

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

3 FRANCES E. KEMNER, et. al.)
)
4 Plaintiffs,)
)
5 VS.) NO: 80-L-970
)
6 MONSANTO COMPANY,)
)
7 Defendant.)

8
9
10 REPORT OF PROCEEDINGS

11 Before the HON. RICHARD P. GOLDENHERSH

12 JURY TRIAL

13 April 11, 1985

14
15 APPEARANCES:

16 Mr. Rex Carr
17 Mr. Jerome Seigfreid
 On Behalf of the Plaintiffs;

18 Mr. John Musgrave
19 Mr. Joseph Nassif
 On Behalf of the Defendant.

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23 Debra M. Musielak, CSR, CM
24 Official Court Reporter

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EXHIBITS SUBMITTED ON BEHALF OF THE PLAINTIFF:

Plaintiff's Exhibit No.:

1267A	(Blow-up of 1267)	35		36
1287	(report)	70		71
1288	(memo)	82		83
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1 BE IT REMEMBERED, that on the 11th day of April,
2 1985, the same being one of the regular judicial days of said
3 court, the above-styled cause came on regularly for hearing
4 before the HONORABLE RICHARD P. GOLDENHERSH, one of the
5 Judges at the St. Clair County Building, 10 Public Square, in
6 the City of Belleville, County of St. Clair, State of
7 Illinois. Whereupon the following proceedings were had:

8 COURT CONVENED:

9 (The following proceedings were had in Chambers, outside the
10 presence of the jury.)

11 MR. NASSIF: I wanted to tell you, Your Honor, that
12 we have found copies of Mr. Park's notes, handwritten notes
13 of the minutes, that we have produced to Mr. Carr.

14 THE COURT: Oh, good.

15 MR. NASSIF: The typewritten versions, and we --
16 since you have ordered us to produce the minutes, we are
17 preparing a group of the notes for your review. We are going
18 to have them to you before noon.

19 THE COURT: All the notes?

20 MR. NASSIF: All the notes of all those minutes.

21 THE COURT: For in camera --

22 MR. NASSIF: For in camera inspection, we will have
23 them to you before noon so you can look at them. They are
24 very brief.

1 THE COURT: Great. Could you -- which exhibit is
2 that?

3 MR. CARR: Parks is going to be put on the stand
4 this morning.

5 THE COURT: Where are the notes?

6 MR. NASSIF: I've got-- I got them this morning, he
7 found them last night. And I got them this morning, they are
8 being copied right now, I can have them up here sooner.

9 THE COURT: If he's going to be on this morning, I
10 definitely want them sooner, and then -- which exhibit is
11 that, are the minutes?

12 MR. NASSIF: They haven't all been introduced.

13 THE COURT: Why don't you have them copy the
14 minutes, too?

15 MR. NASSIF: Okay, so you have a copy of minutes
16 next to the notes?

17 THE COURT: Exactly.

18 MR. NASSIF: We will do that.

19 THE COURT: Try and get them up within an hour.

20 MR. NASSIF: I'll do that, I'll call back.

21 THE COURT: At the eleven o'clock break, I can look
22 at them.

23 MR. NASSIF: I wanted to let you know that right
24 away.

1 THE COURT: Wonderful.

2 MR. NASSIF: The other thing is, we have the

3 Suskind information. We are copying it.

4 THE COURT: Good.

5 MR. NASSIF: And -- did Shelia talk to you about --

6 THE COURT: Yeah.

7 MR. NASSIF: What Suskind wants or University of

8 Cincinnati wants?

9 THE COURT: I'm not too clear on it either. Did

10 she talk to you about that?

11 MR. CARR: She wants to deliver the documents to us

12 in your presence.

13 THE COURT: Right.

14 MR. NASSIF: Okay. All right.

15 THE COURT: And then apparently Dr. Suskind wants

16 -- I will sign something saying that whatever was delivered

17 was delivered in my presence or something to that effect.

18 MR. NASSIF: Okay. We will put that together for

19 you then that should happen fairly soon.

20 THE COURT: All right.

21 MR. NASSIF: Okay, that's it.

22 (The following proceedings were had in open court.)

23 THE COURT: Good morning.

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JAMES MIEURE

(being called as a witness on behalf of the Plaintiff under
Section 2-1102, having been previously sworn, having resumed
the witness stand, continued to testify as follows)

CROSS EXAMINATION

BY MR. REX CARR

Q. Dr. Kaley, at the close of business yesterday, we
were discussing --

A. I think you mean Dr. Mieure.

Q. I'm sorry, I do have Kaley on my mind, don't I? I
don't know why, either. Dr. Mieure, at the close of business
yesterday, we were discussing the your view of what you
believe Monsanto was obligated to do, and if I understood you
correctly, it was your position that the ultimate use of the
product and the fact that it will be diluted before it gets
to the ultimate consumer, and that exposure might be reduced
thereby, was something that you believe Monsanto had the
right to consider and to make the determination that that
exposure was in your judgment not significant, then you
believe that it was Monsanto's right not to inform the EPA
that a chemical that you were producing and placing in
commerce had toxic substances of a nature that might cause
cancer, death, and serious disability, is that a correct
summation of your view, Dr. Mieure?

1 A. No, sir.

2 Q. Okay. Could you advise me of the respect in which
3 it is erroneous?

4 A. Well, for one instance you mentioned that I talked
5 about dilution of the material. I didn't talk anything about
6 dilution of the material. I don't know what you asked me
7 specifically if I knew whether some of the materials were
8 diluted or not, and I said no, I did not know that.

9 Q. Well, dilution has a great deal to do with whether
10 or not in your view or Monsanto's view any significance --

11 A. I don't speak for Monsanto's view, sir, you asked
12 me what my view was.

13 Q. Dr. Mieure, you must -- if you do not accept the
14 definition that the government gives you, the government says
15 give relatively little weight to exposure, just consider that
16 once it gets into commerce that there will be an exposure,
17 that is what the law, not the regulation, but what the
18 Federal law states, isn't it, sir?

19 A. I don't believe so.

20 MR. MUSGRAVE: Just a moment, Dr. Mieure.

21 Q. You don't --

22 MR. MUSGRAVE: Just a moment, Mr. Carr, please, I
23 would like my objection to be noted again today as a
24 continuing objection to continued cross examination to this

1 witness about what the law says or what his view is of the
2 law, and also continued objection to counsel's statements as
3 to what he believes or perceives the law to be is totally
4 improper, number one, and calling also upon this witness to
5 testify as an expert with regard to the law when that is a
6 question for the Court.

