

1 THE COURT: Doctor Mieure, please answer the
2 question. Your objection is overruled.

3 A. Okay. Could I see the words he used, sir?

4 Q. No, Doctor Mieure. Answer the question that I
5 asked you.

6 A. I believe I have, sir.

7 Q. Doctor Mieure, Doctor Mieure isn't 100 percent
8 sure, is he, sir?

9 A. You mean Doctor Paget.

10 Q. Yes. Doctor Paget isn't 100 percent sure, is he,
11 sir?

12 A. As I said, scientists aren't 100 percent sure.

13 Q. Is that a yes to my question?

14 A. If that is what you want it to be, yes, sir.

15 Q. I want it to be what you believe it to be. I want
16 your answer, Doctor Mieure, I don't want my answer.

17 A. I said I don't know what it is and that is my
18 answer.

19 Q. And, Doctor Mieure, are you telling us now that you
20 don't know the word probable means you are not sure? You
21 think so but you are really not sure?

22 A. I used the word probable a moment ago in a response
23 to you and you didn't like the way I had used that word.

24 MR. MUSGRAVE: Well, I object to counsel inferring.

1 IN THE CIRCUIT COURT
2 TWENTIETH JUDICIAL CIRCUIT OF ILLINOIS
3 ST. CLAIR COUNTY

4 FRANCES E. KEMNER, et al.,)

5 Plaintiffs,)

6 v.)

CAUSE NO. 80-L-970

7 MONSANTO COMPANY,)

8 Defendant.)

9
10 REPORT OF PROCEEDINGS

11 Before the HONORABLE RICHARD P. GOLDENHERSH.

12 Testimony of Dr. George Roush

13 July 23, 1985

14 (Afternoon proceedings only)

15
16 APPEARANCES:

17 MR. REX CARR, Attorney at Law, and
18 MR. JEROME SEIGFREID, Attorney at Law,
On behalf of the Plaintiffs;

19 MR. KENNETH R. HEINEMAN, Attorney at Law, and
20 MR. JOSEPH NASSIF, Attorney at Law,
On behalf of the Defendant.

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23 PATRICIA A. GANDY, CSR, RPR

24 Official Court Reporter

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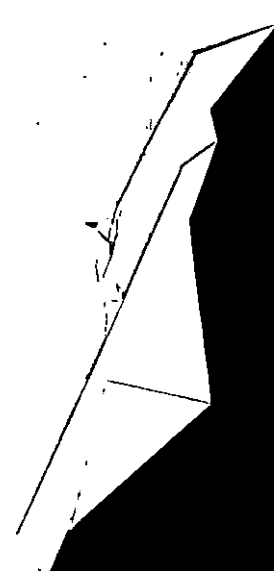
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1 it is based upon an answer to a question which was an
2 improper question. And I object further in that it is now
3 calling him to speculate and conjecture as to what a customer
4 might think is or is not medically acceptable. What might be
5 possible. The word possible itself indicates that we are
6 dealing in speculation and conjecture as to the state of mind
7 or knowledge of others and I object.

8 THE COURT: Overruled.

9 Q. Let me rephrase the question. I will use the words
10 that the witness used. The customer might believe that this
11 is of significance, might he not, sir?

12 MR. MUSGRAVE: Same objection.

13 THE COURT: Same ruling.

14 A. I don't know what the customer. I mentioned, I had
15 no contact with this customer.

16 Q. Doctor Mieux, you are, you hold an important
17 position at Monsanto and the things that you do affect others
18 beyond the confines of Monsanto and you are called upon to
19 make judgments from time to time, aren't you, sir?

20 A. Certainly.

21 Q. And, Doctor, you said that and what led up to this
22 is what I am asking you whether or not Monsanto should report
23 what you scientists have found, you said should report only
24 things of significance and you used the word significance in

1 Q. Do you not agree that Doctor Paget meant to convey
2 when he wrote this memo and used the word probably medically
3 acceptable, that he wasn't sure that it was medically
4 acceptable?

5 A. No. I believe his feelings that it is medically
6 acceptable.

7 Q. I didn't ask you what he feels, Doctor. I asked
8 you what he meant to convey when he wrote this, when he used
9 the words probably acceptable medically?

10 A. I believe he meant that this is my considered
11 medical opinion and that is typically the way scientists
12 express that.

13 Q. But he isn't 100 percent sure, is he, Doctor
14 Mieure?

15 A. As I testified, scientists seldom are 100 percent
16 sure.

17 Q. Is that a yes to my question?

18 A. I believe so, yes.

19 Q. And, Doctor, if he isn't sure and he is speaking
20 from Monsanto in this instance, is it just barely possible
21 that the customers could have a view that even one part per
22 billion isn't medically acceptable? Is that possible, Doctor
23 Mieure?

24 MR. MUSGRAVE: Your Honor, I object. One because

1 all of these examinations is to try to get you to agree that
2 you have the responsibility to let others decide in addition
3 to yourself what is or is not significant. That is all I am
4 trying to get you to agree to, Doctor Mieure. Now don't you
5 agree that others should be allowed to decide what is or is
6 not significant rather than just accepting Monsanto's
7 judgment?

8 A. No, sir.

9 Q. Sir?

10 A. No, sir.

11 Q. You don't think that. All right. I have no
12 further questions.

13 A. That is inconsistent with the current OSHA
14 regulations.

15 MR. CARR: I have no further questions of this
16 witness.

17 THE COURT: Mr. Musgrave, do you have any further
18 questions?

19 MR. MUSGRAVE: Yes, I do, Your Honor.

20 EXAMINATION

21 By

22 MR. JOHN R. MUSGRAVE.

23 Q. Doctor Mieure, Mr. Carr asked you about additional
24 Santophen studies that have been done subsequent to September

1 of 1979. Do you recall that question?

2 A. Yes, I do.

3 Q. And you said you didn't have any knowledge one way
4 or the other?

5 A. That is correct.

6 Q. Now, in January of 1979, what was your job?

7 A. In January?

8 Q. Yes.

9 A. Of '79. I was manager of environmental scientists.

10 Q. And there was a group of analytical chemists who
11 work for you, I believe, with the group leader being Bob
12 Kaley?

13 A. That is correct.

14 Q. That was one of the groups that you had managerial
15 responsibilities over?

16 A. Yes, sir.

17 Q. Now, did you subsequently leave that job, sir?

18 A. Yes, I did.

19 Q. And when did you leave that job with Monsanto?

20 A. December of 1980.

21 Q. December of 1980. Okay. And, what job did you
22 take?

23 A. A manager of production acceptability for Plasty
24 Scissors.

1 Q. All right. So, were you then no longer in a job
2 with Monsanto that put you in a position where you might be
3 copied in on or one of your analytical groups might deal with
4 chlorophenols and with topics of this lawsuit which deals
5 with dioxin content in OCP or OCP-crude?

6 A. I had essentially no further contact with any of
7 the chlorophenol-related issues and I had no analytical
8 group. I was doing completely different kind of work.

9 Q. So you didn't even have an analytical group under
10 you anymore after December of 1980?

11 A. That is correct.

12 Q. Somebody else took your job?

13 A. Yes, sir.

14 Q. You went on to a different job. All right. So,
15 you wouldn't have had an opportunity to know what tests may
16 or may not have been done on Santophen samples subsequent to
17 December of 1980?

18 A. That is correct.

19 Q. And I take it that there is a lot of information
20 that comes across your desk and has over the years in your
21 position that you had there as manager of that group up until
22 December of 1980?

23 A. There were a lot of reports that would come across
24 my desk, yes.

1 Q. And are you able to remember every one that has
2 ever come across?

3 A. I wish I could.

4 Q. Let me hand you what now has been marked as
5 Defendant Monsanto Exhibit 877 and ask if you can identify
6 that?

7 MR. CARR: The number of that for August of 1980 is
8 what number please.

9 MR. NASSIF: 877.

10 A. This is a report, Monsanto report issued by Tom
11 Taulli, George Brautigam and Ed Mallick.

12 Q. And the date of its issuance?

13 A. August 7th of 1980.

14 Q. And what is the topic of that report, sir?

15 A. Title is tetrachlorodibenzo-para-dioxin in
16 Santophen 1 and in parachlorophenol and in orthochlorophenol.

17 Q. Now, would you look at the tables in that document,
18 Doctor Mieure. Do they deal with analysis of various
19 Santophen samples?

20 A. Table 1 deals with Santophen. Yes, sir.

21 Q. All right. And let me show you Plaintiffs' Exhibit
22 1285, the one that Mr. Carr showed you. Do you note on
23 there, sir, the same sample numbers from 1285 being, if you
24 will, re-reported in this August of 1980 report?

1 MR. CARR: Counsel, I have exhibits for that for the
2 jury. I was going to do it with the next witness. I have
3 exhibits for the table with the jury and I have boards, if
4 you would like to use them with this exhibit.

5 MR. MUSGRAVE: Sure.

6 MR. CARR: I was going to do this with the next
7 witness but if you want to do it now, that is fine with me.

8 MR. MUSGRAVE: That is very kind of you, sir. You
9 have no objection to me marking these as Monsanto exhibits?

10 MR. CARR: That is fine. I have another table from
11 that as well. You can mark all of those as Monsanto
12 exhibits.

13 MR. MUSGRAVE: The jury has this exhibit. We will
14 make this Monsanto 877A.

15 (Defendant's Exhibit 877 is passed to the jury.)

16 MR. CARR: It might be safer to have them all marked
17 as Plaintiffs' exhibits because I have them. Go ahead. I
18 will have them marked as the next exhibit as well. But don't
19 remove the stickers from them because that tells me where it
20 is with what witness.

21 MR. MUSGRAVE: Sure. If you prefer you don't want
22 me to use them --

23 MR. CARR: I do prefer that you use them.

24 Q. Doctor Mieure, referring to you now what we have

1 now marked as Defendant's Exhibit 877A, that is table 1 out
2 of this August of 1980 report, is that correct?

3 A. Yes, sir.

4 Q. Now. Again, going back to Plaintiffs' 1285, the
5 last date of a sample shown on there, I believe, is September
6 12, 1979, is it not?

7 A. Yes, it is.

8 Q. And, Mr. Carr asked you whether you knew of any
9 other Santophen samples that had been analyzed after
10 September 12th or, let's put it this way, that bore a date of
11 production after September 12, 1979, is that correct?

12 A. I believe that was his question.

13 Q. Now, on this table 1 to the August of '80 report,
14 there are additional samples shown in Mr. Taulli's report,
15 are there not, after September of 1979 and those --

16 A. Yes, there are.

17 Q. And those would start, what is the last sample on
18 Plaintiffs' Exhibit 1285?

19 A. That is sample MB790.

20 Q. So this report shows that there was a sample tested
21 that would be October of '79, two of them, November of '79
22 and then into February of 1980, is that correct?

23 A. Yes, sir.

24 Q. And the results generally are finding a none

1 detected at .5 parts per billion?

2 MR. CARR: I object to that, counsel. That is not
3 what it says. It has a caret. It doesn't use ND. The ND is
4 used in table 4 as you can see where it is none detected. He
5 is using the ND where it is none detected.

6 Q. Doctor Mieure, can you answer the question?

7 THE COURT: Could you rephrase the question please.

8 Q. Yes. Doctor Mieure, the caret before, for example,
9 in 1980 sample KM02-35 which shows a caret and .05. Do you
10 see that?

11 A. I see the caret, yes.

12 Q. What does the caret indicate?

13 A. I was looking through the report to see if I could
14 tell what it indicates. I haven't found that yet so I am not
15 certain what it indicates.

16 MR. CARR: Turn to page 15 where they used --

17 THE COURT: Do you have an extra copy of that
18 exhibit? I would like to have one.

19 MR. CARR: Your Honor, I do. I made one for the
20 court as well as the witness.

21 A. I haven't found it in here yet where it says what
22 the caret means.

23 Q. Well, let me --

24 MR. CARR: You haven't found page 15, table 4?

1 A. I found that.

2 MR. MUSGRAVE: Would you care to cross examine, Mr.
3 Carr?

4 MR. CARR: I thought you didn't know what ND meant.

5 MR. MUSGRAVE: No, that wasn't my question, Mr.
6 Carr.

7 Q. Now, Doctor Mieuse, in connection with
8 identification of findings and samples, you are familiar with
9 the identification of an ND and then the carets and a
10 particular number?

11 A. Yes, I am.

12 Q. What is that in your usage as an analytical chemist
13 mean?

14 A. In my usage that would mean that there was, that
15 none was detected but that there might have been an
16 interference present which would not let one analyze as low
17 as one normally would be able to go down to what you would
18 expect the method none detection limit to be.

19 Q. Well, if the ND and the less than, for instance,
20 well here. If the ND proceeds a caret and a number, if that
21 number is the detection limit, what does that mean then?

22 A. Then most certainly that means that nothing was
23 detected with the given number, then as the lower detection
24 limit.

1 Q. All right. And if a number happens to be above a
2 detection limit and is preceded with the caret but there is
3 no ND, what does that mean to you as an analytical chemist?

4 A. The way I was using the terminology, that would
5 mean that nothing was detected but that the detection limit
6 was elevated over what the normal method detection limit
7 would be probably because of the presence of some
8 interference.

9 Q. And, I think we have been through that with prior
10 witnesses. And when you have an interference that raises
11 your detection level, does that mean you have found
12 something?

13 A. No, sir. It just means that you can't quote as low
14 a detection limit.

15 Q. Is there something that is interfering with your
16 ability to detect down to your normal limits?

17 A. Yes, sir.

18 Q. But that something is not the substance you are
19 looking for?

20 A. That is correct.

21 Q. But the substance may be there and be masked by
22 this interference that is showing up on the chromatogram?

23 A. The subject may be there and may be masked.

24 Q. The substance may be there but you can't see it on

1 the chromatogram because of the interference?

2 A. It could not be there at a level higher than that.

3 Q. Higher than what, sir?

4 A. Higher than whatever the number is that follows the
5 caret.

6 Q. I understand that. But, I think we have been
7 through this before and just so, let's see if I can't find a
8 chart. This is a drawing that we used with one of the prior
9 witnesses.

10 A. In fact, sir, I believe I made that drawing.

11 Q. And when you have a chromatogram --

12 THE COURT: What number is that?

13 MR. MUSGRAVE: It has not been marked.

14 Q. You have a chromatogram, you are looking for the
15 fine peaks, are you not, Doctor Mieux?

16 A. Yes, sir. Under the analytical conditions that we
17 prescribe in advance for that analysis.

18 Q. They come out at certain times and you match up
19 certain ions and all of that kind of stuff, is that right?

20 A. That is correct.

21 Q. If you don't get a peak and you get as we have
22 roughly drawn down here on this sheet of paper, you get kind
23 of a mound that goes up and then gradually goes back down,
24 that is called an interference?

1 A. That is correct.

2 Q. And if that interference comes at a time on the
3 chromatogram where you expect to see a peak of the particular
4 material you are looking for, it may well be that the peak is
5 masked behind the interference?

6 A. Yes.

7 Q. That it may well be that there is no peak there at
8 all?

9 A. That is correct.

10 Q. So you can't say that it is there or not there?

11 A. That is correct.

12 Q. But since there is interference, analytical
13 chemists for the sake of, I should say, the reporting
14 technique to be scientifically accurate is to say, if it is
15 there, it is less than a particular level?

