

13 A Monsanto Industrial Chemicals.

14 Q MIC, then, right?

15 A Yes.

16 Q And prior to that time what were you a part
17 of?

18 A I was with MIC going as far back as MIC
19 went. MIC was created in a reorganization of the company
20 in '73, '74. Prior to that I was with the Organic Chemicals
21 Division.

22 Q And so whatever analytical services were
23 performed would be confined to those areas that you have
24 just mentioned, whatever company you were servicing or what-
25 ever part of the company you were taking care of? In other

1 words, there is no general analytical chemical service
2 company that takes care of everybody in the company?

3 A There is a Corporate Analytical Department.

4 Q And that would have, like, company-wide
5 responsibility, then?

6 A Yes.

7 Q Now, does it actually do work or is it like
8 an administrative kind of position?

9 A No. They do work.

10 Q Now, who's in that, if you know? Who's the
11 head of it?

12 A Bill Kerner.

13 Q And that's here in St. Louis?

14 A Yes.

15 Q Does your department have some relationship
16 to that?

17 A No. Other than the overall Monsanto realm.

18 Q In other words, you don't answer to them or
19 you're not, in a sense, under them?

20 A There are no reporting relationships.

21 Q Do you know what that organization's
22 responsibility is?

23 A To provide analytical support as needed for
24 any interest within the company.

25 Q So on a given project you could expect

1 assistance from that outfit, right?

2 A If I requested it.

3 Q And I realize the names may have changed,
4 but has that general operation been in existence since you
5 have been with the company?

6 A Yes.

7 Q Now, do you know who it reports to?

8 A It reports through the Corporate Research
9 and Development staff. That's as precise as I can be.

10 Q And do you know who the head of the Corporate
11 Research and Development is?

12 A Howard Sniderman.

13 Q Now, during the special projects you talked
14 about earlier regarding pentachlorophenol, orthochlorophenol
15 and trichlorophenol, did you have any assistance from this
16 corporate level research analytical chemical division?

17 A We had some help from them.

18 Q Do you know who was in charge of that at
19 that time?

20 A Who was in charge of what?

21 Q That corporate analytical chemical operation
22 you just described.

23 A The section?

24 Q Yeah.

25 A Bill Kerner.

1 Q So they came in to provide you assistance
2 on those three special projects or associated with you in
3 that undertaking?

4 A We requested their service occasionally.

5 Q Now, did you request service occasionally
6 on the recurrent times that you tested for TCDD over the
7 period of time we talked about earlier?

8 A Not that I recall.

9 Q But you do specifically recall requesting
10 their assistance on these three special projects we talked
11 about?

12 A No, not on the three of them.

13 Q How about the pentachlorophenol?

14 A I don't recall which of the three we
15 requested their help on. I just recall requesting their
16 help occasionally.

17 Q In connection with one or more of those
18 three projects?

19 A One or more.

20 Q But you don't recall ever requesting their
21 help on the recurrent testing for 2,3,7,8?

22 A No, I don't.

23 Q Do they keep records like your operation
24 keeps records?

25 A Yes, they do.

1 Q And would they likewise be at the -- what
2 did you call it?
3 A Record Center.
4 Q -- Record Center?
5 A Yes.
6 Q And you would access them the same way that
7 you would any other lab record, is that right?
8 A Yes.
9 Q Okay. Now, have you in recent times ever
10 requested their assistance on anything in terms of testing
11 for dioxins?
12 A No.
13 Q The last time you would have had any occa-
14 sion to be involved in that would have been 1980, looking
15 for dioxins?
16 A Yes.
17 Q In your present job you have no occasion to
18 do that, is that right?
19 A That's right.
20 Q Look at 339. In the first paragraph in the
21 first sentence you make reference to seven chlorophenol
22 fractions, OR 256315 (1 to 7) submitted on or about
23 August 15th have now been analyzed for TCDD using spectroscopy
24 method 70-20. What is spectroscopy method 70-20?
25 A That's one of the methods we developed while

1 working with dioxins. I don't recall which one it is.