7 THE COURT: I will incorporate my ruling from
8 yesterday. I'll note this is a continuing objection. I will
9 allow the question to go on as I feel it is proper.

10 MR. MUSGRAVE: Thank you, Your Honor.

11 MR. CARR: In as much as it has been noted a number
12 of times that it is a continuing objection, might counsel
13 refrain from interrupting and making that same objection
14 because it does, as he well knows, stop the continuity of the
15 cross examination and requires me to repeat the question,
16 requires the witness to have the question repeated and drags
17 this process out on forever, and counsel has asked in the
18 past to have a continuing objection, he's been granted a
19 continuing objection, but yet he continues to make the
20 objection.

21 MR. MUSGRAVE: I just want to make it clear that
22 today --

23 THE COURT: This is the start of a new day, so I'll
24 allow it for now, but you understand it is a continuing

1 objection so you don't have to restate it.

2 MR. MUSGRAVE: Just want to be sure it's clear what
3 the objection is.

4 THE COURT: Fine.

5 Q. (by Mr. Carr) Dr. Mieure, did we not establish
6 yesterday that the act states that the mere fact the
7 implicated chemical is in commerce constitutes sufficient
8 evidence of exposure? Didn't we establish that yesterday?
9 Didn't you agree that's what the act states?

10 A. No, sir, I have the act in front of me as you
11 provided, I don't see that in there at all.

12 Q. Well, would you look in the Monsanto Exhibit 880?

13 A. I'm looking in the exhibit that you provided.

14 Q. Look at Monsanto.

15 A. 1283.

16 Q. No, because I didn't give you but one section, I
17 just gave you the section. Look at the exhibit that Monsanto
18 gave you which is the entire section that deals with what
19 constitutes substantial risk. I was asking you about that
20 yesterday.

21 A. Do you know what exhibit that is?

22 Q. Monsanto Exhibit 881 or Monsanto Exhibit 880, both
23 exhibits contain that. 881 is the part that was sent out to
24 the employees of Monsanto.

1 A. It's not here.

2 THE COURT: Gentlemen, could you approach the bench
3 for a minute, please?

4 (The following Side Bar conversation was had outside the
5 hearing of the jury.)

6 THE COURT: I have taken some pretty careful notes
7 on this, as I have on the rest of it, and I think your
8 contention that yesterday he did agree to that is an accurate
9 reflection. We have had too many situations where other --
10 where a subject has been taken up and one conclusion has
11 finally been reached and then the conclusion is changed and
12 we have to go through the same routine again, not just on
13 this witness but on others. Under those circumstances, if
14 you wish, I will allow you when a change like this has taken
15 place to pose the conclusion that was reached before as
16 something that he can assume. And proceed from there.

17 MR. CARR: All right.

18 THE COURT: Because I am frankly, I think that this
19 has happened too many times. It's gone too far, and when I
20 determine that a prior conclusion was reached, I allow you to
21 do that because I don't think this trial is long enough going
22 through it the first time without having to go through a
23 substantial section of it two or three times. And, I think
24 that you can properly assume those matters which have been

1 established in prior testimony after a considerable length of
2 interrogation. Now, that's at your option. If you don't
3 want to do it you don't have to, but I will allow you to do
4 it if you wish to do so.

5 MR. MUSGRAVE: For the record, I simply state that
6 I disagree, that this is a change in any kind of witness'
7 testimony, and I disagree that it would be proper for it to
8 be assumed as a hypothetical.

9 THE COURT: Fine, so noted.

10 (The following proceedings were had in open court.)

11 Q. And do you have Monsanto Exhibit 880, counsel?

12 MR. MUSGRAVE: Do I have it?

13 MR. CARR: Yes, because apparently the witness
14 doesn't have it.

15 MR. MUSGRAVE: It's up there.

16 THE COURT: Are those clipped together for a
17 purpose?

18 THE CLERK: No, they were just keeping them
19 separate from the Plaintiff's.

20 MR. MUSGRAVE: I beg to differ, I apologize,
21 apparently she had took them to copy them, they are here.

22 Q. (by Mr. Carr) Dr. Mieux, I'm sure that you have
23 had an education that would permit you to retain from
24 yesterday to today what we discussed yesterday, you do have

1 that kind of education, don't you, Dr. Mieure?

2 A. I believe so.

3 Q. And just two seconds ago or ten seconds ago, you
4 said that we had not discussed this, and you had not agreed
5 to that, you remember that, sir?

6 A. I said I had not agreed that that was part of the
7 act. This is the act, sir.

8 Q. And you are telling me now that you don't believe
9 that Monsanto Exhibit 880 states what the EPA has told you
10 what the law is?

11 A. Sir, you asked me a few minutes ago if I agreed
12 that the act itself talked about certain parameters, and you
13 gave me a copy of the act, I read from that, I read Section
14 8E from the act, it doesn't say anything about that. That's
15 what you asked me.

16 Q. Dr. Mieure, would you look at Exhibit 880, 881,
17 that Mr. Musgrave inquired of you?

18 A. I have 881 in front of me.

19 Q. Turn to the second to the last page Exhibit 881 and
20 do you recognize that as the notice that that was in the
21 Federal Register made by the EPA which discussed the act in
22 question, the Toxic Substances Control Act and which you were
23 advised of and others where advised of at Monsanto?

24 A. This is an explanatory document of part of the act,

1 yes.

2 Q. You understand it's part of the act, don't you,
3 sir?

4 A. I don't believe it's part of the act.

5 Q. You just got through saying it was part of the act?

6 A. I said it's an explanatory note of the act.

7 Q. I'm sorry? And you said and part of the act is
8 exactly what you said, Dr. Mieure?

9 A. Maybe I'm misinformed, but I am under the
10 impression that Congress passes acts, EPA then would write
11 regulations around the act.

12 Q. Administers the acts, tells you what you as a
13 company must do, how you are to interpret this particular
14 act, tells you what rules you, isn't that correct, sir?

15 A. Yes.

16 Q. Now, did we not establish yesterday, that you are
17 -- that the regulations and the act require that you give
18 little weight to exposure and that the mere fact the chemical
19 is in commerce constitutes sufficient evidence of exposure?