16 A. That is correct, and that is how we use that caret.

17 Q. And that level in this instance where we have this
18 interference, if there was something there, the peak couldn't
19 be any bigger than the interference masking it so, therefore,
20 you would measure --

21 A. The amount of the interference and they report it
22 as less than.

23 Q. If there is something behind that interference
24 there wouldn't be anything more than that?

1 A. Yes.

2 Q. And you can't say whether it is there or isn't?

3 A. That is correct.

4 Q. And looking at table 1, Defendant's Exhibit 877A
5 from the August report, the less than .05 for instance for
6 the 1980 sample, KM02-35, would that indicate that there was
7 an interference detected at one-half or .5 parts per billion?

8 A. That is what I believe these data mean, yes.

9 Q. Because there is no ND there?

10 A. That is correct.

11 MR. MUSGRAVE: Your Honor, it is noon, do you want
12 to break at this time?

13 THE COURT: If this is a convenient point, sure.
14 Ladies and gentlemen, we will break at this point in time for
15 lunch. We will resume again at 1:30. The admonishments that
16 I have given you earlier on breaks will apply during this one
17 also. Court is in recess for lunch.

18 COURT RECESSED:

19 (The following proceedings were had in the hearing
20 and presence of the jury).

21 THE COURT: Before we start, ladies and gentlemen,
22 in keeping our policy of trying to let you know in advance of
23 any days when we are not going to be able to hold court and
24 one of those days will be Thursday, April 25. So if you

1 would note that down.

2 JAMES MIEURE

3 having resumed the witness stand, being previously sworn,
4 testified further as follows:

5 EXAMINATION

6 By

7 MR. JOHN R. MUSGRAVE.

8 Q. Doctor Mieure, when we recessed for lunch, I think
9 we had just been talking about reporting when there is
10 interference present as a caret with a number or using the ND
11 to demonstrate a level of detection. You recall that
12 testimony?

13 A. Yes, sir.

14 Q. Now, with regard to Defendant's Exhibit 877, I will
15 hand you that again. And, of course, as shown here on 877A
16 which is table 1 from that exhibit, there are several of the
17 carets without an ND before it before the .5, is that
18 correct?

19 A. Yes, sir.

20 Q. Now, is Mr. Taulli a doctor or do you know?

21 A. Mr. Taulli.

22 Q. Now, did he work for you in 1979 or 1980 when you
23 were involved in managing many responsibilities over
24 analytical groups?

1 A. No, sir.

2 Q. You are not familiar, then, with the method of
3 reporting that he may or may not have used?

4 A. I am not familiar, no.

5 Q. Now, with regard to his report, I would ask that
6 you turn to page 1 of it. I don't believe Mr. Carr gave the
7 jury a copy of page 1 but there at page 1 under roman numeral
8 2, is there not a summary of what is essentially contained in
9 the report?

10 A. Yes. That is a section called summary.

11 Q. Is there any reference in the summary to anything
12 dealing with detection limits or sensitivity of this
13 particular test for Santophen?

14 A. It says in the first paragraph that this
15 methodology represents a new state of the art sensitivity
16 capability of 0.5 ppb of 2,3,7,8 TCDD et al.

17 Q. All right. And it has been developed and validated
18 for Santophen 1, PCP and OCP. That is the rest of it?

19 A. Yes, sir.

20 Q. That indicates that the sensitivity level of this
21 new analytical method is .5 ppb?

22 A. Yes, sir.

23 Q. Do you find any place else in the exhibit, any
24 reference to detection level or sensitivity level for the

1 procedure?

2 A. No, sir.

3 Q. Would you conclude, then, Doctor --

4 MR. CARR: I object. You know since this is an area
5 that I didn't touch on with this witness, I object unless he
6 asks questions in a non leading form. I haven't objected
7 heretofore but I do object now and ask the witness be allowed
8 to testify.

9 MR. MUSGRAVE: I will be happy to rephrase the
10 question for you, Mr. Carr.

11 THE COURT: Good.

12 Q. Doctor Mieure, given the information that is
13 contained in the report of August of 1980, would you have any
14 conclusion as then to what the caret in front of the .5
15 represents when it is reported in that fashion?

16 MR. CARR: I object to that, Your Honor. He is now
17 cross examining the witness. The witness stated immediately
18 before lunch that it meant, I am sorry, it meant that it was
19 an interference at that level and that he couldn't tell
20 whether it was there or not. Now that is exactly what he
21 said just before lunch and he is now attempting to cross
22 examine this witness to say something else.

23 MR. MUSGRAVE: Your Honor, if I may respond.

24 THE COURT: Go ahead.

1 MR. MUSGRAVE: Before lunch, Doctor Mieux merely
2 testified as to general reporting techniques that he was
3 familiar with. What he has indicated here is that Doctor
4 Taulli was not part of his group and I referred him simply to
5 the language in the report. This is not cross examination.
6 It is no more than clarification of a report that Mr. Carr
7 willingly wanted me to go into because he was going to use it
8 with the next witness and it deals with the same topic. The
9 same topic as Plaintiffs' Exhibit 1285 which deals with many
10 of these same samples by Mr. Taulli.

11 THE COURT: Mr. Carr.

12 MR. CARR: I am not objecting to him going into it.
13 What I am objecting to is his attempts to elicit an answer
14 from the witness that is contradictory to the answer given,
15 the last answer given by the witness when we recessed at
16 lunch.

17 MR. MUSGRAVE: It is not contradictory, number
18 one. And even if it were, that would be for the jury to
19 determine, not you, Mr. Carr.

20 THE COURT: I am sustaining the objection. I think
21 the objection is proper.

22 Q. Doctor Mieux, do you have Plaintiffs' Exhibit 1285
23 there?

24 A. Yes, sir.

1 Q. And I believe we have already established that
2 Plaintiffs' 1285 contains many of the same information that
3 was ultimately reported in the August 7, 1980, report we have
4 just been referring to. That is Defendant's 877, is that
5 correct?

6 A. Yes, sir.

7 Q. Now, Mr. Carr blew up one of these pages. Did you
8 give the jury the entire set of this, Mr. Carr?

9 MR. CARR: Yes.

10 Q. Okay. Refer you then, Doctor Mieure, to the first
11 page of Plaintiffs' 1285. At the bottom of that first page
12 is a paragraph entitled summation, is that not correct?

13 A. Yes, sir.

14 Q. And what does item 2 under summation indicate?

15 A. That 65 percent of the products contained no
16 detectable or less than 0.5 ppb.

17 Q. Is the report then equating none detectable with a
18 caret 0.5 ppb?

19 A. That is the only way that one could get these
20 results would be if the caret meant that because there
21 certainly aren't enough other symbols there to account for
22 the 65 percent.

23 Q. All right. So, in the Plaintiffs' Exhibit 1285, it
24 is indicating that the detection limit is .5 ppb?

1 A. Yes, sir.

2 Q. Now, Doctor Mieux, I believe you told us before we
3 broke for lunch that in approximately December of '80 you
4 went into a different job, is that correct?

5 A. Yes, sir.

6 Q. You would, though, in fact you were a copied in as
7 a recipient of this August of 1980 report, were you not?

8 A. Yes, sir.

9 Q. All right. So after December of '80, would you
10 have been copied in on tests that may have been done,
11 analysis that may have been done on subsequent Santophen
12 samples?

13 A. After December of '80?

14 Q. That is correct, sir.

15 A. Most likely not. There might have been a few
16 instances but I would not have been on the routine
17 distribution, certainly, for such documents.

18 Q. And you don't have any present recollection of
19 seeing any, I think you told us earlier, is that right?

20 A. That is correct.

21 Q. But you wouldn't have been on routine distribution
22 if there had been any, is that correct?

23 A. Certainly. I would not have been on the routine
24 distribution list, that is correct.

1 Q. Now, let me hand you what I have had the Court
2 Reporter mark at Defendant's Exhibit 878 and ask if you can
3 identify that document?

4 A. This is a memo written by Mr. Hicks who works for
5 me at this time written to Doctor Roman.

6 Q. You are noted as a recipient of a copy, are you
7 not, Doctor Mieure?

8 A. Yes, I am.

9 Q. And the date, please?

10 A. March 17, 1978.

11 Q. And what does it deal with?

12 MR. CARR: Could I have a copy for me, counsel?

13 MR. MUSGRAVE: Mr. Carr I don't have a copy. I
14 didn't know that we were getting into this, I am sorry.

15 MR. CARR: March 17, 1978?

16 A. Yes.

17 MR. CARR: That is all right. Go ahead.

18 Q. And the topic?

19 A. Chloro-dioxins and chloro-furans in Santophen 1.

20 Q. And does Mr. Hicks report results of analysis that
21 he ran in 1978 on the Santophen?

22 A. He reports analyses on an attached table.

23 Q. Would you look at those analysis, please, and tell
24 me for the dioxin analysis, what the level of detection was?

1 A. For the tetrachloro-dioxins, the level of detection
2 was none detected less than 0.1.

3 Q. You are looking at the furans.

4 A. I am sorry. 0.1. 100 parts per billion was the
5 detection limit.

6 Q. All right. And at that detection limit, were any
7 tetra TCDDs found?

8 A. No, sir.

9 Q. All right. And how many samples of Santophen were
10 analyzed there?

11 A. 10.

12 Q. You might look and be sure. 10 Santophen samples?

13 A. Yes. The data for 10, 1977 production lots, yes.

14 Q. And the terminology ND is used in front of the
15 number there under the tetra column?

16 A. Yes, sir.

17 Q. Now, Doctor Mieure, with regard to the monos, dis
18 and tris, those level of dioxin, were there, tell the jury,
19 if you would, what was detected with regard to those in the
20 10 samples?

21 A. Well, there is an asterisk in front of each one of
22 those columns and the asterisk indicates that there was an
23 impurity present and/or a vest of impurities, a number of
24 materials that interfered and so that all that could be

1 reported was a less than type of a figure. The same type of
2 thing we were talking about earlier.

3 Q. Where you have something that is not what you are
4 looking for but masked what might be there?

5 A. Yes.

6 Q. And, of course, Mr. Hicks worked for you, did he
7 not?

8 A. Yes, sir.

9 Q. And that type of reporting was what you required of
10 your people?

11 A. Yes.

12 Q. Now, that is only in the monos, dis and tris, not
13 the tetras, is that correct?

14 A. That is correct.

15 MR. MUSGRAVE: Plaintiffs' Exhibit 1131 and 1135.
16 Do you happen to have those, Mr. Carr?

17 MR. CARR: Not to my knowledge. . . The clerk has
18 them, Mr. Musgrave.

19 Q. Handing you what has been marked Plaintiffs'
20 Exhibit 1135. You recall that document, do you not, Doctor
21 Mieure? It is the June report reporting on the analyses that
22 were done after the spill in 1979 on the various processes?

23 A. Yes, sir, and a number of attached data tables.

24 Q. The tests that were run with caustic and without

1 caustic. Do you recall being at least aware of that, do you
2 not, sir?

3 A. Yes, sir.

4 Q. All right. Now, if you would, there were some
5 Santophen studies that were done at that time also, were
6 there not?

7 A. Yes, there were.

8 Q. Let me refer you to table 3 where you see MB 740
9 and MB 741, MB 730. Those were samples of Santophen flakes
10 and Santophen cuts taken when this process was run without
11 caustic. I think if you look at the other tables you will
12 find that to be the case. Would you do that, sir?

13 A. Okay. MB 730.

14 Q. Yes. And 739 and 740?

15 A. 739 and 740 are all Santophen.

16 Q. And in the tetra column, there was reporting of
17 none detected. For instance for MB 740 in the tetra column,
18 740, the first time was none detected at 10 ppb, 10 parts per
19 billion?

20 A. Yes, sir. MB 740, yes, sir.

21 Q. And there was a third sample of that run again was
22 none detected at 10 parts per billion?

23 A. Yes, sir.

24 Q. And the one that reported 18, I believe table 4. I

1 thought table 4 picked that up but it didn't. In any event,
2 Doctor Mieure, with regard again to the monos, the dis and
3 the tris, is there again a showing of interferences and
4 inability to reach down to the level of detection that now
5 for tetras is down for 10 parts per million but is there
6 still an inability to reach down to that same level of
7 detection for the monos, dis and tris because of
8 interferences?

9 A. Yes, there is, sir.

10 Q. And handing you what has been previously identified
11 as Plaintiffs' Exhibit 1131. This is another report from Mr.
12 Hicks which you were copied in on dated July of '79. And it
13 refers to additional Santophen samples, does it not, that
14 were tested?

15 A. Yes, sir.

16 Q. And there were approximately, what, 6 of those?

17 A. 6, yes, sir.

18 Q. And the results there that were reported in July of
19 '79, sir, if you would look at the last table. Under the
20 tetra column, none detected at 10 parts per billion, is that
21 correct, sir?

22 A. Yes, sir.

23 Q. In fact, there was, I don't know whether this was a
24 handout or a blowup. Plaintiffs' Exhibit 1131A is that

1 table?

2 MR. CARR: We went through that yesterday. It is a
3 handout passed to the jury.

4 Q. But again, Doctor Mieure, under the monos, the di
5 and the tri columns, I am seeing just the carets and not the
6 none detected, is that correct?

7 A. Yes. That is the best we could do on those samples
8 was just to report a less than figure because of
9 interference.

10 Q. Yes, because of interferences we have been talking
11 about here?

12 A. Uh-huh.

13 Q. With regard to Santophen analysis, there was some
14 difficulty with interferences in the monos, dis and tris?

15 A. Yes, sir.

16 Q. Although detection level of 10 parts per billion
17 was at least reached in July of '79 with regard to the
18 tetras, the TCDD?

19 A. Yes, sir.

20 Q. Now, Doctor Mieure, are you aware of anything that
21 was done in connection with that problem to attempt to
22 correct that problem that was being had with the
23 interferences in the monos, dis and tris?

24 A. Well, as was the case throughout the entire time,

1 that I was working on problems of this type, we were
2 continually trying to improve the methodology to be able to
3 analyze more and more interference free.

4 Q. And is Defendant's 877, the August of 1980 report
5 of Mr. Taulli that we have been talking about here today,
6 when he talked about the new methodology, was that
7 methodology that was developed to attempt to correct this
8 problem with the monos, dis and tris?

9 A. Yes, it was.

10 Q. And would it appear that he was successful in that
11 regard as indicated by the August of 1980 report, is that
12 correct?

13 A. Yes. They developed an HPLC method which allowed
14 them to get to lower detection limits.

15 Q. Doctor Mieure, handing you what now has been marked
16 as Defendant's Exhibit 879, let me ask you if you can
17 identify that?

18 A. Well, it is a copy of the July of 1979 monthly
19 summary from the detergents and phosphates division, R and D
20 group.

21 Q. You would have been copied in at that time. You
22 were still in the position of manager with the analytical
23 group responsibilities?

24 A. Yes, and I am shown as a recipient.

1 Q. Is there a reference in there, as a matter of fact,
2 to the status of the development of this new process or this
3 new analytical method?

4 A. Yes. In the highlights there is a reference.

5 Q. Let me refer you to page 5 where they are more
6 specific about what was going on. This is a July of '79
7 report, is that correct?

8 A. July of '79 monthly summary, yes, sir.

9 Q. Which would be some 2 or 3 months prior to the
10 October analysis of Taulli, Plaintiffs' Exhibit 1285, which
11 was ultimately reported in more detail with more findings in
12 the August of 1980 report, isn't that correct?