2 Q But that was a Monsanto methodology, perhaps,
3 in connection with the pentachlorophenol or trichlorophenol?

4 A Most likely the pentachlorophenol.

5 Q Now, in the third paragraph down you
6 observed, "We have ordered for delivery the first week of
7 November a GC/MS." What is GC/MS?

8 A That's an acronym for gas chromatographic
9 mass spectrometer system.

10 Q At least until November, 1974, Monsanto did
11 not have that system?

12 A We did not have that particular system.

13 Q Did you have one similar?

14 A Yes.

15 Q Was this one more sensitive or capable at a
16 greater capacity than the one you had?

17 A My recollection is that it had a greater
18 sensitivity than the instrument that we had.

19 Q How long has the GC/MS technology been
20 available as of September 6th, 1974? How old a science is
21 that? How long has the industry had the ability to use
22 GC/MS?

23 A GC/MS has been an evolving science since,
24 oh, around 1966. The first instruments were fairly crude.
25 They have developed in sophistication since that time.

1 Q And do you know when Monsanto first got into
2 the GC/MS business, when they first had that capability,
3 regardless?
4 A Regardless of what?
5 Q No matter how crude it would have been?
6 A We had one of the early instruments, I would
7 say, about 1967 time frame.
8 Q Now, do you know who Raymond Suskind is?
9 A Yes.
10 Q How did you come to know who he is?
11 A I have heard his name mentioned.
12 Q In connection with your work?
13 A Not with my work, no.
14 Q In connection with your place of employment?
15 A Yes.
16 Q You aware of any studies he's conducted on
17 the Nitro population?
18 A I'm aware he has conducted the studies.
19 I've not read the studies.
20 Q Did you supply any information in connection
21 with that undertaking?
22 A I did not, no.
23 Q Have you ever supplied any information rela-
24 tive to dioxins and Monsanto's test for dioxin to Dr.
25 Suskind?

1 A No.

2 Q Has anybody under your control done that?

3 A Not to my knowledge.

4 Q So as far as you know, your department has

5 never, and I mean the department you were in, say, in '79,

6 '78 -- I realize you're out of the business now -- but as

7 far as you know, you were never required to collect any

8 information for transmittal to Dr. Suskind?

9 A To the best of my knowledge, we never did

10 work for the specific purpose of transmitting it to Dr.

11 Suskind.

12 Q During that time period '78, '79 did you

13 perform any work for DMEH in terms of collecting information

14 about dioxin or dioxin testing that you might have done in

15 the past or might have had done in the past?

16 A I don't recall.

17 Q I want to hand you what's been marked 340

18 (Monsanto's I.D. #233610 through 233612, inclusive) and

19 341 (Monsanto's I.D. #232571 through 232574, inclusive).

20 If you would, please, take a minute and look at those.

21 Doctor, you have had a chance to look at Exhibits

22 340 and 341. Exhibit 340 is a memo on Monsanto letterhead,

23 is it not?

24 A Yes, it is.

25 Q And it looks as though it's prepared by

1 G. Edward Paget addressed to George Roush, Jr., M.D., and
2 you're shown on Exhibit 340 as having received a copy of
3 that document. You see that?

4 A Yes.

5 Q Is there any reason to doubt that you
6 received a copy of it?

7 A No.

8 Q Do you remember the document?

9 A Yes.

10 Q Do you know why it is that you were on that
11 distribution list to receive a copy of that document?

12 A At that time my laboratory was laboratory
13 equipped to do dioxin analysis.

14 Q And were you preparing to do dioxin analysis
15 or were you in the process of doing dioxin analysis at
16 about the time of that Document #340?