20 A. No, sir, I did not agree to that.

21 Q. I want you to assume, Dr. Mieure, so that we don't
22 have to spend any more time on this that you did agree that
23 document 881 in discussing what constitutes substantial
24 risks, that you agreed yesterday evening that it did state

1 that in that second column on the second to last page, will
2 you assume that, Dr. Mieure?

3 MR. MUSGRAVE: State what you are asking him to
4 assume that certain words are in the regulation, I have no
5 objection to that, you asking him to assume certain
6 conclusions?

7 MR. CARR: Your Honor, he can direct the witness to
8 assume that which I stated to him.

9 MR. MUSGRAVE: I object, it assumes facts not in
10 evidence.

11 THE COURT: Overruled.

12 Q. Dr. Mieure, you understand that I am not required
13 now to continue to cross examine you on this point because
14 the Court has instructed you to assume that you did say what
15 I said, what I just said that you said yesterday. Will you
16 do that now, will you assume that?

17 A. You said I have no choice.

18 Q. That's correct.

19 A. Okay.

20 Q. Now, assuming that to be the case, Dr. Mieure,
21 don't you agree that Monsanto thereby must not give any
22 weight to whether there will or will not be any exposure to
23 the chemical when it considers whether or not it's to notify
24 the EPA?

1 A. No, sir.

2 Q. You don't agree to that?

3 A. No, sir.

4 Q. Doctor, do you believe, then, that Monsanto is
5 above the law and above what the EPA says is the law?

6 A. No, sir.

7 Q. Then you do believe that Monsanto is required to
8 obey the law as administered by the EPA?

9 A. Certainly.

10 Q. And if I tell you to assume that the law says that,
11 I take it you are still not willing to agree that Monsanto
12 must obey that law?

13 A. You've twisted the law so much I can't make any
14 sense out of it.

15 Q. And I take it that that is Monsanto's view that the
16 law as I've stated it and as the Court has told you to assume
17 that you said yesterday, has been twisted so much that you
18 can't make sense out of it?

19 A. You know well that I don't speak for Monsanto, I'm
20 speaking for myself.

21 Q. No, at this point in time whether you realize it or
22 not, you are speaking for Monsanto, you are their employee,
23 you are their agent, you've discussed this matter at length
24 with their attorneys, you are here under oath, and you are at

1 this point in time, whether you realize it or not, you are
2 speaking for Monsanto within the area of your authority.

3 MR. MUSGRAVE: I object to that.

4 Q. Your authority --

5 MR. MUSGRAVE: Just a moment, I object to counsel's
6 speech, it is not a question, it is improper statement and
7 this witness is not here speaking on behalf of Monsanto on
8 legal matters and legal interpretations and the witness has
9 so testified, it's improper, I object to it and I request the
10 jury be instructed to disregard the speech by Mr. Carr.

11 THE COURT: Overruled, it is proper and it is a
12 direct characterization of this witness' position on the
13 matters within his authority. Overruled.

14 Q. (by Mr. Carr) Dr. Mieux, you do understand that
15 Mr. Musgrave is the one that asked you about Exhibit 881, you
16 understand that, don't you, sir?

17 A. Yes, that's a Defendant's Exhibit.

18 Q. And you do understand that he is at this point in
19 time the absolute representative of Monsanto in the
20 courtroom, you understand that?

21 A. If you say so.

22 Q. Don't you understand that Mr. Musgrave is
23 representing Monsanto in this case?

24 A. Certainly.

1 MR. MUSGRAVE: Object, irrelevant and immaterial.

2 THE COURT: Overruled.

3 Q. Don't you understand that when he asks you
4 questions about a particular exhibit he's asking you in
5 behalf of Monsanto?

6 A. Yes.

7 Q. And don't you know that he's representing to this
8 Court and to this jury that you will testify to the truth
9 about this exhibit, you do know that, don't you?

10 A. As best I know it, yes, sir.

11 Q. Now, are you saying that it is so twisted now, that
12 you sitting on this witness stand as the witness at this
13 point in time, that you don't understand it to mean that you
14 are to disregard the question of exposure once it goes into
15 evidence, once it goes into commerce, is that what you are
16 saying, Dr. Mieux?

17 A. I'm saying you've twisted it around so much that
18 isn't -- you've changed the meaning of the words.

19 Q. Let me give the words exactly as it says in
20 Monsanto Exhibit 881. "The mere fact the implicated chemical
21 is in commerce," you understand that I didn't twist that did
22 I, sir? "The mere fact that the implicated chemical is in
23 commerce," you know exactly what that means, once it leaves
24 the Monsanto plant it's in commerce, you understand that

1 don't you, sir?

2 A. Yes, sir.

3 Q. The next sentence is, "Constitutes sufficient
4 evidence of exposure." Now, you understand what the word
5 constitutes means, don't you, sir?

6 A. Yes, I believe so.

7 Q. It means it is. And, sufficient, that means
8 enough, you don't need any more, sufficient is all you need,
9 correct, sir? You've got all you need, isn't that right,
10 sir?

11 A. Sufficient, yes.

12 Q. And you know what the word evidence means, means
13 proof of something?

14 A. Uh-huh.

15 Q. And you know what exposure means, that means that
16 people have been exposed to the -- people have come in
17 contact with it, you understand that, what that means?

18 A. I understand the meaning of the word exposure.

19 Q. Now, you understand the meaning of all those words,
20 don't you, sir?

21 A. Yes, sir.

22 Q. And you understand and have I twisted in any way
23 the meaning of that phrase, sir?

24 A. Not yet.

1 Q. And it means, does it not, that the fact once it
2 leaves the plant that is sufficient evidence that people are
3 going to be exposed to it?

4 A. (Pause) that's what that little sentence means,
5 that little clause, that little phrase.

6 Q. Very good. Now, Dr. Mieure, we understand then
7 that once it leaves the plant you don't worry about whether
8 there will be or will not be exposure because the law
9 understands that the tank car might break down in Sturgeon,
10 it might not get there?

11 A. That isn't what those words say.

12 Q. Dr. Mieure, once it leaves the plant it's in
13 commerce, isn't it?

14 A. What is it?

15 Q. The implicated chemical, exactly what the word
16 says?

17 A. Where does it say implicated chemical?

18 Q. Would you read it, Dr. Mieure, do I have to go
19 through it again? I just read it, implicated chemical, exact
20 words of that?