13 A. That would be 2 or 3 months prior to that.

14 Q. What does the July R and D report say, then, in
15 this connection?

16 A. Analysis for a mono, di and
17 trichlorodibenzo-dioxins is hindered by the presence of
18 serious interferences in Santophen 1. These unidentified
19 impurities would hide up to 100 or up to a thousand in one
20 case of the three lower chlorinated compounds. We can only
21 set maximum limits. The new analytical method now developed
22 should remove this source of uncertainty.

23 Q. Again it is talking about the monos, dis and tris
24 and not the tetras, is that correct?

1 A. Yes, sir. Monos, dis and tris.

2 Q. As a matter of fact, Doctor Mieuse, the levels that
3 we were able to detect, Monsanto was able to detect with
4 Doctor Taulli's method that was developed, I guess, in the
5 latter part of '79 and early '80 when he was working on it,
6 they were detecting levels that we did not have the
7 capability back in '78 at least by Orville Hicks' work, isn't
8 that correct?

9 A. Yes.

10 Q. And during the period of time that you were
11 involved as group manager or as manager with the
12 responsibilities over analytical group, were there efforts
13 made to reach lower levels of detection with regard to the
14 other chlorophenols?

15 A. Well, as I commented earlier, during this time
16 frame we were constantly striving to develop new methods that
17 were either more sensitive or more interference free.

18 Q. Okay. And these levels that were found in
19 Santophen as Mr. Carr indicated as shown by this report in
20 '79 and at least the one here in '80, almost the majority of
21 them, in fact, more than the majority of them, most of them
22 are reporting at the none detected at the limits of
23 detection?

24 A. Yes, sir. Mr. Taulli's report said 65 percent of

1 them at least.

2 Q. And this, of course, has come down from the reports
3 that we had immediately after the spill when we looked at
4 Santophen and were finding some higher levels, isn't that
5 correct, and the caustic was eliminated? Do you recall all
6 of that?

7 A. The caustic was eliminated during this time period,
8 yes.

9 Q. Now, Mr. Carr asked you, Mr. Carr asked you about
10 Doctor Paget's comments as related to Mr. Wilson, at least as
11 reflected here on Plaintiffs' Exhibit 1239A. You recall
12 that?

13 A. Yes, I do.

14 Q. Now, in fact here, is it not Doctor Wilson stating
15 what he felt or what, whatever, he is stating what Doctor
16 Paget reported?

17 MR. CARR: I object to the leading form of the
18 question.

19 THE COURT: Objection sustained. Would you
20 rephrase that. Mr. Musgrave.

21 Q. Is Plaintiffs' Exhibit 1239A, is that in fact a
22 document apparently authored by Doctor Paget?

23 A. Doctor Wilson apparently is the author of the
24 document.

1 Q. It is not Doctor Paget?

2 A. That is correct. It is Doctor Wilson.

3 Q. And then would it appear that Doctor Wilson is
4 reporting on what Doctor Paget said?

5 A. Apparently so, yes.

6 Q. And Mr. Carr asked you some questions about what
7 Doctor Paget had in mind when he said this. Do you recall
8 that?

9 A. Yes, he did ask questions.

10 Q. Now, who would know better what Doctor Paget had in
11 mind when he said that? You or Mr. Wilson, or Doctor Wilson,
12 I should say, or Doctor Paget?

13 A. Well, most certainly Doctor Paget.

14 Q. Now, Doctor Mieure, you recall at the end of the
15 day yesterday, Mr. Carr was asking you some questions about
16 8(e) meetings and about, I believe it is, let me get the
17 exhibit. He was asking you some questions about a report of
18 October 10, 1980. Plaintiffs' Exhibit 1279. Do you have
19 that, sir?

20 A. Apparently not.

21 THE COURT: Here. Why don't you use my copy.

22 Q. You have 1279 in front of you now?

23 A. Yes, sir.

24 Q. And that report with regard to 2,4 di sample

1 reported 9.5 parts per billion something coeluting with the
2 2,3,7,8 standard?

3 A. Yes, sir.

4 Q. And incidentally while we are on that, Doctor
5 Mieure, the report of Mr. Taulli that we had gone over
6 previously, is that an isomer specific report for 2,3,7,8
7 TCDD?

8 A. Was Doctor Taulli's report isomer specific?

9 Q. Yes, sir.

10 A. No, sir.

11 Q. And it is so stated in the body of the report, is
12 it not?

13 A. I would have to check it to see, sir.

14 Q. I believe it is page 2 which the jury does have.

15 A. Yes, sir. You were correct. It is not isomer
16 specific for the 2,3,7,8.

17 Q. He indicates that the column 2,3,7,8 et al means
18 those isomers that coelute with 2,3,7,8, isn't that correct?

19 A. We have analytical characteristics similar to
20 2,3,7,8.

21 Q. Okay. Now, getting back to again the October
22 report, here again there was a report of 9.5 parts per
23 billion of tetra that coeluted with 2,3,7,8 or the 2,3,7,8
24 standard, is that correct?

1 A. That is correct.

2 Q. Now, Mr. Carr then alluded to your criticism with
3 much regard to that report, Plaintiffs' Exhibit 1280, the
4 December 30, 1980 document and in part referenced you to the
5 paragraph where you talk about the concern?

6 A. Can you turn that a bit more?

7 Q. I sure can. Can you see it now?

8 A. Yes.

9 Q. You will find it, I think, there?

10 A. Well, I don't believe I have that exhibit.

11 THE COURT: Which number is this?

12 Q. It is September 30th, not October 10th. You are
13 referring to the wrong exhibit. The December 30th.

14 MR. MUSGRAVE: No, he wrote his report of December
15 30th referring to October 10th. It is Plaintiffs' Exhibit
16 1280. You have it there, Mr. Carr.

17 MR. CARR: Not I. It should be up there. The clerk
18 has put them in chronological order last night. And you
19 haven't handed it to the witness yet.

20 THE COURT: Here.

21 Q. Thank you, Judge. Let me hand you your memorandum
22 of December 30, 1980 discussing the October, 1980, report.
23 And, particularly referencing what he has taken out of the
24 report and placed here on Exhibit 1281A with the reference to

1 the EPA and the TSCA Section 8(e). Do you recall that?

2 A. Yes, sir.

3 Q. Now, Mr. Carr asked you, as I recall, whether you,
4 in fact, had reported anything in connection with the
5 requirements of Section 8(e) to anyone, is that correct?

6 A. Whether or not?

7 Q. You have reported to the EPA, as I recall?

8 A. Yes.

9 Q. And I think you told us that you had not personally
10 yourself reported anything to the EPA, is that correct?

11 A. That is correct.

12 Q. Now, Mr. Carr showed you the statute in connection
13 with these 8(e) requirements but he didn't show you anything
14 dealing with Monsanto's internal policies or standards in
15 connection with this or the EPA's standards or policies, did
16 he?

17 A. No, he did not.

18 Q. And you mentioned something about regulations when
19 you were trying to explain this to Mr. Carr but were not able
20 to do so. Do you recall that?

21 A. Yes, I do.

22 Q. Handing you what now has been marked as Defendant's
23 Exhibit 880, did you at sometime become made aware of
24 Defendant's Exhibit 880 or the substance in it, Doctor

1 Mieuse?

2 A. Certainly the substance of it, yes.

3 Q. And what is Defendant's 880?

4 A. Well, this exhibit is a clarification, really, of
5 the Toxic Substances Control Act, Section 8(e), Substantial
6 Risk Notification Requirement. It is a statement of
7 interpretation and enforcement policy issued by the EPA.

8 Q. And this was published in the Federal Register. Is
9 that not what it indicates there?

10 A. Yes, sir.

11 Q. And that is an official government publication
12 where policy and regulations that deal with statutes are
13 published or do you know that?

14 A. Yes, it is that, yes.

15 Q. And it was published March 16, 1978, is that
16 correct?

17 A. Yes, sir.

18 Q. And that would have been some, more than 2 years
19 before your December, 1980, memorandum, isn't that correct,
20 referring to 8(e)?

21 A. Yes. About 2 and a half years.

22 Q. And, I would like to draw your attention to the
23 first page of this statement from the EPA published in the
24 Federal Register. The middle paragraph of the last paragraph

1 of that middle column, I should say. Would you read that to
2 the jury please?

3 A. It says the agency now feels that these objectives
4 would best be served by allowing commercial establishments --
5 under certain conditions designed to ensure full disclosure
6 -- to assume exclusive responsibility for reporting to EPA
7 any substantial risk information obtained by individual
8 officers or employees. Accordingly, this policy statement
9 stipulates that individual officers and employees will have
10 fully discharged their Section 8(e) obligations once they
11 have notified the designated responsible company supervisor
12 or official of pertinent information, provided, that the
13 employing company or firm, I am sorry, provided, that the
14 employing company or firm has established internally,
15 publicizes and affirmatively implements procedures governing
16 such notifications. These procedures at a minimum must, (1),
17 specify the information that must be reported; (2), indicate
18 how the notifications are to be prepared and submitted; (3),
19 note the Federal penalties for failing to report; and (4),
20 provide a mechanism for promptly notifying officers and
21 employees who have submitted reports of the company's
22 disposition of those reports including, whether or not they
23 were submitted to EPA and if not, informing employees of
24 their right to report to EPA as protected by TSCA, section

1 23. EPA believes these 4 criteria will ensure prompt and
2 appropriate processing of pertinent information.

3 Q. This policy statement was developed, was it not, as
4 a result of conferences and meetings that the EPA had on how
5 best to implement the statutory requirement of Section 8(e)
6 in connection with companies such as Monsanto where there
7 would be a large number of people that might come into
8 contact with such information and how far it would be
9 appropriately handled in large companies, isn't that correct?

10 A. That is what the preamble says, yes.

11 Q. In fact, immediately before the long paragraph I
12 had you read, does it is not say as following: The September
13 9 proposal would have applied Section 8(e) requirements to
14 commercial establishments as well as to employees capable of
15 appreciating pertinent information, but stipulated
16 enforcement priorities intended to encourage corporate
17 processing and centralized reporting of such information, and
18 then it cites 42 FR 45363. The intent was to ensure that
19 pertinent information obtained by employees is promptly and
20 appropriately considered, while minimizing duplicative or
21 ill-considered submissions, is that right, sir?

22 A. Yes, sir.

23 Q. So the EPA announced in the Federal Register in
24 March of '78 that compliance would be certainly as far as

1 they were concerned. The company would be in complete
2 compliance if they set up a method of reports as set out in
3 those criteria that you just read?

4 A. I believe they say they prefer it that way, in
5 fact.,

6 Q. As a matter of fact, you were made aware of this
7 prior to December of 1980, were you not, sir?

8 A. Yes, sir.

9 Q. And did Monsanto institute such a procedure as
10 spelled out in the Federal Register by the Environmental
11 Protection Agency in connection with Section 8(e)?

12 A. Yes, we had.

13 Q. Doctor Mieure, let me hand you what I have now
14 marked as Defendant's Monsanto Exhibit 881 and would ask you
15 to look at that and tell me if you can identify it?

16 A. Yes, sir. This is a letter of transmittal of the
17 notification procedures for TSCA 8(e). For use internally
18 within Monsanto.

19 Q. And this letter of transmittal with the procedure
20 is dated December of 1978. In fact, December 29, 1978?

21 A. December 29, 1978.

22 Q. And the second page of the exhibit is a letter
23 dated December 29, 1978, is it not?

24 A. Yes, sir.

1 Q. And the remaining pages of the exhibit then deal
2 with Monsanto's policies and procedures in connection with
3 complying with Section 8(e) of TSCA in accordance with the
4 published policies and procedures of the Environmental
5 Protection Agency and the Federal Register that we have just
6 looked at, Defendant's Exhibit 880, isn't that correct, sir?

7 A. Yes, sir.

8 Q. And if you could, Doctor Mieure, just tell us and
9 tell the jury briefly what that procedure involved in
10 December of 1980?

11 A. Well, consistent with the desire of the EPA not to
12 be receiving a lot of spurious information and notifications
13 of this type, EPA wanted a uniform and systematic procedure
14 set up to monitor this and as Monsanto implemented the
15 policy, it was a matter of each individual, any individual
16 who came into possession of information, if that individual
17 felt that that information might represent a significant risk
18 of harm, then that individual had the obligation to report
19 that finding to his supervisor.

20 Q. But not directly to the EPA?

21 A. But not directly to the EPA.

22 Q. And that is what the EPA policy says, isn't it?

23 A. Yes.

24 Q. Go ahead, sir.

1 A. And it would go up through different levels of
2 supervision until it came to what we call the operating
3 company director of environmental operation. There were
4 roughly half a dozen or so of these individuals who would
5 serve as the focal point for receiving this type of
6 information and when the information got to that individual,
7 then, that information would convene a corporate committee
8 and they would then determine whether or not that bit of
9 information did indeed constitute a significant risk as it
10 was interpreted by the agency in this Federal Register
11 document.

12 Q. And if they then did at this meeting, it would then
13 be reported to the EPA by --

14 A. By the corporate committee, yes, sir.

15 Q. And that is what has been referred to in the prior
16 testimony as Monsanto's 8(e) meetings when it got up to the
17 level where you had this committee actually meeting and
18 looking at it and making the determination as to whether a
19 report had to be made, is that right?

20 A. That is correct.

21 Q. Now, Doctor Mieure, then, getting back to the
22 situation in December of 1980, you were about to leave your
23 position there, were you not, that managerial position you
24 had at the time?

1 A. Yes, I was. In December of 1980, yes.

2 Q. When you wrote this memo, then, did you copy, was
3 there somebody that you would be required to report something
4 to if you felt there was something that should be considered
5 by this committee to be reviewed to see if some notification
6 were required under Section 8(e)?

7 A. If I had been required to report at that time, it
8 would have been to Doctor Clayton Callis.

9 Q. And your December, 1980, memorandum which contains
10 the paragraph 1281A referring to the consideration of
11 reporting this under Section 8(e). Was Doctor Callis copied
12 in on that?

13 A. Yes, he was.

14 Q. In fact, he is the first named recipient of a copy,
15 is he not, on Plaintiffs' Exhibit 1280?

16 A. Yes, he is.

17 Q. Now, do you recall whether you spoke with Doctor
18 Callis or spoke with anyone directly about this problem? Did
19 you have a recollection one way or the other?

20 A. About the overall problem that was described in my
21 memo?

22 Q. Yeah. Do you recall specifically discussing this
23 problem with anyone?

24 A. I am not sure whether you are referring to the

1 problems that I allude to in my memo.

2 Q. The specific problem that gave rise. I believe you
3 told Mr. Carr that in reviewing your December memo, that most
4 likely what gave rise to this statement with reference to
5 such Section 8(e) and the position of whether this should be
6 reported or not was the level of tetra found in the 2,4
7 dichlorophenol sample, the 9.5 parts per billion,?

8 A. I believe I said that that might have been one.
9 That would probably have been one of the factors, yes, sir.

10 Q. My question is, do you recall specifically
11 discussing at any time that matter with Doctor Callis or any
12 of these other people that were copied in?

13 A. That specific matter, no. I don't recall
14 discussing that.

15 Q. Mr. Carr asked you whether or not you reported it
16 to EPA. You said you didn't, isn't that right?

17 A. That is correct.

18 Q. Do you know whether anyone had an 8(e) meeting in
19 connection with your comments here about where you say we
20 considered reporting your data to EPA as a potential
21 substantial risk?