17 A As I mentioned earlier, we did dioxin
18 analysis periodically during a wide time frame.

19 Q Well, were you doing it at that time,
20 June, whatever it was there?

21 A June 5th, 1979.

22 Q Okay. And look at 341, which is captioned,
23 "A Position Paper for Consideration by M. C. Throdahl,"
24 dated June 26th, 1979, and, apparently, again, written by
25 G. Edward Paget. You were shown on the list as having

1 agreed to this paper. That's what it says. You see that,
2 "agreed by," and your name appears in the column?

3 A Yes.

4 Q What's that mean? Was it submitted for
5 your approval, or why were you on there as indicating your
6 agreement?

7 A I believe that means there was conceptual
8 agreement by the parties on the right that this was a reason-
9 able position paper.

10 Q And do you know why it would have been given
11 to you for agreement?

12 A I was an analytical consultant during that
13 time.

14 Q And so you don't disagree with anything
15 that appears in 341, do you?

16 A I would not agree with your statement.

17 Q What do you disagree with in there?

18 A You want me to read it again with that
19 thought in mind?

20 Q Whatever you want to do. Whatever is
21 necessary to get an answer.

22 A In response to your question, I believe your
23 question is do I agree with everything in here.

24 Q Yeah.

25 A I don't agree with the implied likelihood.

1 Q What page you on?

2 A Page two, first paragraph. There is a

3 statement, "of importance to Monsanto is the fact that it

4 appears that they may be formed when any aromatic substance

5 is chlorinated under industrial conditions."

6 Q You disagree with that?

7 A Yes, I do.

8 Q Did you disagree with it at the time that

9 the document was created from your reading, or is that

10 something you learned since then?

11 A I can't be certain what my frame of mind

12 was at that time.

13 Q What do you base your disagreement on?

14 A It's too broad and sweeping. Aeromatic

15 chemicals covers a very broad range of materials, some of

16 which might be susceptible to the kind of conversion that

17 he describes here, that many of which would not be susceptible

18 to that type of conversion.

19 Q Aside from that broad statement about the

20 aeromatic compounds, is there anything else in there that

21 rubs you the wrong way?

22 A I didn't notice anything else that I had a

23 serious quibble with.

24 Q And I believe you already told me the

25 reason you were on there is because you were in this

1 particular area of work at the time of this document?

2 A Yeah.

3 Q Now, I want to go back and ask you some
4 questions about when you were involved in the actual testi
5 of this stuff. Like, you went to work there in '68 and
6 beginning of '69 you started taking a look at pentachloro-
7 phenol. Were you doing some hands-on testing at that time?

8 A Yes.

9 Q What kind of precautions, if any, did you
10 take when you were handling the pentachlorophenol and what-
11 ever substances it is you were working with, what kind of
12 precautions did you take?

13 A We handled our substances in what are called
14 laboratory hoods.

15 Q Can you describe that?

16 A A laboratory hood is a forced-air device.
17 There is a blower which pulls air -- it's almost like a
18 closet with sliding glass doors on the front and a source
19 of ventilation within.

20 Q Are you inside this closet?

21 A No. You're outside. The chemical is inside
22 the closet and any air circulation is from the outside
23 laboratory into the hood so that fumes which might be
24 released, for example, inside the hood would not get into
25 the laboratory. They would stay within the hood, they would

1 go in the ventilating system.

2 Q And be ventilated to the outside or some-
3 place?

4 A Yes.

5 Q Now, how do you get in there to work? You
6 have some kind of holes to stick your hands through?

7 A No. As I mentioned, they have sliding
8 glass doors and you open the sliding glass doors.

9 Q Did you wear any type of gloves or anything
10 like that?

11 A We normally would wear a laboratory coat or
12 clothing that would be changed during the day, and we used
13 plastic gloves if we were handling a sample which would be
14 expected to be corrosive to the skin. Pentachlorophenol is
15 an industrial chemical and it's a very corrosive material.

16 Q And did you have any other, aside from the
17 gloves and this special coat and laboratory hood, any other
18 protective devices on?