21 A. Okay, yes, sir.

22 Q. Once it leaves the plant, you've got to assume that
23 people will be exposed to it?

24 A. Uh-huh.

1 Q. Isn't that what it says?

2 A. Once the chemical is implicated.

3 Q. Once the chemical is implicated, no, it says the
4 implicated chemical, the chemical we are talking about, the
5 chemical that may cause cancer or death or other adverse
6 serious health effects, you understand that's the meaning of
7 that?

8 A. But it has to be implicated.

9 Q. Dr. Mieure, do you understand that, sir?

10 A. Yes, I understand it, sir, it has to be implicated
11 before any of this applies. It has to be implicated.

12 Q. Has to be the chemical that you are talking about
13 that has the substance in it that can cause cancer, death, or
14 serious health effects, isn't that correct, sir?

15 A. Doesn't say that here.

16 Q. Dr. Mieure --

17 A. Says the implicated chemical.

18 Q. And what do you understand that they are talking
19 about when they say the implicated chemical?

20 A. Talking about a chemical that would exhibit certain
21 health effects.

22 Q. Yes, exactly what it says. Now, TCDD does exhibit
23 certain health effects, we agreed to that yesterday, didn't
24 we, sir?

1 A. Certain ones, yes.

2 Q. And among those are cancer and serious bad effects,
3 correct, sir?

4 A. I don't know that.

5 Q. Didn't you agree yesterday that those have been
6 attributed to TCDD?

7 A. No, sir.

8 Q. Your Honor, will you direct the witness to assume
9 that he did agree yesterday that those were things that had
10 been laid?

11 MR. MUSGRAVE: I object to that, that's totally
12 improper, that's not what he agreed to Mr. Carr, you examined
13 him about whether he had seen newspaper articles about a
14 controversy. Now you are asking him whether he agrees, you
15 are not asking him what he read in the newspaper and was
16 aware of controversies, he did not testify yesterday he
17 agreed with you, he testified he had seen newspaper --

18 Q. I will exceed to that.

19 MR. MUSGRAVE: Wish you will.

20 Q. I want you to assume that there is in this case
21 evidence of toxicologists and of doctors, that implicate TCDD
22 in causing cancer, in causing neuropathies, in causing
23 neuro-psychiatric disorders. One moment, I have a blow-up of
24 the chart in question? That the toxic effects have been

1 described as Chloracne, porphyria cutanea tarda,
2 hyperpigmentation and hirsutism, liver damage, elevated serum
3 hepatic enzyme levels, disorders of fat metabolism, disorders
4 of carbohydrate metabolism, cardio-vascular disorder, urinary
5 tract disorder, respiratory disorders, pancreatic disorders,
6 polyneuropathies, sensory impairments, sight, hearing, smell,
7 taste, neurasthenic or depressive syndrome, and in addition
8 to that, cancer. I want you to assume that those things are
9 true, will you do that, sir?

10 A. If the Judge so instructs.

11 THE COURT: You must assume those, it's proper put
12 to you to you assume.

13 A. I beg your pardon.

14 THE COURT: It's properly put to you to assume, you
15 have to assume those.

16 Q. Would you agree that that's included in the health
17 effects that implicate the chemical?

18 A. Now would -- excuse me.

19 Q. Would you agree that that substance in a chemical
20 is within the definition of implicated chemical?

21 A. No, sir.

22 Q. And, Dr. Mieure, are you assuming that the TCDD
23 causes those things or can cause those things?

24 A. You told me -- you and the Judge told me to assume

1 that.

2 Q. Are you assuming that in your answer right now?

3 A. Yes, sir.

4 Q. And, we do know that it's in 2,4 dichlorophenol, we
5 know that, don't we, sir?

6 A. I don't know that it's in there now.

7 Q. Didn't we just establish, assume that it's been
8 established in this case that TCDD at certain levels up to
9 480 parts per billion is in 2,4-dichlorophenol, and it's in
10 Santophen and in orthochlorophenol, would you assume that,
11 please?

12 MR. MUSGRAVE: Object, no evidence of that, and
13 again, he's asking a question assuming that that level or
14 levels are in all of those all products manufactured by
15 Monsanto, and that is totally contrary to the evidence.

16 THE COURT: Overruled. The way the assumption was
17 phrased, it's a proper assumption.

18 Q. Now, assuming that, Dr. Mieure, do you now agree
19 that the chemical was implicated?

20 A. No, sir.

21 Q. Are you assuming now that TCDD's and 2,3,7,8 are in
22 the chemicals? Are you assuming that?

23 A. I was instructed to assume that.

24 Q. Are you doing it?

1 A. Yes, sir.

2 Q. Are you assuming that it will cause those health
3 effects, including cancer, that I've told you to assume?

4 A. Yes, sir.

5 Q. And are you also assuming that it's going to leave
6 the plant?

7 A. Yes, sir.

8 Q. Now, is there anything else that you need to assume
9 before you will decide that you don't need to consider
10 whether or not there is going to be exposure?

11 A. No, sir.

12 Q. Then, we have laid the complete foundation for that
13 which eliminates the need for discussing exposure, correct,
14 sir?

15 A. Then you have laid --

16 Q. All of the things are present and you now disregard
17 exposure because what we just --

18 A. No, sir.

19 Q. What we have just been reading says we does regard
20 it?

21 A. No, sir.

22 Q. What have we left out?

23 A. You said all the elements would be there to make
24 the determination.

1 Q. Haven't we got the elements?

2 A. No, sir.

3 Q. Got it in the chemical, have we not?

4 A. You have what in the chemical? TCDD.

5 MR. CARR: Would you direct the witness to quit
6 this fencing, because we could take forever if I have to
7 re-establish everything with the witness, he knows exactly
8 what I mean.

9 THE COURT: Why don't you rephrase the question
10 with all the points established.

11 Q. Assume, if you will, that the 2,3,7,8-TCDD is in
12 the chemical that's being manufactured, one or more of the
13 chemicals being manufactured by Monsanto, chlorinated
14 phenols. Assume, if you will, that the 2,3,7,8-TCDD has the
15 health effect, the toxic effect in man, including cancer,
16 that I've asked you to assume; and assume that it's going to
17 leave the plant. Now, is there anything else that we need to
18 show before that can be considered to be in, that it will
19 have exposure to humans?