22 A. No, sir.

23 Q. You would have been out of the department after
24 December of '80, isn't that correct?

1 A. Yes, sir.

2 Q. Let me show you, sir, Plaintiffs' Exhibit 1241A
3 introduced into evidence by Mr. Carr sometime ago. Let me
4 see if I can find you a copy of it.

5 MR. CARR: Counsel, I didn't use it with this
6 witness. It was used with Doctor Wilson. If you are looking
7 for the original of 1241, it should be in the clerks file.

8 MR. MUSGRAVE: She just looked.

9 MR. CARR: I have one that I was going to use when
10 we examined Mr. Park this afternoon. I was going to number
11 it and let the witness look at it.

12 MR. MUSGRAVE: That would be nice. That is okay.
13 We will use this one.

14 Q. Doctor Mieuze, let me hand you what has been marked
15 or what has been previously marked and introduced into
16 evidence as Plaintiffs' Exhibit 1241A. Before I ask you
17 about that, you recall Mr. Carr yesterday accusing you or
18 Monsanto of failing to --

19 MR. CARR: Accusing or asking questions?

20 MR. MUSGRAVE: No, I think you accused him.

21 Q. Accusing Monsanto of failing to carry out their
22 responsibilities or duties as they may have seen them under
23 this particular statute?

24 A. There was a comment of that type made, yes.

1 MR. CARR: Well, to be specific, what I said, I
2 asked what Monsanto ever informed the EPA of this risk.

3 MR. MUSGRAVE: I am talking about the comments you
4 made, Mr. Carr, when you said that Monsanto had failed to
5 carry out their responsibilities.

6 MR. CARR: Yes, and their responsibility is to
7 report it to the EPA. That is what I accused Monsanto of
8 doing.

9 MR. MUSGRAVE: Failing to comply with the section,
10 Mr. Carr?

11 MR. CARR: Yes, that is correct. That is true.
12 Failing to comply with the section.

13 Q. Now, this January of 1981 document, 1241A, sir,
14 does it refer to your December memo in any way or to the
15 October 10th memo that you referenced in your December memo?

16 A. This refers to the October 10th memo from R. F.
17 Ivory to J. A. Gloeckner which described the analytical
18 results.

19 Q. Yes. And this, in fact, is as indicated here a
20 TSCA Section 8(e) meeting. Isn't that what this is in
21 connection with?

22 A. These appear to be notes that were taken as the
23 record of the TSCA Section 8(e) meeting.

24 Q. And does it say who was present at this meeting?

1 A. Yes. The above named persons and then there is a
2 list of those and the undersigned.

3 Q. And that would be Doctor Callis, one of the persons
4 that you would be required to pass on such information to if
5 you felt that it should be considered by the committee?

6 A. Yes, sir.

7 Q. Now you are not a toxicologist or a doctor, isn't
8 that correct, Doctor Mieure?

9 A. That is correct. I am an analytical chemist.

10 Q. And the other people, Doctor George Roush, who was
11 he at the time?

12 A. He was the head of the medical department.

13 Q. Doctor Jim Wilson is listed here too that the jury
14 knows who he is. How about the other gentlemen there?

15 A. Two of the other gentlemen are toxicologists and
16 the Mr. Kondry is the director of regulatory management for
17 TSCA.

18 Q. He is the one that put out the Monsanto procedure
19 as a matter of fact, isn't he?

20 A. His predecessor, I believe.

21 Q. And Mr. Park who signed this particular memorandum,
22 who is he?

23 A. Phocion Park is the chief of the environmental law
24 department within Monsanto.

1 Q. And these are the gentlemen that constitute the
2 committee as set out in the Monsanto policy that we
3 previously looked at set up in accordance with the EPA?

4 A. That is correct.

5 Q. Federal Registered publication?

6 A. That is correct.

7 Q. And you will note here that the consideration was
8 made with regard to this 9.5 parts per billion of TCDD in the
9 one 2,4 di sample?

10 A. Yes, they considered the analytical results.

11 Q. And and the committee including these medical
12 doctors and toxicologists concluded it was not necessary to
13 report this to the EPA, isn't that correct, sir?

14 A. Yes, sir. It was, therefore, concluded that this
15 notification is not required by TSCA Section 8(e).

16 Q. So contrary to what Mr. Carr suggested and stated,
17 Monsanto did comply with the --

18 MR. CARR: You are confused.

19 MR. MUSGRAVE: Well, let me finish my question then
20 you can restate your accusation if you like.

21 Q. Monsanto did comply, did they not, with the
22 policies and regulations and statutes of Section 8(e)?

23 A. Yes, they did.

24 Q. Now Doctor Mieure, after this meeting of January of

1 1981, that committee determined that the 9.5 ppb in their
2 view was not anything that required reporting, isn't that
3 correct? The reasons they stated in there?

4 A. Yes, it is.

5 Q. Now then, these other reports that Mr. Carr showed
6 you this morning, let's start first with, the first February
7 6, 1981 report. That is Plaintiffs' Exhibit 1174. He
8 referenced the 2,4 dichlorophenol analyses that were
9 contained in table 1 there?

10 A. Yes.

11 Q. Now, with regard to samples produced in 1980, not
12 samples in '79 or '78 but in samples produced in 1980, there
13 was no finding of 2,3,7,8 in excess of 9.5 parts per billion,
14 was there, sir?

15 A. I am sorry, I have forgotten the date code on
16 those.

17 Q. Well, KK. KK would be 1980, KL would be 1979 and
18 KM would be, pardon me. KK would be 1978. KL would be 1979
19 and KM would be 1980.

20 A. Okay.

21 Q. And the question then was there was no finding of
22 any level of 2,3,7,8 in excess of 9.5 parts per billion for
23 the 1980 sample?

24 A. That is correct.

1 Q. Nor for the 1979 sample?

2 A. That is correct.

3 Q. There was for the 1978 sample, isn't that correct?

4 A. Yes, sir.

5 Q. But that was a sample from December of 1978. That

6 was more than a year prior to this when that sample was

7 generated, wasn't it?

8 A. Yes, sir.

9 Q. Now, of course, these samples that we find in these

10 reports issued in 1981, some of them dating back to 1979 and

11 1978, do you know where they get these samples from, that are

12 that old?

13 A. Well they -- I would have to read this to be sure

14 but I imagine they came from the sample repository at the

15 plant. At The plant they have what they call a retention

16 policy where they retain a pound or two of material for

17 extended periods of time just for this sort of thing. For

18 testing in the future.

19 Q. And we find throughout these reports the example

20 Mr. Taulli when he submitted his report in 1980 with regard

21 to the Santophen analysis that had been done was going back

22 into '78 to pick up tests. Why do they do that, Doctor

23 Mieure?

24 A. Why do we save the samples?

1 Q. Why do you go back and test back in '78 and '79
2 when you are testing in 1980 or whatever it is?

3 A. To develop a historical prospective on what
4 concentrations of given material would be present.

5 Q. So with regard to currently produced samples in
6 1980 as per this February of '81 report, or 1979 samples,
7 none of them exceeded as far as 2,3,7,8 this level that had
8 previously been considered at the January of 1981 8(e)
9 meeting, isn't that correct, sir?

10 A. None of the '79 or '80 samples exceeded that.

11 Q. And with regard to the October 7, 1981 report that
12 Mr. Carr showed you, that is Plaintiffs' Exhibit 1284. You
13 have that, sir?

14 A. Yes, I do.

15 Q. He didn't refer you to the other tables in that
16 report dealing with OCP and OCP-crude and parachlorophenol,
17 did he? Just to the 2,4 di tables?

18 A. I believe just to the 2,4 di. I am not certain.

19 Q. In any event, in looking at that table number 2
20 which is the 2,4 di table, there were 2 samples that were
21 analyzed in connection with that report of 2,4
22 dichlorophenol?

23 A. Yes, sir.

24 Q. And one of them had none detected?

1 A. One had none detected.

2 Q. And what was the limits of detection now here in
3 October of '81? Isn't it shown there on the table, Doctor
4 Mieure, down there at the bottom?

5 A. Oh, I am sorry. Method of detection limit. One
6 part per billion. One part per billion.

7 Q. One part per billion?

8 A. Yes, sir.

9 Q. And the one sample of 2,4 dichlorophenol that where
10 they did detect tetras, I think that has been previously
11 indicated that when the 3 with the star means that that 3
12 parts per billion did not coelute with the 2,3,7,8 standard
13 whereas the 2 did coelute with the 2,3,7,8 standard, isn't
14 that correct?

15 A. If it does not coelute, it is flagged with a star.

16 Q. So this sample had 2 parts per billion of something
17 that coeluted with 2,3,7,8?

18 A. That is correct.

19 Q. There again, that is not in excess of 9.5 that had
20 been considered at the 8(e) meeting in January of '81, isn't
21 that correct?

22 A. That is correct.

23 Q. And Plaintiffs' Exhibit 1176, the next exhibit Mr.
24 Carr showed you, is a December 4, 1981 report?

1 THE COURT: Before you get into that next one, is
2 this a good point for a short break?

3 MR. MUSGRAVE: I think it is, Your Honor.

4 THE COURT: Ladies and gentlemen, we will take a
5 short break at this time. The admonishments that I gave you
6 earlier will apply to this break also. Court is in recess.

7 COURT RECESSED:

8 (The following proceedings were had in the hearing
9 and presence of the jury)

10 JAMES MIEURE

11 having resumed the witness stand, being previously sworn,
12 testified further as follows:

13 EXAMINATION

14 By

15 MR. JOHN R. MUSGRAVE.

16 Q. Now Doctor Mieure, when we broke, I had just asked
17 you about Plaintiffs' Exhibit 1284 and the findings with
18 regard to tetras there in the 2,4 dichlorophenol and I was
19 about to refer you to Plaintiffs' Exhibit 1176, the December
20 4, 1981 analysis. Do you have that one there?

21 A. 1176?

22 Q. Yes, sir.

23 A. Yes, I have it.

24 Q. Now, Mr. Carr referred you to table 1 on that

1 exhibit again dealing with 2,4 dichlorophenol. If you would
2 turn to that, please?

3 A. Yes, sir. I have table 1.

4 Q. And to an analysis that was done of KAO4-7005 and
5 there were total tetras there of 5 and then in the replicate
6 6, isn't that correct?

7 A. Yes, that is correct.

8 Q. Again not above this level that had been considered
9 at the 8(e) meeting?

10 A. Yes, sir.

11 Q. Now, as a matter of fact, this table referencing
12 KAO4-7005, that is the sample that was in the prior exhibit
13 that we just looked at, October 7, 1981, Plaintiff's Exhibit
14 1284. And table 2 which is represented here by Plaintiffs'
15 Exhibit 1176B. Do you see the KAO4-7005 and the replicate?

16 A. Yes, that is the same sample number.

17 Q. I take it back. These are the furans though. I
18 don't know whether he has the dioxins on a board but if you
19 look at table 2 of Plaintiffs' Exhibit 1284, the October of
20 '81, you will see that the same exhibit or the same sample is
21 referred to in both of these, isn't it?

22 A. What was the second reference please?

23 Q. Plaintiffs' 1176 and table 1?

24 A. Yes.

1 Q. And Plaintiffs' 1284 and table 2?
2 A. Which table please?
3 Q. Table 2.
4 A. Of each document?
5 Q. Of 1284.
6 A. And table 1 of the other document?
7 Q. Yes. It is the same sample?
8 A. Yes, it is.
9 Q. So these 2 documents don't represent 2 different
10 samples of products with findings of tetras but only one, is
11 that correct?
12 A. That is correct. Yes, uh-huh.
13 Q. Now, you have Plaintiff's Exhibit 1282 there, sir?
14 A. I believe so.
15 Q. That is --
16 A. Yes, I have it.
17 Q. That is a report that came in between these 2 that
18 we have just been looking at or I take that back. Pardon
19 me. Came in September, a month before the October report we
20 were looking at?
21 A. Yes. It is dated September 15, 1981.
22 Q. And this is what Mr. Carr was referring to
23 yesterday as the re-analysis of the followup after the
24 October of '80 report?

1 A. Yes, sir.

2 Q. And refer to this as the confirming data about your
3 concerns in your December, 1980, memo?

4 A. Yes, sir.

5 Q. And as a matter of fact, Doctor Mieux, Monsanto
6 didn't wait until September of 1981 to consider the subject
7 of the 9.5 parts per billion tetras in that 2,4 di sample
8 from October of '80, did they? They didn't wait until
9 September of '81 to receive the memo where they had that
10 meeting in January, did they not?

11 A. In January of 1981, yes, sir.

12 Q. Shortly after your memo of December 20, 1980 or was
13 it December 20?

14 A. I think it was December 30.

15 Q. December 30, 1980. And so the suggestion that Mr.
16 Carr made to you that Monsanto had in fact not done anything
17 even before or after the September of '81 report was
18 certainly erroneous, wasn't it, sir?

19 A. That is correct. A meeting was held.

20 Q. Now, if you would look at Plaintiffs' Exhibit 1285,
21 sir. I believe that is the one we have talked about
22 earlier. That is Mr. Taulli or Doctor Taulli's October 15,
23 1979 report?

24 A. Yes. Well 3 tables.

1 Q. Yes?

2 A. Not really report.

3 Q. Whether it is a report or whatever. Now, Mr. Carr

4 blewup the last page but the first page is not blown up and

5 we talked about the summation on that first page previously,

6 did we not?

7 A. Yes. The paragraph at the bottom.

8 Q. In connection with the none detected at least than

9 .5 parts per billion?

10 A. Yes, sir.

11 Q. Well, immediately above that is another summation,

12 is there not?

13 A. Yes. Item one.

14 Q. Yes. And, what does that summation say with regard

15 to these 3 tables?

16 A. It says the average level is less than one ppb.

17 Q. All right. Do you know whether that is for all 3

18 tables or just the first 3 table?

19 A. I am not certain. I believe that it is, that it

20 covers all 3.

21 Q. But in any event, whether it is the first table or

22 whatever, the summation there reflects an average level of

23 less than one part per billion?

24 A. That is correct, yes.

1 Q. And there again --

2 A. I would like to correct what I said though. It
3 probably applies to this one table.

4 Q. All right. Sir, and that one table, the first
5 table, covers the production from May to September of '79,
6 the later dates that are covered by all 3 of these tables,
7 isn't that correct?

8 A. Yes. That is correct.

9 Q. And the table that Mr. Carr blewup and demonstrated
10 to the jury, the last table, that was the one that went back
11 to August of '78?

12 A. Yes. That represents the earlier analyses.

13 Q. And, of course, you were made aware of the fact
14 that around May of 1979, thereabouts, caustic was eliminated
15 from the manufacturing process in Department 237?

16 A. Yes, sir.

17 MR. MUSGRAVE: I believe that is all the questions
18 I have at this time, Your Honor.

19 THE COURT: Okay. Mr. Carr, do you have any
20 further questions?

21 MR. CARR: Yes, Your Honor.

22 RECROSS EXAMINATION

23 By

24 MR. REX CARR.

1 Q. Doctor Mieure, with reference to the Exhibit 1135 I
2 think that you have in front of you?

3 A. I have 1235 in front of me.

4 Q. Do you not also have 1135? Counsel asked you about
5 it.

6 A. 1135. Yes, sir.

7 Q. Dated June 26, 1979?

8 A. Yes, sir.

9 Q. The second page of that exhibit, the page numbered
10 1 refers to the methodology used for the results reflected in
11 that entire report, isn't that correct, Doctor Mieure?