19 A I don't recall any.

20 Q Would you ordinarily handle pentachlorophenol
21 under those rather stringent circumstances?

22 A Yes.

23 Q And what are the reasons for that?

24 A As I just mentioned, it's an industrial
25 poison and it's a toxic and corrosive material.

1 Q Now, when you were doing the work on this
2 trichlorophenol, did you know which samples of the trichloro-
3 phenol had been spiked with 2,3,7,8?

4 A No.

5 Q And that was part of the deal, I guess, that
6 you weren't to know which samples were spiked?

7 A That's correct.

8 Q And why would that be? To test your
9 methodology?

10 A To test the methodology that's being used.
11 It prohibits any bias by the analyst.

12 Q Did you likewise handle this trichlorophenol
13 which may or may not have contained dioxin in one of these
14 closets also?

15 A All chlorophenols, to the best of my knowl-
16 edge, are hazardous materials and we always handle them
17 with a great deal of caution.

18 Q So that means the trichlorophenol was handled
19 in one of these hoods?

20 A Uh huh (yes).

21 Q With these special gloves?

22 A Yes.

23 Q And a lab coat of some kind or ~~is~~ clothing
24 of some kind?

25 A Yes.

1 Q Now, were those precautions taken in part
2 because of the presence of dioxin?

3 A No.

4 Q So if you were just handling the dioxin,
5 you wouldn't have to take any precautions like that, is
6 that right?

7 A We would take the same precautions when we
8 were handling dioxins as we would handling any other hazard-
9 ous material.

10 Q So you don't handle dioxin outside of one
11 of these closets, do you?

12 A No. Except for the very dilute samples we
13 would put in our instruments. Obviously, it would be
14 impractical to put an instrument half the size of this
15 room into one of these hoods. The only time we took samples
16 out of the hoods was when they were in very dilute form and
17 there was very little dioxin present.

18 Q Now, when you were collecting your files on
19 this Monsanto dioxin analysis that we talked about earlier,
20 did you look at any papers or letters written by Dr. Kelly,
21 that you recall?

22 A Not that I recall.

23 Q Now, when you were working with the ortho-
24 chlorophenol, did you likewise take the same precautions,
25 the hood and clothing and all that?

1 A Yes.

2 Q And the recurrent times we talked about
3 when you tested for the dioxins, were they likewise con-
4 ducted under those laboratory techniques, the closet and
5 the gloves and all that?

6 A To the best of my recollection, yes, that
7 was my standard procedure for handling materials at that
8 time.

9 Q And do you have a standard procedure for
10 handling dioxin samples? Is it the same procedure?

11 A Same procedure.

12 Q You don't take any -- if someone handed you
13 a sample of the 2,4,5 T and said, Doc, we want you to test
14 for dioxin in this, do your standard procedures, would they
15 require you to put the 2,4,5 T in one of these hoods and
16 carry on as you did when you tested the trichlorophenol and
17 pentachlorophenol and all that?

18 A My group did not have standard procedures
19 for handling the 2,4,5 T, but I'm sure that's the way we
20 would have handled it. That's the prudent way to handle
21 hazardous material.

22 Q So until you determined what was wrong with
23 it, why, you're not going to be fooling around taking any
24 chances with it, is that right?

25 A That's correct. But we would handle it the

1 same way whether it had dioxin in it or not.

2 Q But if you determined that the 2,4,5 T didn't
3 have any dioxin in it, there wouldn't be any reason to put
4 it under those hoods, would there?

5 A I would still keep it under there.

6 Q Now, if you're working with a dioxin sample
7 and you got it under one of those hoods except for those
8 small tiny diluted things you put in your machine, why do
9 you wear gloves when you handle that? It's not corrosive,
10 is it?

11 A Excuse me. I need you to refresh my memory
12 on the beginning of that.

13 Q If you're handling a sample of dioxin, a
14 sample of TCDD, one of the isomers, and I think you testi-
15 fied you put that under a hood, laboratory hood?