20 A. That it will have exposure to humans, yes, sir.

21 Q. What else?

22 A. You would need to show, as it says in the documents
23 that you've asked me to look at, you would need to show that
24 the chemical was strongly implicated and that hasn't been

1 shown the chemical was shipped, the chemical in question
2 here.

3 Q. Dr. Mieure, I'm asking you to assume, and if you
4 will please, Your Honor, direct the witness that he is now
5 backing off of the assumption, because I've asked you to
6 assume that it causes those things.

7 A. You said --

8 Q. That there is evidence that it causes those
9 things.

10 A. That what causes those things that the TCDD or --.

11 MR. CARR: Your Honor, I'm --

12 THE COURT: We are not going to go through this
13 again, that assumption was clearly stated and you have been
14 required by me, you checked it with me for clarification, you
15 have to take the assumption that's there. I think Mr. Carr's
16 characterizations are true, you are backing off of it, you
17 are ordered to take it as assumed. Now, Mr. Carr, will you
18 proceed.

19 MR. MUSGRAVE: May my objection be shown on the
20 record, Your Honor, to the Court's order. The question
21 hypothesizes certain facts, and I previously object to the
22 hypothesizing of those. But does not hypothesize the fact
23 obviously is necessary for this witness to answer the
24 question. Mr. Carr is not permitting him to so state the

1 necessary elements that he needs, and I don't see anything
2 wrong with the witness' answer. I object --

3 THE COURT: I completely disagree. This question
4 was the result of the witness saying what element he needed.
5 I think your objection is totally incorrect. It's overruled.

6 MR. MUSGRAVE: That's fine. Make my record.

7 THE COURT: Mr. Carr, you may proceed.

8 Q. (by Mr. Carr) Assuming all those things, now, Dr.
9 Mieure, is there anything else that needs to be considered
10 before you will agree that there is exposure within the
11 meaning of the document that we have been discussing?

12 A. Yes, sir.

13 Q. And what else is that?

14 A. Some evidence that the chlorophenol product is
15 strongly implicated in health effects.

16 MR. CARR: Your Honor, would you direct the witness
17 that he is --

18 A. That's what the language is right here.

19 THE COURT: You have that -- you have been ordered
20 to assume the implication of health effects by the first
21 assumption.

22 A. Of dioxin.

23 THE COURT: Of dioxin.

24 A. Yes, I assumed that.

1 THE COURT: You are ordered to assume that.

2 A. Yes, I did assume that, Your Honor.

3 THE COURT: Mr. Carr, proceed.

4 A. I assumed that throughout.

5 Q. Anything else that you will need to agree before
6 there is exposure?

7 A. Yes, sir.

8 Q. And what is that?

9 A. The evidence of a health effect from the
10 chlorophenol product.

11 MR. CARR: Your Honor, I hesitate to ask you to
12 hold the witness in contempt, but I think he is very nearly
13 contemptuous?

14 A. I'm reading the words right from here.

15 THE COURT: Gentlemen, could you approach the bench
16 for a minute?

17

18 (The following Side Bar conversation was had outside the
19 hearing of the jury.)

20 THE COURT: We are going to take a five minute
21 recess at which point I want you to explain to this witness
22 that involved in one of the assumptions gave in the middle
23 was the presence of TCDD's in the three products mentioned
24 Santophen, chlorophenol, and 2,4-di. And if he keeps playing

1 this game I may hold him in contempt.

2 MR. MUSGRAVE: Are you going to order that he also
3 assume that the level may be implicated in any particular
4 shipment also constitutes under the Statute, under the policy
5 or the regulations written that the EPA promulgated under the
6 Statute that he must assume that the levels there meet the
7 requirement of what constitutes a substantial hazard, Your
8 Honor?

9 THE COURT: That question has not be posed.

10 MR. MUSGRAVE: That's just exactly what --

11 THE COURT: Just wait a second, you asked me a
12 question, I'm answering. It has not been posed, I have not
13 ruled. I don't want to make any advisory types of ruling.
14 That question has not been posed to me, not before me. I'm
15 telling you that he has to assume that the elements that have
16 been properly posed to him as being assumed and he had better
17 do that, that's what --

18 MR. MUSGRAVE: I will so instruct him, Your Honor,
19 but --

20 THE COURT: I'd appreciate it if you would, because
21 I don't want him to get himself into trouble.

22 MR. MUSGRAVE: Let me make it clear what the Court
23 is doing by assuming this is requiring him to assume that a
24 particular shipment at the particular level, was what Mr.

1 Carr obviously is doing, is trying to get him to interpret
2 the law with regard to a particular shipment and what Your
3 Honor is requiring him to assume is that a particular level
4 in a particular shipment of orthochlorophenol constitutes
5 under the policies or regulations, whatever they be enacted
6 by the EPA under the Statutes constitutes what is defined as
7 a substantial hazard to health or death. And, that's where
8 the hang-up is here?

9 THE COURT: What --

10 MR. MUSGRAVE: Notification of that.

11 THE COURT: What I am ordering him to assume is
12 those factors which have been included by prior testimony
13 after the long process of cross examination under 1102 and
14 properly concluded and then have been retracted, renigged,
15 regressed from after a break. And, I am tired of that and
16 it's not going to happen again.

17 MR. MUSGRAVE: I agree.

18 THE COURT: That is what I'm doing. Whether it
19 leads to as far as you have posed it is not before me, hasn't
20 been posed to me. If and when it is, I will deal with it at
21 that time. Okay.

22 MR. MUSGRAVE: May I just have one clarification
23 what is it you want me tell him that he must assume.

24 THE COURT: The last point that was the hang-up was

1 that there is anything in those products that was so
2 implicated, and he was ordered to assume that TCDD is in the
3 Santophen, 2,4-di, and the OCP, and that is the last point
4 that he has retracted on or renigged on, and as far as I'm
5 concerned it's also the last straw.

6 MR. MUSGRAVE: Let me be sure, I hate to keep
7 belaboring this, but, he assumed there was dioxin in there,
8 he took that.

9 THE COURT: No, he did not, he did not take it.

10 MR. CARR: Just got through saying that's not the
11 chemical.

12 THE COURT: Now, he's turning around and not taking
13 it. That is the problem. You put your finger on it. He did
14 assume it, he did acknowledge that he was ordered to assume
15 that because the assumption was properly posed to him, now
16 he's turning around and not taking it. I want you to advise
17 him, you are acting as his attorney, you understand the
18 situation as far as contempt and potential contempt. I think
19 it's only fair to him that we take a few minutes and you so
20 advise him, and I will grant you the opportunity to do it at
21 this time.