12 A. As best I can tell, yes, sir.

13 Q. And attached to that exhibit is the copy of the
14 report that I asked you about sometime ago that or rather the
15 published report in a journal, Chromatographic Science in
16 July of '77 that you, Hicks, Kaley and Michael wrote, isn't
17 that correct?

18 A. Yes, sir.

19 Q. And the method used as described on page 1 is that
20 very method that was described in the article of 1977, isn't
21 that correct, sir?

22 A. Yes, it is with the modifications then that are
23 listed in that same paragraph.

24 Q. And we went through and we concluded, did we not,

1 that the modifications that were put into effect in 1979 so
2 that it could be used to test for all the chlorinated phenols
3 could have been performed prior to 1979? Do you recall that,
4 Doctor Mieure? We went through that?

5 A. I believe the way that that was left was that we
6 philosophically had the capabilities of doing it but we
7 hadn't demonstrated and validated it, sir.

8 Q. All you needed to do was to do it and it would be
9 demonstrated but you didn't choose to do it until 1979, isn't
10 that correct, sir?

11 MR. MUSGRAVE: Choose to do what?

12 MR. CARR: To validate that their method that he
13 published in 1977 could be used for other chlorinated phenols
14 in addition to pentachlorophenol?

15 A. And what was the time frame again, please?

16 Q. You could have done that in '78. That which you
17 did in '79 you could have done in '78 if you wanted to,
18 couldn't you?

19 A. I believe we were doing it in '78, sir. I think
20 some of the results that we have discussed today were
21 obtained with that method.

22 Q. And you were doing it then in '78?

23 A. I believe so.

24 Q. And that took you down to 10 parts per billion,

1 didn't it, sir?

2 A. Well, if we --

3 MR. MUSGRAVE: For what, sir?

4 Q. It took you down for 10 parts per billion?

5 A. If we were fully successful in eliminating
6 interferences, yes.

7 Q. In the tetras and you were, of course, successful
8 in the tetras, were you not, sir?

9 A. In most cases, yes.

10 Q. And so you had the method in 1978, you had the
11 method prior to 1977. You simply published it in '77. You
12 had the method established for penta, I think you said, in
13 '75 and '76 if my memory holds true, isn't that correct, sir?

14 A. I believe the final touches were put on the method
15 in 1976.

16 Q. And so counsel referred you to an exhibit dated in
17 March of '78, I think it is. I don't know the exact number.
18 Do you have it there, counsel?

19 MR. MUSGRAVE: I am looking for it now, Mr. Carr.
20 It may still be up there with Doctor Mieure.

21 MR. CARR: It would be Monsanto Exhibit 878, Doctor
22 Mieure. You have it there?

23 A. Yes.

24 Q. And this document in March of '78, you tested or

1 someone did, Orville Hicks tested the Santophen products in
2 19 -- set for 1977 or at least part of the products, isn't
3 that right, sir?

4 A. Some products, yes, sir.

5 Q. And you tested, however, the Santophen production
6 lots only down to .1 part for the tetras at least. Only down
7 to .1 parts per million, isn't that correct, sir? I think
8 you said that before?

9 A. That is given as the detection limits for the
10 tetras in this.

11 Q. And parts per billion, that is 100 parts per
12 billion, isn't it, sir?

13 A. That is correct.

14 Q. So in 1978, you tested Santophen to determine
15 whether or not it had levels of tetras in it above 100 parts
16 per billion, did you not, sir?

17 A. 100 parts per billion or above.

18 Q. Or above. And the method that you used in '78 to
19 detect whether or not the tetras were present in the 1977
20 production was not capable of going down to 10 parts per
21 billion, was it, sir?

22 A. On this particular type of sample on the Santophen
23 type of samples.

24 Q. Isn't that correct?

1 A. This was the lower limit of detection on these
2 samples, yes.

3 Q. But you learned in '79 that you could use that
4 method to detect in Santophen down to 10 parts per billion,
5 didn't you, sir?

6 A. I believe we reported results at that level, yes.

7 Q. And as a matter of fact, I just asked you earlier
8 about the July of '79 report, whether or not you used your
9 method for those products that were tested in '79 and
10 reported in Exhibit 1135. You recall me asking you that?

11 A. Yes, and I pointed out there were some
12 modifications made that were mentioned in the report.

13 Q. Right. And we also established that you could have
14 done that in 1977, didn't we, sir? Made those modifications?

15 A. Philosophically the modifications could have been
16 made, yes.

17 Q. And practically they could have been made. You
18 could have done that in '77 which you did in '79. Haven't we
19 established that so many times? I am tired of asking the
20 questions, Doctor Mieuse.

21 A. I am tired of being asked the question.

22 Q. Well, then, why don't you answer the way you
23 answered it?

24 A. I believe I had answered it.

1 Q. And could you have done that in '77 but you didn't
2 do it, did you, Doctor Mieure?

3 A. We didn't modify the method.

4 Q. You did not modify your method to test the
5 Santophen production in 1978 to determine whether or not
6 there was tetras in it down to the level of or above the
7 level of 10 parts per billion, did you, sir?

8 A. We didn't test all the way down to that level, no,
9 sir.

10 Q. You tested only down to the level of 100 parts per
11 billion, didn't you, sir?

12 A. That is what we did in this work, yes.

13 Q. But you had the ability to test down, if you wanted
14 to, if somebody had told Orville Hicks as you did in '79,
15 modify that method and find out whether or not we have any
16 tetras in the Santophen down to 10 parts per billion. As you
17 were doing for the pentas. You could have done that in '78,
18 couldn't you, sir?

19 A. It was more work, yes. We could have done it.

20 Q. And you could have found out, then, whether or not
21 your Santophen products had levels above or between 10 parts
22 per billion and 100 parts per billion, couldn't you, sir?

23 A. I don't know whether we could have or not.

24 Q. Well, Doctor, you do know that you modified the

1 method in '79 and found levels of Santophen between 10 and
2 100 parts per billion, didn't you, sir?

3 A. Say that again please? We modified the method?

4 Q. You found in your Santophen, you modified the
5 method in '79. You used the method to check '79 production
6 of Santophen and you found levels above 10 parts per billion
7 in your Santophen products in 1979, didn't you, sir?

8 A. I believe there was one sample perhaps in '79 that
9 was above it or was that '78? The Santophen --

10 Q. Doctor, could you answer that question?

11 A. I am not sure, sir. We have talked about so much
12 data I am truly not certain.

13 Q. If you look at 1135 which you have in front of you?

14 A. Okay.

15 Q. And if you refer to the first, the second, third
16 and fourth reports. MB 653, 653, 653?

17 A. Are we in table 3?

18 Q. Table 3. That is reported, the tetras reported in
19 the samples of that particular product, the same sample on
20 each occasion at 65, 35 and 70 parts per billion of tetras,
21 isn't that correct, sir?

22 A. Yes. That sample is reported that way.

23 Q. And would you, if you will, turn to table 2, it
24 identifies that which was tested, does it not, sir, the

1 product of 653?

2 A. Yes, sir.

3 Q. And it is Santophen, isn't it, sir? Santophen
4 flakes, isn't it, sir?

5 A. I am looking for the identification.

6 Q. Table 2?

7 A. I am in table 2.

8 Q. Page 7, the second entry on table 2?

9 A. Yes. Santophen flakes.

10 Q. And when you used the first products that you
11 tested in 1979 after you modified the method that you could
12 have done therefor, you detected levels of less than 100
13 parts per billion but above 10 parts per billion, didn't you,
14 Doctor Mieure?

15 A. That is what the analyst detected, yes.

16 Q. And the Santophen products in '77 that you referred
17 there that Mr. Musgrave referred you to could have been
18 tested down to 10 parts per billion if you had modified your
19 method, couldn't you, sir?

20 A. If we had changed the method, yes.

21 Q. And we have no way of knowing and no one has any
22 way of knowing whether or not the Santophen products that you
23 shipped out in 1977 contained tetras at the levels shown by
24 table 3 in Exhibit 1135A, isn't that correct, sir? 1135B?

1 A. Yes. It would be speculating for me to guess what
2 was in those samples.

3 Q. Well, you know the very first sample that you
4 tested after you modified the method of presumably 653 you
5 found tetras at these levels, didn't you, sir?

6 A. I don't know. Are these listed in the order in
7 which they were analyzed.

8 Q. I haven't the vaguest idea. They are listed
9 numerically and I suppose you would list the samples in the
10 way, numerically as you test them. I would just hypothesize
11 that. It would be a logical thing to do?

12 A. I don't know whether that was the case or not.

13 Q. Well, it is the logical thing to do, isn't it, sir?

14 A. It is a logical way. They probably were tested in
15 the order in which they were obtained. That wouldn't always
16 been chronologically.

17 Q. Well, Doctor, that is besides the point. If you
18 will turn over on page 10 on table 3, counsel didn't ask you
19 about 698 and 699, did he?

20 A. I don't recall,, sir. MB 698 and MB 699.

21 Q. Again Santophen, isn't it, sir?

22 A. I am looking. Santophen, yes.

23 Q. And the levels in sample 698 of tetras is 20 parts
24 per billion and in 699 it is 33 parts per billion, isn't it,

1 sir?

2 A. That is correct.

3 Q. Again, above the level of 10 parts per billion but
4 below the level that you used to test your Santophen in '78,
5 isn't that correct, sir?

6 A. Yes.

7 Q. And if you will turn to page 11 table 3 and look at
8 sample 730, this is reported 48 parts per billion of tetras,
9 isn't that correct, sir?

10 A. That is what is reported for sample 730, yes, sir.

11 Q. And 739 described as a Santophen cut shows 79 parts
12 per billion of tetras, doesn't it, sir?

13 A. Yes, sir.

14 Q. And 741, the last fraction for the Santophen also
15 shows 48 and 25 tetras, parts per billion of tetras, doesn't
16 it, sir?

17 A. Number 741, is that what you are saying?

18 Q. 741 which is the Santophen last fraction?

19 A. Reports 48 and 25, yes.

20 Q. Isn't that correct, sir?

21 A. Yes.

22 Q. Now Doctor, referring to the TSCA exhibit that you
23 have been -- strike that. Before we get to that, if you will
24 look at Monsanto Exhibit 877 in order to help to interpret,

1 this one hasn't be marked. Why don't I make it a plaintiffs'
2 exhibit so we can keep it. Now, Doctor Mieux, I am handing
3 you what now has been marked 1286 for the Plaintiff and 877
4 for the Defendant and 1286A, B, C and D are accurate blowups
5 of the tables and page 2 that appear there. That is,
6 specifically table 2 is 1286A and is also Monsanto 877A.
7 Table 4 is 1286C. Table 2 is 1286D and page 2 of the exhibit
8 is 1286B, is that correct, sir?

9 A. Yes. The first one you mentioned was table 1, is
10 that correct?

11 Q. Yes.

12 A. Yes.

13 MR. CARR: Your Honor, I will offer these exhibits
14 now as Plaintiffs' exhibits into evidence.

15 THE COURT: Any objection?

16 MR. MUSGRAVE: What were the pages again? 12, 15.

17 MR. CARR: 2, 12, 13 and 15.

18 MR. MUSGRAVE: Again, Your Honor, the same
19 objection with regard to information to the extent that it
20 deals with other than orthochlorophenol or
21 orthochlorophenol-crude. The reason the defense went into it
22 is because the court had earlier overruled our objection but
23 the purpose of consistency we would continue to make the same
24 objection.

1 THE COURT: Fine. It is noted in the record. They
2 will be admitted over that objection.

3 Q. Doctor Mieure, with regard to the symbols that is
4 used in that exhibit, table 4 does use the letters ND, does
5 it not, that is in the exhibit which you have in front of
6 you?

7 MR. CARR: Your Honor, I have also have prepared
8 those exhibits for the jury and we might as well pass those
9 at this time. No, we already passed them. Fine.

10 Q. Do you find table 4 there?

11 A. I find table 4, yes, sir.

12 Q. And they use in this exhibit the letters ND for
13 meaning not detectable, correct, sir?

14 A. Yes, they do.

15 Q. And they use it in this exhibit in a number of
16 places, don't they, sir?

17 A. Yes.

18 Q. Now Doctor, with regard to the reports that were
19 made in or not made, rather, in 1981, did you believe
20 yesterday when I was discussing with you or asking you
21 questions about it, that I was suggesting that I believe the
22 law put the responsibilities upon you or other employees to
23 make this report to the EPA administrator?

24 A. The law, you mean what was my recollection?

1 Q. Were you under the belief yesterday that when I was
2 cross examining you as to the meaning and significance of the
3 paragraph that is excerpted in Exhibit 1281A, that I meant to
4 suggest that it was your responsibility as a person to report
5 this finding to the EPA?

6 A. I frankly don't recall whether I thought that it
7 was the implication that I had to or that Monsanto had to. I
8 don't recall, so --

9 Q. Well, there was a considerable discussion between
10 you and Mr. Musgrave as to the fact that a procedure was set
11 up under the EPA rules and regulations whereby individuals
12 having knowledge because the law is quite broadly written.
13 It says any person, doesn't it, sir?

14 A. I am not certain.

15 Q. Any person having knowledge of a level. Any person
16 having knowledge of, any person who manufactures, processes
17 or distributes in commerce a chemical substance or mixture
18 must report the substance or mixture that presents a
19 substantial risk of injury to health or environment shall
20 immediately inform the administrator of such information.
21 Now, you understand, don't you, that this law and the rules
22 and regulations applies to the companies and not to the
23 employees of the company, per se? You understand that now,
24 don't you, sir?

1 A. It says in the regulations that it applies to the
2 officers and the companies themselves.

3 Q. All right. And, companies under the rules and
4 regulations that Mr. Musgrave talked to you about are
5 required to set up certain procedures whereby they can
6 process possible information and pass it on to the EPA if
7 they believe that it presents a substantial risk to the
8 health of persons or to the environment, isn't that correct,
9 Doctor Mieure?

10 A. Yes, sir.

11 Q. And Monsanto did indeed set up the procedures
12 necessary to comply with the law insofar as having a
13 procedure, isn't that correct, sir?

14 A. Yes, we did.

15 Q. But, you don't conceive it to be the law that
16 having set up the procedure and having analyzed the
17 questionable product or discussed it, that that is compliance
18 with the law if the material presents a substantial risk to
19 health or the environment? You don't conceive that that is
20 compliance with the law, do you, sir?

21 A. I am sorry, the question had enough parts that I am
22 not certain what the question was.

23 Q. Well, Mr. Musgrave asked you about this committee
24 that was set up, this TSCA committee that was set up. This

1 8(e) could evaluate this 2,4 dichlorophenol that we are
2 talking about. The 9.5 parts per billion?

3 A. The committee that actually convened in January of
4 1981?

5 Q. Yes. That committee was in compliance with the law
6 when it considered this but the committee did not report it,
7 did it, sir? The committee reported its finding to the EPA?

8 A. They reported their findings in the memo, sir.

9 Q. To the EPA?

10 A. I don't know if there was a report made to the EPA
11 or not.

12 Q. Doctor Mieure, didn't you go through a long
13 examination here with Mr. Musgrave and he suggested to you
14 that the law was complied with? You know the law
15 specifically says that the company shall report it to the
16 administrator of the EPA?