16 A Uh huh (yes).

17 Q Now, as I understand it -- and you correct
18 me if I'm wrong -- that TCDD is not corrosive, is it?

19 A I don't know if it's corrosive or not. It's
20 certainly highly toxic.

21 Q And would you wear gloves when you handled
22 that?

23 A Definitely.

24 Q What purpose would the gloves serve?

25 A They would serve as a barrier between the

1 skin and the dioxin.

2 Q Is that to keep it from being absorbed into
3 the body?

4 A To keep any human exposure to a minimum,
5 whether through absorption or ingestion.

6 Q Breathing it?

7 A I don't think the gloves are going to pre-
8 vent you from breathing it.

9 Q Being under the hood.

10 A That was the purpose of being under the
11 hood, yes.

12 Q Now, was it your job to advise anybody on
13 how to handle these kinds of toxic substances, what pre-
14 cautions to take?

15 A No.

16 Q You tested some of this pentachlorophenol
17 for safety. You know if one of the reasons to do it was to
18 determine the safety of the product, is that right?

19 A I was doing it to provide data on concen-
20 trations of dioxin so that others could decide on the safety.

21 Q Okay. Do you know why there was some testing
22 for safety of the dioxin? It just causes pimples, isn't
23 that all it does?

24 A Are you talking about 2,3,7,8
25 tetrachlorodibenzo-para-dioxin?

1 Q Yeah. Or any of those tetra levels. In
2 the hexa level didn't you say you found one in the penta-
3 chlorophenol? That's toxic, isn't it?
4 A I don't know.
5 Q Is 2,3,7,8 toxic?
6 A Everything I read in the papers implies
7 that it is.
8 Q But is that your only source of information
9 about 2,3,7,8 is what you read in the paper?
10 A No. I have information from Monsanto
11 toxicologists as well.
12 Q What would they tell you?
13 A They would periodically pass along questions
14 about being careless with the material.
15 Q What did they tell you?
16 A Keep it in a hood, use gloves, use protective
17 clothing.
18 Q Did they tell you why it was necessary to
19 do that?
20 A Because it's a toxic material.
21 Q What's that mean, it's a toxic material?
22 A Can cause harmful effects to biological
23 organism.
24 Q And you're a biological organism, right?
25 A That's not on my check.

1 Q What kind of harmful effects does it cause
2 in biological organisms?

3 A You want me to speculate?

4 Q What you have been told? Apparently, these
5 toxicologists were talking to you about it. Whatever you
6 have been told and then if you want to --

7 A It causes these pimples, as you referred to
8 them, this chloracne, and there have been reports it causes
9 other effects.

10 Q Like what?

11 A Loss of hair, nervousness, pigmentation,
12 excess pigmentation of the skin. There have been reports
13 that it's a carcinogen.

14 Q That's good enough reason not to take any
15 chances with it, isn't it?

16 A As far as I'm concerned.

17 Q Did you have this knowledge when you were
18 looking at pentachlorophenol in '69?

19 A I doubt if I had that much knowledge in '69.
20 I think I was cautioned it was a toxic material, that the
21 2,3,7,8 tetrachlorodibenzo-para-dioxin isomer was a toxic
22 material and we should handle any standards of that material
23 with a great deal of caution.

24 Q When you say that in your trade, it means
25 put this stuff in a hood and get some gloves on and don't

1 breathe it, right?

2 A Yes.

3 Q Did your knowledge about the toxicity of
4 this substance increase as you continued to work with it
5 from '69 up to '79 or '80?

6 A I'm sure it did.

7 Q Did you exercise any more care or caution
8 than you did in '69?

9 A No.

10 Q And in '69 when you undertook this project,
11 were you likewise cautioned and briefed by the toxicologist
12 about what it is you're getting into?

13 A I was cautioned. I don't recall exactly
14 who cautioned me, whether it was a toxicologist -- I just
15 don't recall who gave me a briefing.

16 Q And then in connection with your review of
17 the materials there as you geared up there in '69 to look
18 at these dioxins, did you read any studies or anything that
19 contained any toxicological information about dioxin?