22 MR. MUSGRAVE: I should advise him that he must
23 assume --

24 THE COURT: Those matters that are properly --

1 MR. CARR: What the Court tells him to assume.

2 THE COURT: And have been posed to him to assume,
3 and the last one of which he is renigging on the assumption
4 is that TCDD's which have been so implicated in this are in
5 those three products, that was the last point of controversy.

6 THE COURT: Okay.

7 (The following proceedings were had in open court.)

8 THE COURT: Ladies and gentlemen, we are going to
9 take about a five minute recess. I would remind you, this
10 would go for any other breaks that we will take during the
11 day, that you are not to discuss this matter among
12 yourselves, with anyone outside the jury panel, or as of yet
13 form any opinions or conclusions about the matters on trial.
14 We will be in a very short recess.

15 (Following a recess, these proceedings were had in open
16 court.)

17 MR. MUSGRAVE: May we approach the bench?

18 THE COURT: Sure.

19 (The following Side Bar conversation was had outside the
20 hearing of the jury.)

21 MR. MUSGRAVE: Your Honor, I just want the record
22 to reflect that I have talked with the witness.

23 THE COURT: Good.

24 MR. MUSGRAVE: This witness is not a lawyer.

1 THE COURT: Right.

2 MR. MUSGRAVE: In talking with the witness and
3 telling him what the Court is requiring that he assume, he
4 relates to me he has no problem assuming those things.

5 THE COURT: Good.

6 MR. MUSGRAVE: The problem he has, I think it's
7 important that I let the Court be advised of this, is that in
8 his understanding in his own mind of those requirements, that
9 the first thing that must be determined is whether as the
10 Statute indicates, whether the substance or mixture presents
11 a substantial risk of injury, the substance or mixture in
12 this instance is the product that may be contaminated or have
13 impurities in it of TCDD, and if he is asked to assume that
14 the chlorophenol or the the 2,4-dichlorophenol,
15 parachlorophenol has been determined to be a substance or
16 mixture that presents a substantial risk of injury, then he
17 has no problem once those assumptions are made, but Mr. --

18 THE COURT: You are leaving out something, because
19 my understanding of the assumptions he's been ordered to make
20 so far is that because of the inclusion of the TCDD's which
21 have been implicated as far as those other health matters,
22 which is also something he has got to assume.

23 MR. MUSGRAVE: When he hears that question, he's
24 assuming that you are only talking about TCDD as though you

1 were shipping a tank car of TCDD.

2 THE COURT: Did you clear that up in his mind?

3 MR. MUSGRAVE: Yes.

4 THE COURT: Good.

5 MR. MUSGRAVE: He's told me that's where he's
6 answering the question the way he is, because he's only been
7 asked to assume that TCDD is implicated chemical. The
8 problem is it is not a shipment of TCDD, shipment of
9 orthochlorophenol substance or mixture. You have to look at
10 that substance --

11 THE COURT: Does he understand now it's based on
12 what's included in any of the three chemicals and not
13 necessarily the matrix itself that he's looking at?

14 MR. MUSGRAVE: He understands that the Statute
15 makes him look at the product whatever mixture or chemical
16 is, and if that mixture or that chemical, if it's -- for
17 instance, if the chlorophenol crude, one must look at that
18 and whatever is in it to determine --

19 THE COURT: That's the point and since --

20 MR. MUSGRAVE: Is an implicated product.

21 THE COURT: The focus is on TCDD which has been
22 found in the chemical. The chemical itself to use the terms
23 of those other chemists is the matrix, and what the focus is,
24 the contaminant of TCDD in them, does he understand that?

1 MR. MUSGRAVE: I don't think he understands, his
2 understanding is that you look at the chemical, the mixture.

3 THE COURT: Does he understand that those
4 assumptions deal with what that contaminant in those --

5 MR. MUSGRAVE: He understands assumptions deal with
6 the contaminant. What he doesn't understand is his view of
7 this regulation which says you look at the chemical, the
8 chemical in this case.

9 THE COURT: Have you explained that he has to go on
10 the basis of those assumptions and not on his view as far as
11 answering those questions to which the assumptions are
12 properly imposed?

13 MR. MUSGRAVE: I have.

14 THE COURT: Good.

15 MR. MUSGRAVE: If I may, Your Honor, the assumption
16 is of groundwork for his opinion, which I think is improper,
17 but the Court has instructed him to give his opinion.

18 THE COURT: I have.

19 MR. MUSGRAVE: In giving his opinion when he makes
20 those subjects as he understands and as he reads this, that's
21 why he answers as he does, that's what I'm trying to explain
22 to the Court.

23 THE COURT: The problem is -- the problem is he has
24 to give his opinion based on those assumptions, and I want to

1 make sure in my own mind that you have clearly instructed him
2 that regardless of his opinion on those other things, he has
3 to answer the question posed incorporating in his answer as
4 the question incorporates the assumptions which have properly
5 been posed to him. Does he understand that?

6 MR. MUSGRAVE: He does. He just has an opinion as
7 to what this means.

8 THE COURT: He's entitled to have an opinion on
9 anything he wants, he's an American citizen. He has to
10 answer questions properly posed in this courtroom, based on
11 certain assumptions regardless of his opinion.

12 MR. MUSGRAVE: And I believe he is, I believe the
13 record reflects that.

14 THE COURT: Well, I disagree, that's why I gave him
15 the opportunity to very good legal counsel before he gets
16 himself into trouble.

17 MR. MUSGRAVE: Okay.

18 (The following proceedings were had in open court.)

19 MR. CARR: Your Honor, I'll offer into evidence
20 1267 A, which is a blow-up of 1267, which has been previously
21 admitted into evidence.

22 MR. MUSGRAVE: May I see it?

23 THE COURT: Incorporate the same objections.

24 MR. MUSGRAVE: Yes, whatever made previously.

1 THE COURT: Fine, so ordered. Admitted over
2 objection.

3 Q. (by Mr. Carr) Doctor, you recognize 1267 A as
4 being that list of toxic effects of 2,3,7,8-TCDD in man that
5 I have read off to you earlier before we had the recess?