17 A. Shall report a finding of significant risk, yes,
18 sir.

19 Q. No. They shall report, any person who
20 manufactures, processes or distributes in commerce a chemical
21 substance or mixture and who obtained information which
22 reasonably supports the conclusion that such substance or
23 mixture presents a substantial risk of injury to health or
24 the environment shall immediately inform the administrator of

1 such information. Now that is what -- If you have Monsanto
2 Exhibit 880 in front of you, you can refer to it. That is
3 what the law requires?

4 A. Yes, sir.

5 Q. It is not sufficient, is it, simply to, for the
6 company to have a meeting and to put it in a memo. Well, we
7 looked at this and we are not going to report it. That isn't
8 sufficient, is it, sir, if it is in fact --

9 A. The purpose of the meeting was to determine whether
10 or not a significant risk existed, sir, and if so to report
11 it and I believe this committee did not find that there was a
12 significant risk so there was nothing to report.

13 Q. Now, if in fact there was a substantial risk, then
14 it should have been reported, shouldn't it, sir?

15 A. That is what the law says.

16 Q. Now, this committee met in January of 1981, didn't
17 it, sir? Just 8 days after the memo that you wrote?

18 A. Yes, sir.

19 Q. Now, it met prior to the time the September 1981
20 report was promulgated in which the findings in the October
21 10, 1980 memo were confirmed, that is, that it was 9.5 tetras
22 in that 2,4 dichlorophenol, isn't that correct, sir?

23 A. They certainly met prior to September, yes, sir.

24 Q. And they met at the time that you weren't sure as

1 to whether or not this was 9.5 tetras as you pointed out in
2 your memo. That there is equivocal data. Ambiguous report.
3 That is what they meant and considered, isn't it, sir?

4 A. I don't believe so, sir.

5 Q. Well, did they have any confirmation? Did they
6 have anything other than the October 10, 1980, memo and your
7 memo of December 30, 1980?

8 A. I don't see any reference to other information.

9 Q. And as a matter of fact, they refer to just the
10 memo dated October 10, 1980, don't they, sir?

11 A. Yes.

12 Q. Now, Doctor, you stated that you didn't report it,
13 that we considered reporting it and you said we, you didn't
14 say you. You said we. You are referring to more persons
15 than one, aren't you, sir?

16 A. We is plural.

17 Q. Yes. You considered reporting it until you
18 recognized something and what it was that you recognized that
19 prevented you from reporting it was that this report of
20 October 10, 1980, was uncertain, isn't that correct?

21 A. I mentioned that that was one of the factors.

22 Q. Well, isn't that the only factor that you said?
23 You consider reporting it and quote until we recognized the
24 uncertainties in your report?

1 A. And my testimony yesterday I said that was one of
2 the factors. It is the only one that is referenced in the
3 memo.

4 Q. And that is what the meeting had on January 7,
5 1981. This uncertain report, isn't that correct, sir?

6 A. That is the information they had available to them,
7 yes.

8 Q. All right. And so they determined that you had
9 samples containing tetrachlorodibenzo-p-dioxin at levels
10 ranging from 1 to 3 part per billion with only one analysis
11 indicating a higher level and it was apparently the detection
12 of TCDD and dichlorophenol that led to this subject meeting.
13 Anyway, you concluded at that time that because of these low
14 levels which you don't even -- the level of 9.5 isn't even
15 mentioned in this memo, is it, sir?

16 A. I believe it is.

17 Q. Oh? Where is it mentioned?

18 A. Only one indicating a higher level. I believe that
19 is the one that indicates a higher level.

20 Q. And I directed your attention to that. My question
21 is, they didn't even mention the 9.5 level itself, sir?

22 A. It is not mentioned by number but I have to assume
23 that is a direct citation to it.

24 Q. You did mention in this memo that you put in your

1 file the finding of 1 to 3 parts per billion, didn't you,
2 sir?

3 A. I don't know, sir.

4 MR. MUSGRAVE: Which memo?

5 Q. The memo dated January 7, 1981. 1241A which is the
6 memo you put in to file in your TSCA requirement?

7 MR. MUSGRAVE: That is not his memo. This is
8 Doctor Mieure's memo. You said you put in your memo.

9 Q. Doctor Mieure, you understand that?

10 A. No, sir, I didn't.

11 Q. You didn't write this memo. I know you didn't
12 write this memo. Park wrote the memo and these persons were
13 there and you weren't even there and when I say you, I mean
14 Monsanto, you understand that?

15 A. No, sir. At that time you did fool me.

16 MR. MUSGRAVE: How are you supposed to guess, Mr.
17 Carr, when you don't even know?

18 MR. CARR: Well, I suppose you are right, Mr.
19 Musgrave, and I should withdraw that question.

20 Q. And you understand that the TSCA memo that Monsanto
21 put in the file to comply with the EPA requirements doesn't
22 even mention the 9.5 finding, does it?

23 A. I see nothing particularly to concern me about
24 that.

1 Q. Doctor Mieux, did you conceive that I was asking
2 you whether or not you were concerned about it? I am simply
3 asking you to affirm, if you will, that 9.5 is not mentioned
4 in this memo?

5 A. I confirm that the number 9.5 does not appear in
6 the memo.

7 Q. But the findings of 1 to 3 parts is mentioned,
8 isn't it, sir?

9 A. Yes, it is.

10 Q. And there is no mention in that memo of the 2,4
11 dichlorophenol finding of 65 parts per billion, is there,
12 sir?

13 A. Of 65 parts per billion?

14 Q. I am sorry, of the 120 parts per billion finding
15 for dichlorophenol in June of '79?

16 A. I don't think that was referenced in the memo that
17 was under consideration here.

18 Q. Now, do you understand that the law, this TSCA,
19 this Environmental Protection Agency law, the Toxic Substance
20 and Control Act came into existence and was in effect in
21 1977?

22 A. I thought it was '76 but we certainly agree that it
23 was in that general time frame.

24 Q. If you look at Monsanto Exhibit 880, it says it

1 comes into effect, Section 8(e) came into effect on January
2 1, 1977?

3 A. Okay.

4 Q. Now, if you look at 1135B again, the bottom of page
5 9 table 3, you will find --

6 A. Just a moment, sir. I have to find 1135. I have
7 it.

8 Q. You will find samples MB 681 and MB 682, wouldn't
9 you, sir?

10 A. I can't read the table number.

11 Q. Well, you have the table there? You have the
12 table?

13 A. Yes.

14 Q. Table 3?

15 A. Could you tell me which table you are referring
16 to?

17 Q. Table 3. The first page thereof on page 9?

18 A. Thank you.

19 Q. And you see sample 681 and 682, don't you, sir?

20 A. MB 681 and 682, yes, sir, down at the bottom.

21 Q. And you see, do you not, a report there of both
22 before and after aeration, don't you, sir?

23 A. Well, you must be referring to something in table 2
24 then.

1 Q. Yes. Table 2. Table 2 describes what the product
2 is that is analyzed and reported in table 3?

3 A. Okay. I see that. In table 2.

4 Q. And you find that 2,4 DCP both before and after
5 aeration, exhibit MB 681 and 682 has levels of tetra at 340
6 parts per billion and 190 parts per billion respectively,
7 isn't that correct, sir?

8 A. Yes, sir.

9 Q. And if you will turn to the next page of table 3,
10 MB 686 which is also 2,4 dichlorophenol, you will find that
11 that has tetras at the level of 360 parts per billion,
12 wouldn't you, sir?

13 A. Yes, sir.

14 Q. Now, that is many times higher than the 1 or 3
15 mentioned in the January 6, 1981, January 7, 1981, memo,
16 isn't it, sir?

17 A. Yes, sir.

18 Q. Now, was that, was a TSCA meeting held on that?
19 This is over 2 years after that law went into effect?

20 A. Your question was was a TSCA meeting held on that?

21 Q. Yes. With reference to this finding?

22 A. Not that I know of.

23 Q. Was it reported to the EPA?

24 A. Not that I know of.

1 Q. Look down to sample 697, if you will. Also 2,4
2 dichlorophenol. That sample was tested 4 different times and
3 had tetras reported ranging from 230 to 450 parts per
4 billion, isn't that correct, sir?

5 A. Just a moment. Levels from 380. 230 to 450, yes,
6 sir.

7 Q. Was that reported to the EPA under Section 8(e)?

8 A. I don't know, sir.

9 Q. Do you have any knowledge, do you have any
10 information, have you ever heard that it was reported or even
11 mentioned or reported to the EPA?

12 A. Certainly nothing that I can recall at this time.

13 Q. Doctor, you are aware of the fact that you will, if
14 you will turn to Monsanto Exhibit 880, the second page, the
15 last column?

16 A. I have 880. What was the specific reference?

17 Q. The second page where it discusses in the last
18 column where it discusses what constitutes substantial risk?

19 A. Okay.

20 Q. And it states, does it not, in the middle of that
21 paragraph, the human health effects listed in subpart A
22 below, for example, are so serious that relatively little
23 weight is given to exposure. The mere fact the implicated
24 chemical is in commerce constitutes sufficient evidence of

1 exposure. Do you read that, sir, and did I read it
2 correctly?

3 A. I believe you read the words correctly, sir.

4 Q. Simply because it is put in commerce. Do you
5 understand what commerce means? When it is shipped out of
6 your plant, going to someplace else. You understand that
7 that is in commerce, don't you, sir?

8 A. That is one part of commerce.

9 Q. And just a simple fact that it is going to be
10 shipped out of your plant is sufficient to be called
11 exposure, constitutes sufficient evidence of exposure. Do
12 you understand that?

13 A. Under the certain highly defined conditions they
14 are talking about here, yes.

15 Q. And could you turn to the next page and see what
16 are the health effects that they are so concerned about that
17 if a chemical could cause that, that it is considered
18 sufficient exposure just the moment you ship it out of the
19 plant? Are not, doesn't the agency consider these as the
20 effects for which substantial risk information must be
21 reported? Human health effects, any instance of cancer,
22 birth defects, mutagenesity, death or serious or prolonged
23 incapacitation including the loss of or inability to use a
24 normal bodily function with a consequent relatively serious

1 impairment of normal activity, if one or a few chemicals is
2 strongly implicated, did I read that correctly, sir?

3 A. That is what the Federal Register notice says, sir.

4 Q. Does it also say any pattern of effects or evidence
5 which reasonably supports the conclusion that the chemical
6 substance or mixture can produce cancer, mutation, birth
7 defects or toxic effects resulting in death or serious or
8 prolonged incapacitation. Did I read that correctly?

9 A. I believe you read it correctly.

10 Q. And, Doctor, do they not also include where there
11 is a possibility in the environment that there is bio
12 accumulation that can take place. That is, that it can
13 accumulate in the fish?

14 A. It says per ounce bio accumulation when coupled
15 with potential for widespread exposure.

16 Q. And the non trivial adverse effect can be that
17 heretofore unknown to the administrator, that is the EPA,
18 associated with a chemical known to have bio accumulated to a
19 pronounced degree or to be widespread in environmental
20 media. Did you read that, sir?

21 A. That is what it says.

22 Q. Now, Doctor, you are aware, even though you are not
23 a toxicologist because I think you have testified to it, that
24 the tetra dioxins and other dioxins have been charged by

1 scientific people and toxicologists that it can have these
2 effects at levels, they haven't even found the no effect
3 level but certainly one part per billion is a level of
4 concern?

5 MR. MUSGRAVE: Well, I object to counsel examining
6 this witness as a toxicologist. You will want to qualify him
7 as an expert in toxicology, Mr. Carr. I object to that that
8 there is no foundation laid; that he has the qualifications
9 to testify as an expert with regard to the toxicology,
10 toxicological properties of 2,3,7,8 as Mr. Carr is going
11 into.

12 THE COURT: I don't think that is what he was asked
13 for. I think he was asking his personal knowledge as to
14 whether those charges have been made.

15 MR. MUSGRAVE: Well, his personal knowledge, if he
16 is not an expert, Your Honor, if I may suggest, would not be
17 competent evidence, then if he is not an expert. Personal
18 knowledge would be like me testifying as to --

19 THE COURT: No. Question of whether he is aware
20 that certain charges have been made and not any evaluation of
21 them or other comments on them is implied in the question.
22 Personal awareness that it exists is different than what you
23 are objecting to. Overruled.

24 Q. Doctor, you were aware on December 30, 1980, that

1 possible presence of chlorodibenzo-p-dioxin or chlorodibenzo-
2 furan impurities in products and processes is of critical
3 concern to MIC and to all Monsanto. Because of this concern
4 we considered reporting your data to EPA as a potential
5 substantial risk. When you wrote that memo, you had in mind
6 these human health effects, did you not, sir?

7 A. I had in mind the controversy that was raging at
8 that time over the 2,3,7,8 which included the potential for
9 human health defects, yes, sir.

10 Q. And so that accepts and you understand that those
11 risks are included in the EPA requirement where they
12 described the health effects. You understand that, don't
13 you, sir?

14 A. Yes, sir.

15 Q. Now, Doctor, and so far as you know, notwith-
16 standing the fact that the tetras, not just the tetras but
17 many other chlorodibenzo-p-dioxins and furans have such a
18 potential substantial risk, you understand, do you not, or
19 did you understand when you wrote that memo that you were
20 talking about reporting it to the EPA because those
21 impurities might have the effects described in the TSCA Act
22 itself?

23 MR. MUSGRAVE: I object to counsel's question. One
24 which it is a multiple question. Two, counsel states that

1 many other dioxins have these same risks. I don't believe
2 there is any evidence with regard to these other dioxins and
3 these same risks that they reference the same risk and I
4 object. It assumes facts not in evidence.

5 THE COURT: Overruled.

6 Q. Doctor Mieure, Mr. Musgrave can't see but the
7 language that I gave to you is the very language that you
8 used in the December 30, 1980, memo, isn't it, sir?

9 A. You were paraphrasing from that, yes.

10 Q. And I didn't make that up. You are the one that
11 wrote that down, didn't you, sir?

12 A. Yes.

13 Q. And do you consider that these are substantial
14 health risks, cancer, birth defects, porphyria, liver
15 disease, polyneuritis, polyneuopathy? Do you consider these
16 are substantial health effects?

17 A. I don't know what most of those words mean, sir.

18 Q. You don't know what poly means?

19 A. Poly means many.

20 Q. And do you know what neuritis means?

21 A. No, sir. It sounds like a neurological disorder,
22 some kind.

23 Q. It is pain in the nerves. That you have pain in
24 your nerves is what it is. It hurts you. It causes you

1 disability. It causes you pain. That is what neuritis is.
2 Do you understand that is a health effect, an adverse health
3 effect and an effect that a person should not be afflicted
4 with if we can avoid it and if the company that manufactures
5 the products can also avoid? Do you understand that, sir?
6 A. Yeah. I don't see the connection between that and
7 what we are talking about here but I understand the health
8 effect you are talking about.
9 Q. Do you believe that the law that you were concerned
10 here has a useful purpose?
11 A. Certainly.
12 Q. And that purpose, Doctor Mieux, is what, sir?
13 A. That when a group of experts becomes aware of a
14 significant health risk, they need to report it to the EPA.
15 Q. And do you consider that a product that has 480
16 parts per billion of 2,3,7,8 or of tetras in it poses a
17 health risk?
18 A. That would depend on the use for which that product
19 was intended and the exposure that there would be resulted
20 from it.
21 Q. But you heard the definition that the law gives of
22 exposure, did you not, sir?
23 A. I believe you asked me what I considered and I told
24 you what I considered.