20 A As we discussed earlier, some of the litera-
21 ture surveys I looked at had toxicology in them as well as
22 the analytical methods, but the reason for reading the
23 articles was for the analytical.

24 Q Do you remember reading a study by Kimmig
25 and Schulz, "Chlorinated Aromatic Cyclic Esters as Substances

1 Responsible for the So-Called Chloracne," 1957?

2 A No.

3 Q Have you ever heard about that study?

4 A No.

5 Q Did you do some reading in 1969 about the
6 BASF accident in 1953 in Germany?

7 A No.

8 Q Did you know what that was about?

9 A I later read there was an incident, but I
10 don't know when it was.

11 Q You don't know when you read it or when the
12 incident was?

13 A Neither.

14 Q You recall that that study added to your
15 knowledge about the toxicity of the substances you were
16 working with?

17 A No.

18 Q Did you ever hear of a guy named Oetel?

19 A No.

20 Q Didn't read any of these studies, as far as
21 you can recall, "Results of Tests on Animals and Clinical
22 Experiences with Highly Toxic Chlorinated Naphthalene; A
23 Contribution to the Perna Problem," 1955 study?

24 A No.

25 Q You read Dr. Suskind's 1953 report, I presume?

1 A No.

2 Q '49 and '50 study reports on the Nitro
3 situation?

4 A I've not read any of Dr. Suskind's reports.

5 Q In preparation for testing with pentachloro-
6 phenol you looked at this big file that you mentioned in
7 one of these exhibits, did you look at anything involving
8 the 1949 autoclave incident in Nitro?

9 A I've never read anything on that.

10 Q You know anything about it?

11 A I know there was an incident, an incident
12 at the plant that required cleanup.

13 Q When did you learn that?

14 A Sometime during the course of this work.
15 Probably in the early '70's.

16 Q Why did that come up in the early '70's?

17 A I don't recall the context.

18 Q But it certainly was related, I guess, to
19 what you were doing, wasn't it?

20 A That would be speculation.

21 Q It involved the trichlorophenol process,
22 didn't it?

23 A I believe so.

24 Q That's probably why it was related, right?

25 A I wasn't working with the trichlorophenol,

1 so that's why I don't see the relationship.

2 Q In the middle '70's, you were, though, right?

3 A No.

4 Q When you were on the round robin?

5 A You asked me if I was working with trichloro-

6 phenol. No.

7 Q Somebody under you doing that?

8 A No.

9 Q You had no connection with the trichloro-

10 phenol process in the mid-'70's?

11 A That's correct.

12 Q Well, I misunderstood what you said, then.

13 You had no connection at all with trichlorophenol testing

14 for dioxin in the mid-'70's.

15 A I participated, we participated in the

16 round robin test, the FDA's test. I had no connection with

17 the trichlorophenol process.

18 Q You were testing some trichlorophenol in

19 that round robin test?

20 A Yes.

21 Q My question was you seem to remember that

22 you learned about the 1949 incident at Nitro along about

23 that time and since that process did in fact involve a

24 trichlorophenol process of sorts, there would be some con-

25 nection there, then, isn't that right? Same substance, same

1 kind of problems, maybe presence of dioxin, which is what
2 you were testing for.

3 A Well, it wasn't the same substance and I
4 don't see the connection you're trying to draw.

5 Q Okay. You don't know, then, I guess, when
6 Monsanto determined that it was a dioxin that was a contami-
7 nant in the unexpected chemical reaction liberating products
8 of unknown decomposition at the Nitro Plant?

9 A You're correct. I don't know.

10 Q Did you know that Monsanto did in fact
11 determine that?

12 A No.

13 Q And even though you were involved in this
14 testing of these various chlorophenols and were copied with
15 Exhibits 340 and 341 which goes into some detail about
16 chlorinated dioxins and talks about testing for them, you
17 just never really found out anything about 2,4,5 T and the
18 suspected dioxin contaminant that Nitro produced, is that
19 right?