6 A. Yes, I do.

7 Q. And I've included in the question, along with those
8 effects, I've asked you also to assume that TCDD has been
9 implicated in causing cancer?

10 A. You've asked me to assume that, yes, sir.

11 Q. Now, Doctor, assuming if you will that 2,3,7,8-TCDD
12 has had instances, evidence, testimony in this case and
13 evidence of those health effects including cancer, and that
14 2,3,7,8-TCDD is in some of the 2,4-dichlorophenol that's
15 being shipped out, not all, that 2,3,7,8-TCDD is in some of
16 the Santophen being shipped out, and not all, and that
17 2,3,7,8-TCDD is in some of the orthochlorophenol-crude being
18 shipped out, but not all. Do you now agree that that
19 chemical containing the 2,3,7,8-TCDD is a chemical that could
20 be considered in commerce?

21 MR. MUSGRAVE: May I ask a question, Your Honor,
22 just to clarify this? I'm sorry to interrupt, but are you
23 asking, him, Mr. Carr, to assume, use the word implicated,
24 are you asking him to assume that the particular chemical you

1 are talking about at whatever particular level you are
2 talking about has been determined to be implicated chemical
3 as that term is used in the regulations or policy statement,
4 Defendant's Exhibit 880?

5 MR. CARR: Counsel, we have gone over this before,
6 I don't intend to --

7 MR. MUSGRAVE: You are asking him to interpret the
8 law?

9 MR. CARR: I think the Court has ruled on this, I
10 just simply don't feel like going into long argument.

11 THE COURT: I think the question is proper as
12 posed.

13 MR. MUSGRAVE: I object to it as being vague and
14 indefinite and an improper hypothetical.

15 THE COURT: Objection is overruled, Dr. Mieux,
16 please answer the question.

17 A. I believe the question is that chemical in
18 commerce.

19 Q. Yes.

20 A. If the chemical has been shipped, yes, it's in
21 commerce.

22 Q. And would you then agree that if that chemical has
23 in it those things that I've asked you to assume that's in
24 it, and that those things that are in that chemical can

1 cause, and there is evidence that it does cause those health
2 effects that I've related to you, do you agree that you, that
3 you do not have to give any notice and that that constitutes
4 sufficient evidence of exposure?

5 A. Am I to assume that the chemical itself is an
6 implicated chemical, sir?

7 MR. CARR: Your Honor, would you direct the witness
8 to answer the question?

9 A. That chlorinated is --

10 MR. CARR: I've gave him the hypothetical.

11 THE COURT: You have to answer the question as
12 posed. I think the question is clear and complete, you have
13 to answer the question.

14 A. If I have to assume that the product is implicated
15 chemical, then yes.

16 Q. Then -- and Doctor, you do understand and you do
17 know that Monsanto, at least to your knowledge, Monsanto has
18 never advised the EPA that any of the chemicals that it ships
19 out has 2,3,7,8-TCDD in it, you do understand that, you know
20 that, don't you, sir?

21 A. No, I testified that I don't know whether we have
22 or not.

23 Q. Well, assume that to this date there is no record
24 and we have had everything produced to us that there is to be

1 produced, I assume, and there is no record that the EPA has
2 ever been notified that any of the chemicals being shipped
3 out into commerce contains 2,3,7,8-TCDD, assume that to be
4 the case. Now, Doctor, you do understand that under those
5 circumstances, you do agree, do you not, that it is the EPA
6 that should make the final determination as to whether or not
7 that product should go into commerce and not Monsanto?

8 A. If I make all those assumptions --

9 Q. Yes.

10 A. Yes.

11 Q. And you do understand that simply when Monsanto
12 notifies the EPA take this chemical that's going out contains
13 a certain level of the implicated chemical, that is the
14 2,3,7,8-TCDD, you do understand, don't you, Dr. Mieux, that
15 the EPA won't automatically say don't ship that chemical,
16 that they will look at it and determine whether or not in
17 their judgment, there is an ultimate health effect upon the
18 population, that there is a real danger to the population,
19 you do understand that is correct, don't you, sir?

20 MR. MUSGRAVE: Object to counsel testifying as to
21 what EPA does or doesn't do, assumes facts not in evidence
22 and it's counsel's view.

23 THE COURT: Overruled, I think it's a proper
24 question?

1 A. I really don't know what EPA does when they are
2 notified of an --

3 Q. You do know, though, that if they are never told
4 that the chemical is in the product that's being shipped out,
5 they will never get the opportunity to exercise their
6 mandated duty, that is to make the determination whether or
7 not that chemical should be shipped out or what safeguards
8 must be taken or how notices should be put out or what should
9 be done, if they are not told, they can never exercise their
10 duty, you understand that, don't you, sir?

11 A. I understand that.

12 Q. And, if Monsanto believed that the levels of dioxin
13 in the product was going to be diluted when it got to the end
14 result to such a degree that only parts per trillion, and
15 there has been testimony that the Lysol, the one part per
16 billion which it gets into the Lysol, the things above one
17 part per billion, when it gets into the Lysol will be down
18 into the very small trillions, you understand that, you could
19 calculate that yourself, couldn't you, sir?

20 A. Yes.

21 Q. And the EPA, though, if it's never told that there
22 is more than one part per billion in those products that's
23 being shipped out of Monsanto, they never have the
24 opportunity to exercise this judgment, do they, sir?

1 A. That's correct.

2 Q. And, Monsanto is in effect -- well, just for
3 instance, suppose Monsanto -- Monsanto couldn't be done any
4 harm, could it, by telling the EPA that if Monsanto believes
5 that the TCDD is harmless, that one part per billion won't
6 hurt anybody, if that's what they were shipping or if a
7 million or one million, four hundred thousand parts per
8 billion didn't hurt anybody, if Monsanto believed that, they
9 could easily notify the Government and they wouldn't be at
10 risk, would they, sir?

11 A. I don't believe we would be, no.

12 Q. But, if somebody else's judgment was that those
13 levels could harm humans, then the EPA could exercise it's
14 judgment and say don't ship that Santophen to Lehn and Fink,
15 don't ship that 2,4-dichlorophenol to Fallek and Lancro or to
16 Shamrock or to whoever gets it? EPA could say that, couldn't
17 they, sir?

18 A. They do do that, yes.

19 Q. If they are not given the information, not given
20 the facts, if they are not given the whole truth, they can
21 never exercise their judgment?