1 Q. No, I am asking you whether or not you understand
2 the risk that the EPA considers is once it goes out the
3 plant, that is considered exposure?

4 A. No, I don't see that it says that.

5 MR. MUSGRAVE: I am going to object to counsel,
6 one, asking this witness what a health risk is or not in
7 compliance with the statute because he has not been qualified
8 as either an expert in this law or an expert in toxicological
9 properties nor in medicine to make such a decision. He is
10 asking him to state expert opinions.

11 THE COURT: Overruled.

12 Q. My question is referring to exposure. If you have
13 any question about it, please read Monsanto's Exhibit 880,
14 the exhibit that Mr. Musgrave asked you questions of and
15 determining again whether or not exposure is defined, is
16 there sufficient evidence of exposure simply when it goes out
17 in commerce?

18 A. No, sir, I don't believe it does.

19 Q. It doesn't say that? Look at the exhibit and see
20 if it doesn't say that?

21 A. Taken to a ridiculous extreme this uses the health
22 effects of death, and everything causes death. An overdose
23 of drinking water causes death. And taken to a ridiculous
24 extreme that would imply that water should be reported as a

1 significant risk. Now that isn't what they meant at all
2 here. There has to be some exposure. A significant exposure
3 that would cause one of these effects to take place.

4 Q. And do you know whether or not Monsanto, have you
5 discussed this question of what the law says with regard to
6 exposure? Have you discussed that with others at Monsanto?

7 A. Specifically what it means with respect to
8 exposure?

9 Q. Yes, this part?

10 MR. MUSGRAVE: Which law are we talking about?
11 This law?

12 MR. CARR: Monsanto Exhibit 880. The law contained
13 in the definitions of what constitutes substantial risks and
14 what is exposure.

15 MR. MUSGRAVE: May my objection, Your Honor, to Mr.
16 Carr examining this witness with regard to the law and
17 application of the law to facts in connection with exhibit
18 880 be a continuing objection instead of my --

19 MR. CARR: Mr. Musgrave is the one --

20 MR. MUSGRAVE: Just a minute. The extent of my
21 examination of the witness just so to simply point out the
22 procedural steps stated in here. Not to interpret the law.
23 Not to interpret the meaning or substantial risk or to give
24 toxicological opinions or health opinions in applying this

1 law. So if my objection may run to the entire line of
2 questioning with regard to those opinions that he is asking,
3 I would request that be the case.

4 THE COURT: Mr. Carr, did you have a comment you
5 wish to make?

6 MR. CARR: I would like to put in the record that
7 counsel used this witness and referred to different parts of
8 this exhibit with this witness not only this exhibit but the
9 rules and regulations as well and asked him whether or not
10 having their committee complied with that law, whether or not
11 the committees, in fact, met and a number of things
12 interpreting this particular law. Now, I will concede that
13 he didn't ask about each and every section of this law but he
14 most certainly asked this witness to interpret this law.
15 Monsanto Exhibit 880.

16 THE COURT: I think the examination is within the
17 scope of your redirect. Objection is overruled. I will note
18 in the record that it is a continuing objection to the line
19 of questioning.

20 Q. Now, Doctor Mieure, my specific question is is when
21 you get to go, when you wrote this memo and this TSCA 8(e)
22 requirement, you, of course, had to consider the various
23 elements of the law as to what, before you could decide
24 whether you were or were not in compliance, isn't that right,

1 sir?

2 A. No, sir. That is up to the committee to decide if
3 a meeting is convened. It is up to me to make a notation and
4 to trigger TSCA 8(e) if in fact something comes to my
5 attention that I view to be a significant risk.

6 Q. And that, of course, would be in confines of the
7 law. You received some instruction from somebody on this
8 point, did you not, sir?

9 A. Specifically for this case, no, sir.

10 Q. Not for this case, for the TSCA 8(e). What your
11 duty was?

12 A. Yes, I was given Monsanto guidance documents and
13 policy documents, and policy statements, yes, sir.

14 Q. And that included copies of the law and other
15 instructions as to what you were to do, didn't it, sir?

16 A. I don't know if it included copies of the law. It
17 certainly included copies of the interpretive regulations.

18 Q. Nonetheless, you were aware at that time, I
19 suppose, and others were aware of the fact as to the
20 definition of substantial and exposure, weren't you, sir?

21 A. As to the definitions.

22 MR. MUSGRAVE: Substantial and exposure as used in
23 this particular exhibit, Mr. Carr?

24 MR. CARR: Yes. Monsanto Exhibit 880.

1 MR. MUSGRAVE: The terms aren't used independently
2 and out of context, Mr. Carr.

3 MR. CARR: I certainly am now trying to take them
4 out of context, counsel.

5 MR. MUSGRAVE: I suggest that your --

6 Q. Doctor Mieux, you have to know what exposure means
7 under the law before you can determine whether or not there
8 is a substantial risk, don't you, sir?

9 A. I don't know, sir. I assume so.

10 Q. If the chemical stays locked within Monsanto's
11 gates and it doesn't get out, then you know that there will
12 be no exposure to the public. You know that, don't you, sir?

13 A. You are not counting our workers as public?

14 Q. No, that is right, because your workers are not
15 counted up under the EPA. That is covered by OSHA, not by
16 the EPA?

17 A. Okay.

18 Q. You understand that, don't you, Doctor Mieux?

19 A. As you have described it, I guess.

20 Q. And the definition of exposure that is put into
21 law, did you discuss that definition of what it is exposure
22 with others at Monsanto?

23 A. I don't recall.

24 Q. Well, now you stated here that you consider that, I

1 think you said, ridiculous. I want to know whether or not
2 others at Monsanto share that definition or that view of this
3 law?

4 A. You mean the experts?

5 MR. MUSGRAVE: I object to counsel requiring the
6 witness. Just a moment, Mr. Carr. May I at least finish my
7 objection before you cut me off? I object to counsel asking
8 questions that requires this witness to speculate as to the
9 state of mind or opinions of others at Monsanto.

10 THE COURT: It wasn't called for in the question.
11 Overruled.

12 A. I pointed out, sir, that taken to the extreme, this
13 exposure question means that any chemical, no matter what it
14 is, whether it be water or a food, would have to be reported
15 to EPA as a substantial risk.

16 Q. And my question to you, Doctor Mieure, is your view
17 of that or others of Monsanto, those that you have discussed
18 the matter with, you might know their knowledge, do they
19 share your view?

20 A. I suspect they do. That every chemical has to be
21 assessed according to toxicity and exposure.

22 Q. And do you know whether or not anybody at Monsanto
23 accepts the definition of the view as to what constitutes
24 exposure?

1 MR. MUSGRAVE: I object. The same basis, Your
2 Honor. It is also indefinite.

3 THE COURT: Objection noted. Overruled.

4 A. I don't know what interpretation others would put
5 on this, sir.

6 Q. Well, do you have any -- can the phrase, the mere
7 fact the implicated chemical is in commerce, constitute
8 sufficient evidence of exposure. Can you put any
9 interpretation on that other than once it goes in the
10 commerce, that is considered exposure?

11 A. That is probably what those words were meant to
12 imply.

13 Q. Could you have put any other interpretation on
14 those words other than the plain meaning of the word?

15 A. Where are you reading, sir?

16 Q. Page 2 of exhibit, Monsanto's 880. The last
17 column. The bottom one-fourth of that column?

18 A. It says relative little weight is given to
19 exposure. I certainly can't put, can't interpret that, sir,
20 in the way you have. I cannot do that.

21 Q. Well, you read just one phrase of a sentence. The
22 sentence is the human health effects listed in subpart A
23 below, for example, are so serious that relatively little
24 weight is given to exposure. The mere fact the implicated

1 chemical is in commerce constitutes sufficient evidence of
2 exposure. Now, I read that correctly, Doctor Mieux, and can
3 you interpret that in any other way except that it means
4 that?

5 A. Yes, sir, I most certainly can.

6 Q. Once the chemical gets out of Monsanto, gets into
7 commerce, gets on the railroad track, that that is considered
8 for the purposes of this law exposure?

9 A. Yes, sir. I most certainly can.

10 Q. All right. Tell me how else you can interpret
11 that, please?

12 A. Saccharin causes cancer in laboratory animals.

13 Q. That isn't what I asked you, Doctor Mieux.

14 A. Yes, it is.

15 MR. MUSGRAVE: Just a minute, Mr. Carr. Just a
16 minute. Mr. Carr, you have asked him to tell you what it
17 means. Now, that is wide open and he is responding. Now
18 certainly whatever he thinks it means is his response so he
19 is entitled to respond. Well then please let him respond,
20 Mr. Carr.

21 MR. CARR: I will let him respond.

22 MR. MUSGRAVE: How can you say it is not
23 responsive?

24 MR. CARR: Because I am not asking him about that.

1 I am asking him about exposure.

2 A. And I am answering on exposure.

3 Q. Is equating with putting it in commerce?

4 THE COURT: Your objection is overruled. That was
5 not responsive to the question. Doctor Mieure, please answer
6 the question?

7 A. All right. Many materials are known to cause
8 cancer in laboratory animals and yet they are still
9 components of food; therefore, they are in commerce. This
10 cannot be taken to mean they shouldn't be in commerce because
11 they are not --

12 Q. And I didn't ask you that and the law doesn't say
13 they shouldn't be in commerce. All this says, Doctor Mieure,
14 is that once it gets out of the gates, that is considered
15 exposure and so you don't worry about whether anybody is
16 going to get exposed, whether it is going to be put on the
17 ground or in the foods or in the air. By definition, it is
18 sufficient evidence, persons are going to be exposed to
19 Saccharin. We all know that. So by definition, once it gets
20 out of the plant that makes Saccharin, the requirements of
21 exposure is satisfied.

22 A. And they call the EPA and say there is a
23 significant risk because we have a train load of Saccharin
24 coming down the tracks?

1 Q. Nobody is suggesting that.

2 A. I certainly wouldn't.

3 Q. Doctor Mieure, and nobody is suggesting that. All
4 I am asking you about is you said there has to be exposure, a
5 lot more exposure to this product. According to how far it
6 is used and all I am asking about is the law says that is not
7 a requirement. The requirement is for exposure, not on the
8 health risk but for exposure. Somebody is capable of doing
9 these things in whatever quantity, that somebody is capable
10 of doing these things, that is considered exposure so when
11 your TSCA committee gets together and discusses this
12 question, you are not to discuss, you do not need to consider
13 whether or not someone is going to be exposed to it. What
14 happened to that exhibit? I lost it already. You understand
15 that, Doctor?

16 A. No, sir. I don't understand that. I think that is
17 too narrow of an interpretation.

18 Q. You think that it is too narrow to say that there
19 is exposure once it gets into commerce?

20 A. And that coupled with one of these effects, that
21 means that a substantial risk is triggered, yes, sir. I think
22 that is far too narrow.

23 Q. It doesn't mean a substantial risk is triggered?

24 MR. MUSGRAVE: I object.

1 THE COURT: Overruled.

2 Q. I ask you whether or not the law says exposure
3 means you are exposed by definition when it leaves the plant
4 and that you don't have to get any more evidence of
5 exposure. Just show that it leaves the plant and that is
6 considered exposure?

7 A. I don't know if that is what this means or not.

8 Q. Well, read it again and see if that is not what it
9 means. See if there is any other interpretation you can put
10 on that?

11 MR. MUSGRAVE: I object. It has been asked and
12 answered. He asked it and he answered it about other
13 interpretations.

14 THE COURT: Overruled.

15 A. Again it says relatively little weight is given to
16 exposure.

17 Q. That is right. And why is -- and why is
18 relatively little weight given to exposure?

19 A. Why? I don't know, sir.

20 Q. Saying these health effects are so serious that the
21 question of exposure isn't even relevant. They are so
22 serious that once they leave the plant gates, it is
23 automatically assumed that somebody is going to get exposed
24 to it.

1 MR. MUSGRAVE: I object. Just a minute, Mr. Carr.
2 I object to counsel's speech as to what the law is. Is that
3 a question, Mr. Carr? If it is I object to it. May I have a
4 ruling please?

5 THE COURT: Overruled.

6 Q. Don't you understand the words that say the mere
7 fact the implicated chemical is in commerce constitutes
8 sufficient evidence of exposure? You understand the plain
9 meaning of that, don't you?

10 MR. MUSGRAVE: I object. It has been asked and
11 answered.

12 THE COURT: Overruled. It has not be answered.

13 A. Do you want me to answer again?

14 Q. Yes, I do.

15 A. I said no.

16 Q. Then --

17 A. Everytime.

18 Q. And that view that you have given, your
19 interpretation of that exposure is shared by the members of
20 this committee, isn't it, sir?

21 MR. MUSGRAVE: I object. It calls for speculation.

22 THE COURT: Overruled.

23 Q. Haven't you read this before?

24 A. I don't know if they share my view or not. They

1 performed a risk assessment. That is what that memo talks
2 about. They talk about the results of that meeting.

3 Q. And what they decided was that since they are going
4 to dilute the TCDD and since when it is diluted it would be
5 unlikely to cause any harm or environmental hazard, they
6 believe that it is not required, that it doesn't have to be
7 reported, isn't that what they are saying, sir?

8 MR. MUSGRAVE: I object. Just a second, Doctor
9 Mieure.

10 MR. CARR: I think you should have the exhibit in
11 front of you.

12 THE COURT: What is your objection?

13 MR. MUSGRAVE: I object. He is now asking the
14 witness to speculate as to the state of mind of others as to
15 what they meant by what they place in the document.

16 THE COURT: Overruled. I don't think that is what
17 the question calls for.

18 A. Could someone give me a reference to the document,
19 please?

20 Q. It is dated January 7, 1981 and it bears number,
21 Plaintiffs' Exhibit 1241 and I think counsel took his copy
22 back and he handed my copy back to me so you may be without
23 one. Here you can have my copy again.

24 A. 1241. I found it. Fine. It appears to me the

1 assessment of the data that was available to the committee
2 was made.

3 Q. Yes.

4 A. And that they concluded that there was no
5 substantial risk and that notification wasn't required under
6 TSCA Section 8(e).

7 Q. That is exactly what they conclude. But my
8 question to you was did they not consider that what exposure
9 the customers might have to the product?

10 MR. MUSGRAVE: Same objection.

11 THE COURT: Same ruling.

12 A. And the ruling was what, sir?

13 THE COURT: That you have to answer.

14 A. I don't see how else one would do a risk assessment
15 without considering the exposure. That is part of the
16 definition of a risk assessment. You have to have exposure
17 and toxicity.

18 Q. Could you answer that question please? They did
19 consider possible exposure by the customer, didn't they, sir?

20 A. It was concluded that the extremely low levels
21 found in dichlorophenol would be unlikely to cause any health
22 or environmental hazard.

23 Q. They did consider the prospect of exposure by the
24 ultimate user, didn't they, sir?

1 A. Well, certainly.

2 THE COURT: Mr. Carr, is this a good point for a
3 short break? We will take a short break at this time. About
4 a 10 minute break at the most. The admonishments that I have
5 given you earlier will apply during this break also.