20 A That's right.

21 Q First time you read about it was in the
22 newspapers, right?

23 A I don't know when the first time I learned
24 about it was.

25 Q Were you informed by your employer about it

1 at all, or was this something you just picked up on your
2 own?

3 A I don't recall.

4 Q During this '79, '78 period you were involved
5 with a chemical analysis group that would have included the
6 Nitro Plant, is that right, or some product that the Nitro
7 Plant manufactured, right?

8 A Would you rephrase the question for me
9 again. During the time period --

10 Q The '78, '79 period you were assigned to a
11 chemical analysis group that would have provided services
12 to the Nitro Plant?

13 A Yes.

14 Q And in fact the reason you were on the
15 mailing list of Exhibits 340 and 341 is that your particular
16 group was assigned the task of sorting out these substances
17 for dioxin, and that's the reason you were included on these
18 lists, isn't that right?

19 A I don't believe that's the reason I was
20 included on those lists.

21 Q What was the reason?

22 A We had analytical capability and we periodically
23 performed analysis for dioxins.

24 Q Was there any other group in the company
25 that was doing that routinely?

1 A In the 1978 or '79 time frame?

2 Q Yes.

3 A Monsanto Research Corporation in Dayton,
4 Ohio, developed the capability somewhere in that general
5 time frame.

6 Q Is one of those fellows on that distribution
7 list of 340 or 41? If there is a fellow on that outfit,
8 could you point him out to me?

9 A I'm not sure of the affiliations of all the
10 people on the list. But I don't see anyone I recognize as
11 being a member of that group.

12 Q And that's true for both of those exhibits?

13 A That's right.

14 Q So as far as you know, your analytical
15 group, at least, was getting all this stuff, but even so
16 you don't have any recollection, don't know anything about
17 the 2,4,5 T situation at Nitro and the suspected dioxin
18 content from their process from 1949 to '69?

19 A I was not involved in the 2,4,5 T study.

20 Q In your travels within the company and
21 looking at the literature and reading about all these dioxins
22 and all that, you've just never had occasion to find out
23 about it, right?

24 A As we mentioned earlier, I found out there
25 was an incident, but I don't know the details about it.

1 Q You know who in your department would know
2 or who ought to know about it?

3 A I'm not sure that anyone in my department
4 ought to know, nor am I sure anyone in my department at that
5 time would know any more than I did.

6 Q May not be anyone in Monsanto that knows
7 anything about it at all, right?

8 A I'm in no position to say.

9 MR. CALWELL: Okay, Doctor. Thank you
10 very much.

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James P. Mieux

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1
2 STATE OF ILLINOIS)
3 COUNTY OF MADISON) SS
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7 I, M. JOY SPRINGER, a Notary Public, duly
8 commissioned and qualified in and for the County of Madison,
9 State of Illinois, do hereby certify that pursuant to notice
10 came before me on the 14th day of July, 1983, at the
11 Radisson Hotel, Room 215, 9th Street and Convention Plaza,
12 St. Louis, Missouri, JAMES P. MIEURE, who was by me duly
13 sworn to testify to the truth and nothing but the truth of
14 his knowledge touching and concerning the matters in contro-
15 versy in this case; that the was thereupon carefully examined
16 upon oath, and his examination reduced to writing under my
17 supervision; that the deposition is a true record of the
18 testimony given by the witness; and signature of the wit-
19 ness was not waived by agreement of counsel.

20 I FURTHER CERTIFY that I am neither attorney
21 nor counsel for nor related to nor employed by any of the
22 parties to the action in which this deposition is taken;
23 and further, that I am not a relative or employee of any
24 attorney and counsel employed by the parties hereto, or
25 financially interested in the action.

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IN WITNESS WHEREOF, I have hereunto set my
hand and affixed my notarial seal on this _____ day of
_____, 1983.

Notary Public within and
for the County of Madison,
in the State of Illinois.