6 COURT RECESSED:

7 (The following proceedings were had in the hearing
8 and presence of the jury)

9 JAMES MIEURE

10 having resumed the witness stand, being previously sworn,
11 testified further as follows:

12 RECROSS EXAMINATION

13 By

14 MR. REX CARR.

15 Q. Doctor Mieure, you have Monsanto Exhibit 881 also
16 that Mr. Musgrave gave you?

17 A. I believe that is up here. Yes, sir.

18 Q. And, attached to that exhibit is a copy of the law,
19 of that part of the law we have been discussing as to what
20 constitutes substantial risk, isn't that correct, sir?

21 A. Yes, sir.

22 Q. And did you get a copy along with -- Let's see who
23 all that was sent to. That was sent to Callis, Carpenter,
24 Duncan, Flitcraft, Hobson, Morris, Papageorge, Schlattman,

1 Andrews,, DeGarmo, Mr. Throdahl, Mr. Park and Doctor Roush.
2 Is that correct, sir?

3 A. That is what the distribution is.

4 Q. Do you know whether or not you got a copy of that
5 as well?

6 A. Yes. I have gotten copies of this.

7 Q. And it is noted, is it not, that it was published
8 in the Federal Register, at least a copy that is appended was
9 taken from the Federal Register dated March 16, 1978. That
10 is on the second to the last page of the exhibit. On the
11 page that has what constitutes substantial risks?

12 A. Yes. That is taken from the Federal Register,
13 March 16, 1978.

14 Q. So there is no question that what responsible
15 persons at Monsanto knew how the EPA defined exposure and
16 knew that relatively little weight was to be given to
17 exposure, isn't that correct, sir?

18 MR. MUSGRAVE: I object. Speculation and
19 conjecture about what some unidentified person might think
20 about.

21 MR. CARR: I have identified the persons. I have
22 identified the persons who got copies of these documents.

23 MR. MUSGRAVE: I still object. It calls for the
24 witness to state conclusions and to speculate as to the state

1 of mind as to others and what they understood and didn't
2 understand.

3 THE COURT: Overruled.

4 A. Sir, could you ask your question again please?

5 COURT REPORTER: So there is no question that what
6 responsible persons at Monsanto knew how the EPA defined
7 exposure and knew that relatively little weight was to be
8 given to exposure, isn't that correct, sir?

9 A. No, sir. That is not correct. The EPA puts very
10 heavy weight on exposure. I deal with several EPA committees
11 routinely and they put a very heavy weight on exposure.

12 Q. Doctor, didn't we just discuss and didn't you find
13 out the words relatively little weight is given to exposure?

14 A. I also pointed out my interpretation that you have
15 to put exposure in as a consideration when you are trying to
16 determine whether or not a substantial risk exists.

17 Q. Doctor, do you understand that the United States
18 Congress promulgated this law and the regulations made under
19 it were made by the EPA and that these are definitions made
20 in conformance with the law the way the federal government
21 wants the law to read?

22 A. Yes, sir.

23 Q. You understand that, don't you, sir?

24 A. Yes, sir.

1 Q. And you understand that neither you nor me, whether
2 we agree with it or not, whether we think it is right or
3 think that it is wrong, as law abiding citizens, we are
4 obligated to obey that law?

5 A. Yes, sir.

6 Q. And what the law tells you to give relatively
7 little weight to exposure because these health hazards are so
8 terrible and so bad that the mere fact that the implicated
9 chemical is in commerce constitutes sufficient evidence of
10 exposure. You don't think that you or I or Monsanto has the
11 right to ignore that law, do you, sir?

12 A. I don't think that is what the law says, though,
13 sir.

14 Q. Well, didn't I just read it that that is exactly
15 what it says? Relatively little weight is to be given to
16 exposure. Didn't I read that correctly?

17 A. You read those few words very correctly.

18 Q. Well, let me read it again for you. What
19 constitutes substantial risks. A substantial risk of injury
20 to health or the environment is a risk of considerable
21 concern because of, A, the seriousness of the effect. See
22 subparts A, B and C below and this is referring to the human
23 health effects, isn't that correct, sir?

24 A. Yes, sir.

1 Q. Because of the seriousness of the effects and see
2 below for an illustrative list of effects of concern. And,
3 B, the fact or probability of its occurrence. Economic or
4 social benefits of use or costs of restricting use are not to
5 be considered in determining whether a risk is substantial.
6 These 2 criteria are differently weighted for different types
7 of effects. The human health effects listed in subpart A
8 below, for example, are so serious that relatively little
9 weight is given to exposure. The mere fact the implicated
10 chemical is in commerce constitutes sufficient evidence of
11 exposure. Now, that is for human health effects. The other
12 significant levels of exposure deal with environmental
13 effects and emergency incidents and things of that sort. The
14 human health effects are so serious, doesn't it say, the
15 human health effects listed in subpart A below, for example,
16 are so serious that relatively little weight is given to
17 exposure. The mere fact the implicated chemical is in
18 commerce constitutes sufficient evidence of exposure. Isn't
19 that exactly what it says, sir?

20 A. But if you read on under human health effects
21 provided if one or a few chemicals is strongly implicated.
22 So this has to be implicated.

23 Q. That is a separate point.

24 A. But it has to be tied in with this.

1 Q. Doctor Mieure, that is a separate point and we can
2 discuss that in a moment. If a chemical is indicted, is
3 charged with causing serious health effects such as cancer
4 and death, do you not agree that those are substantial health
5 risks, adverse effects?

6 MR. MUSGRAVE: Well, I object now. Are you asking
7 him again to interpret the law, Mr. Carr? Are you asking him
8 about a personal opinion without regard to this particular
9 exhibit?

10 THE COURT: Objection is overruled.

11 MR. MUSGRAVE: You are misquoting what the
12 regulations even say, Mr. Carr.

13 THE COURT: Objection is overruled.

14 Q. Do you consider cancer a serious health effect?

15 A. Cancer is a serious health effect. Some forms of
16 cancer are very serious.

17 Q. Do some reputable scientists say that soft tissue
18 sarcomas can be caused by exposure to dioxin?

19 A. I don't know.

20 Q. You don't know that?

21 A. That is correct.

22 Q. You never heard that?

23 A. Oh, I have read it in the press. I have read it in
24 the press that there may be a link but you asked me do some

1 reputable scientists. No, I can't comment on that.

2 Q. You read it in the press that soft tissue sarcomas
3 have been associated with and caused by TCDD, haven't you,
4 sir?

5 MR. MUSGRAVE: I object to the relevancy of what he
6 may have read in the press, Your Honor. It has no weight to
7 the probative value in this lawsuit and I object to it.

8 THE COURT: Overruled.

9 A. Sir, I have read conflicting evidence on that.

10 Q. Well, but it is a potential substantial risk, isn't
11 it, sir? Conflicting or not?

12 A. I don't know, sir.

13 Q. Doctor, don't you understand that by this law, the
14 law is setting up an agency that under our system is to make
15 a decision whether or not action should be taken against a
16 particular batch of chemical or whether or not it should go
17 out, whether or not it should be, the public should be
18 exposed to it. That function belongs to the EPA. You
19 understand that, don't you, Doctor Mieure?

20 A. No, sir. That function belongs to the company
21 first and then to EPA.

22 Q. I am sorry?

23 A. That function belongs to the company or to the
24 individual first and then to the EPA. The regulations

1 clearly state that.

2 Q. Yes. The company is charged with the duty?

3 A. That is correct.

4 Q. Isn't it, sir?

5 A. Yes, sir.

6 Q. And it is charged with the duty of determining
7 whether or not it produces things and puts into commerce
8 things that can cause serious health effects, isn't it, sir?

9 A. Yes.

10 Q. And you know that TCDD is a much more serious
11 poison than Saccharin or water. You know that, don't you?

12 MR. MUSGRAVE: I object to the vagueness of the
13 question.

14 THE COURT: Overruled.

15 Q. And surely, Monsanto is not equating TCDD with
16 water or Saccharin in the human environment. You are not
17 equating that, are you, sir?

18 A. Are you asking me as Jim Mieceur?

19 Q. Well, you brought up the subject water and
20 Saccharin.

21 A. Yes, I did.

22 Q. And I thought perhaps Monsanto might share your
23 view?

24 MR. MUSGRAVE: That is a different context too, Mr.

1 Carr.

2 THE COURT: Go ahead, Mr. Carr.

3 Q. You don't consider, do you, Doctor Mieux, that
4 TCDD and Saccharin and water have the same toxicity?

5 A. I believe they are all subject to the same type of
6 risk assessment procedures, sir.

7 Q. And does Monsanto share that view, sir?

8 A. I don't know, sir.

9 Q. Well, do you understand that the company is charged
10 with the duty to report chemicals to the EPA if that chemical
11 might injure someone? Do you understand that?

12 A. No, sir. I don't believe that is what --

13 Q. You don't understand that either?

14 A. I don't believe that is what the regulation says.
15 If it might injure someone. That isn't what the regulation
16 says.

17 Q. Well, to use your language, if it is a potential
18 substantial risk, I think that is the language that you use
19 in interpreting the law?

20 MR. MUSGRAVE: Are you asking him what the law say,
21 Mr. Carr? Are you asking what he says? I object to that,
22 Your Honor.

23 MR. CARR: Right now I am asking what he said a
24 potential substantial risk.

1 THE COURT: Objection is overruled.

2 A. Yes. That is what I said.

3 Q. And, Doctor, don't you believe that it is the EPA's
4 duty and obligation under the law and not Monsanto's to make
5 the ultimate decision of whether or not a particular chemical
6 should or should not be put into commerce, depending on its
7 toxicity, depending upon the effects of what might happen?
8 Don't you believe that that is the EPA's obligation?

9 A. You are talking about new chemicals?

10 Q. Any chemical that has in it those things that might
11 injure people?

12 A. No, sir. The rules and the law clearly stipulate
13 that it is first Monsanto's responsibility.

14 Q. And if Monsanto --

15 A. And is if Monsanto is comfortable enough with the
16 material, if Monsanto feels with adequate degree of certainty
17 that there is no substantial risk then there is no reporting
18 need be to EPA at all.

19 Q. What level of TCDD must the product contain before
20 Monsanto is obligated under the law to report it? A million,
21 4 hundred thousand parts per billion, one part per billion?
22 What is the level?

23 A. I wouldn't know that, sir.

24 Q. Well, you do know what Doctor Paget said was the

1 medically acceptable level for Santophen, don't you, sir?

2 A. I believe you showed me something earlier today
3 that, today or yesterday that had a number on it.

4 Q. One part per billion is what he described as
5 probably medically acceptable, that is, probably would not in
6 his judgment at that time, not necessarily what he believes
7 today but in his judgment would not cause any, the only
8 serious health effect for exposure to TCDD, that is,
9 chloracne. You understand that, don't you?

10 MR. MUSGRAVE: I object to counsel cross examining
11 the witness about what others have testified to and I object
12 to the question as not accurately representing the testimony
13 in the entirety of Doctor Paget. It is improper cross
14 examination.

15 THE COURT: Overruled. It is proper cross
16 examination. Overruled on both grounds.

17 Q. You understand that Doctor Paget set the level. I
18 think we went through that one part per billion for
19 Santophen?

20 A. I believe you showed a memo which was written by
21 Doctor Wilson which reported on something that Doctor Paget
22 was alleged to have said about probably, yes, sir.

23 Q. And he found, he reported that in that, Doctor
24 Wilson reported that Doctor Paget said that in 1979 relative

1 to Santophen, and Santophen, you know, is going to be greatly
2 diluted before it gets to the nursery, to the hospital
3 floor. You know that, don't you, sir?

4 A. No, sir.

5 Q. You don't know that, sir?

6 A. No, sir. I don't know how Santophen is used. I
7 testified to that already.

8 Q. You don't know how Lysol is used?

9 A. No, sir. I have never used it.

10 Q. And you never read anything? Ahs your wife ever
11 used Lysol?

12 A. We don't use that product.

13 Q. You have never heard what -- do you have the
14 vaguest idea, Doctor Mieure, of what Lysol is used for?

15 A. It is a disinfectant, I know that.

16 Q. Then you do know what it is used for. You don't
17 think they use it just pure, do you, sir?

18 A. I don't know. Some disinfectants are used pure,
19 some are diluted.

20 Q. Doctor, do you consider that it should be the EPA
21 to decide the levels that your chemical could go out to the
22 public or should it be Monsanto's place to decide that level?

23 MR. MUSGRAVE: I object. It has been asked and
24 answered.

1 THE COURT: Overruled.

2 A. In what context, sir?

3 Q. In 2,4 dichlorophenol or Santophen or
4 orthochlorophenol-crude or pentachlorophenol or any of the
5 chlorinated phenols?

6 A. In what kind of a use? That makes a big
7 difference. There are many different branches of EPA. Are
8 you talking about significant risk?

9 Q. Just when they go out in commerce. When they leave
10 the gate. Consider not the use at all but just consider that
11 they are going to leave the plant. Now, who should set the
12 levels? What is the responsible governmental agency that
13 sets the levels of what this product can contain or should
14 contain by way of TCDD or other furans or other
15 dibenzo-p-dioxins when it leaves the plant? Who makes that
16 decision?

17 A. You are talking about Santophen now?

18 Q. All of the chlorinated phenols.

19 A. They are regulated differently, sir.

20 Q. They are regulated differently?

21 A. Certainly.

22 Q. What regulations are different?

23 A. Well, I believe Santophen, for example, is
24 registered under FIFRA.

1 Q. You believe that Santophen can go out without
2 obliging and reporting to the EPA?

3 A. No. FIFRA is administered by EPA.

4 Q. And you think that Santophen is under the FIFRA
5 regulations?

6 A. I believe so.

7 Q. Doctor Mieure, the question that I am asking you is
8 who makes the determination that is under FIFRA? TSCA, 2,4
9 dichlorophenol or whatever. Who makes the determination?

10 A. Well, it is going to be different in each case,
11 sir.

12 Q. Who makes it? The company or the government? The
13 EPA or Monsanto?

14 A. In some cases it is one. In some cases it is the
15 other.

16 Q. And you think that Monsanto has the right to
17 determine that?

18 A. Yes, sir. The rules stipulate that. The
19 regulations stipulate what we do.

20 THE COURT: Is this a good point in which to break?

21 MR. CARR: Yes.

22 THE COURT: Ladies and gentlemen, we will adjourn
23 for the day at this time. I want to remind you that you are
24 not to discuss this matter among yourselves or with anyone

1 outside the panel or read, listen to or watch anything in the
2 media about this case in particular or the subject matter in
3 general. We will start again tomorrow morning at 9:30. Have
4 a good evening. Court is adjourned.

5 COURT ADJOURNED:
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1 STATE OF ILLINOIS)
2 TWENTIETH JUDICIAL CIRCUIT) SS
3 COUNTY OF ST. CLAIR)
4

5 I, Kimberly Ganz, one of the Official Court Reporters, do
6 hereby certify that the foregoing transcript is a true and
7 correct transcript of the proceedings had in the
8 above-entitled cause.

9 Dated this 16 day of April, 1985.
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14 KIMBERLY GANZ
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1 STATE OF ILLINOIS)
2 TWENTIETH JUDICIAL CIRCUIT) SS
3 COUNTY OF ST. CLAIR)
4

5 I, RICHARD P. GOLDENHERSH, one of the Judges in and for
6 the Twentieth Judicial Circuit, do hereby certify that the
7 foregoing transcript is a true and correct transcript of the
8 proceedings had in the above-entitled cause.

9 Dated this 16 day of April, 1985.

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HON. RICHARD P. GOLDENHERSH

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