22 MR. MUSGRAVE: Object, all repetitive. He's asked
23 this witness four times the same question just a different
24 way.

1 THE COURT: It is a different question, overruled.

2 Q. (by Mr. Carr) Doctor, the exhibit that you had,
3 it's Plaintiff's Exhibit 1286 B which is part of the Monsanto
4 exhibit that you had had earlier, August of '80 report by
5 Taulli and Brautigam, do you have it there?

6 A. I believe I have it someplace, should be this
7 exhibit?

8 A. I'm sorry, yes, yes.

9 Q. You recognize the Plaintiff's Exhibit 1286 B as
10 being page two of that document?

11 A. Yes, sir.

12 Q. And page -- this document says as safety
13 precautions, does it not, that the toxicity of 2,3,7,8-TCDD
14 necessitates the utmost caution be used at all times, doesn't
15 it, sir?

16 A. That's what it says, Item A.

17 Q. Now, they are saying that because 2,3,7,8-TCDD can
18 cause serious adverse effects in human beings, aren't they,
19 sir?

20 A. Yes, sir.

21 Q. And Monsanto, at least in 1980, August 7th, 1980,
22 recognized that 2,3,7,8 was so toxic that the utmost caution
23 means the very most caution, doesn't it, sir?

24 A. Yes.

1 Q. Now, do you believe that the people at Lehn and
2 Fink that get the product, the Santophen, or the people at
3 Fallek and Lancro, the workers that work with it, do you
4 believe that they should be made aware of the fact that there
5 is something in it that would require that that product be
6 handled with the utmost caution?

7 A. If there is a level there that would cause harm, I
8 think they should know about it.

9 Q. Does this document, does this indicate that there
10 is a level, does Monsanto document for your workers, for you
11 in the laboratory, that working with it, does it say anything
12 about any level?

13 A. This is designed for someone who's working directly
14 with 2,3,7,8 standards.

15 Q. No, if you go down to Paragraph G, it's talking
16 about Santophen also, and PCP and OCP also, doesn't it, sir?

17 A. Yes.

18 Q. You are talking about --

19 A. Those materials all cause serious chemical burns,
20 the products themselves cause serious chemical burns.

21 Q. We understand that, Doctor, but what you are
22 working with is the TCDD that's in the product as well, we
23 have other exhibits in evidence we don't need to, and I don't
24 intend to go through it again, but I want you to assume that

1 we have other exhibits that say that the samples being tested
2 should be handled the same way as you are handling
3 2,3,7,8-TCDD probably a document that you signed off on, but
4 assume that that also is in evidence, not just the purer
5 2,3,7,8-TCDD, but the product that you are handling, you are
6 asked to assume when you handle it that those samples have
7 TCDD in it, you understand that?

8 A. That I'm to assume?

9 Q. That there is in evidence your records, documents,
10 that say that's the way you handle samples, so I need not
11 take the time to dig it out again?

12 A. Well, I can certainly verify that we handle
13 virtually all samples in the chemical laboratory with care.

14 Q. That's not what I asked you, and I did dig it out
15 again, it's dated December the 13th, 1979, it's Exhibit
16 1168 C, which it says, and this is signed off by Hileman,
17 says in particular 2,3,7,8-tetrachlorodibenzo-p-dioxin is
18 extremely toxic, therefore, all samples should be handled as
19 though they contain 2,3,7,8-TCDD, you see that, don't you,
20 sir?

21 A. Yes, sir.

22 Q. Now, Doctor, the samples that they are talking
23 about there, are the samples that they are testing, isn't
24 that correct, sir?

1 A. That's correct.

2 Q. Now, the samples that they are testing that
3 contains 2,3,7,8-TCDD is the raw product, the Santophen
4 that's being shipped to Sterling Drug Company and is the
5 2,4-dichlorophenol that's being shipped to the oil well
6 workers, to the Fallek and Lancro and to others, isn't that
7 correct, sir?

8 A. I don't know what they are testing in that
9 particular report that you just showed me.

10 Q. The title of the report is Trace Amounts of
11 Chlorodibenzo-p-dioxins From Industrial Product Samples, do
12 you see that, sir?

13 A. Yes, sir.

14 Q. They are testing a whole variety, there is a
15 document in evidence a whole variety of production samples is
16 what they are testing, includes 2,4-dichlorophenol, includes
17 Santophen, includes orthochlorophenol, it includes -- doesn't
18 include pentachlorophenol, but includes the products that we
19 are talking about. Now, this is the information that's given
20 to you in the laboratory the way you are to handle the
21 product that contains the 2,3,7,8-TCDD, isn't it, Dr. Mieure?

22 A. That's the instructions that were given in that
23 report.

24 Q. Now, was any warning given to the people that got

1 those products that had the occasional batch, that had the
2 2,3,7,8 in it, was any warning given those people to handle
3 those products with utmost caution?

4 A. I don't know whether they were given warning or
5 not, sir.

6 Q. At least they weren't to your knowledge, isn't that
7 correct, Dr. Mieure?

8 A. They weren't to my knowledge. Now, Monsanto has a
9 material safety data sheet that goes along with each product
10 and I don't know what warnings were on it.

11 Q. You don't know what warning is on there, do you,
12 sir?

13 A. That's correct.

14 Q. And, Dr. Mieure, you do know, or at least you have
15 no -- well, you didn't take part in any conferences that
16 decided those things. And did you take part in any
17 conferences that were -- where you discussed, I think you
18 mentioned you talked over with the lawyers, but I meant other
19 than lawyers, where you discussed whether or not there was
20 exposure within the meaning of the law once the product left
21 the plant?

22 A. No, sir, I don't believe I did.

23 MR. CARR: I have no further questions.

24 THE COURT: Mr. Musgrave?

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CLARIFICATION EXAMINATION

BY MR. JOHN MUSGRAVE

Q. Dr. Mieure, you have the exhibit, I believe the Statute Section 8E?

A. Yes, sir.

Q. You have the exhibit that has that, which one are you looking at?

A. You after the act or the policy statement?

Q. The act.

A. The act itself?

Q. The act.

A. That's Plaintiff's Exhibit 1283.

Q. Now, you have that in front of you, sir?

A. Yes.

Q. You are not a lawyer, are you?

A. I'm certainly not.

Q. You reviewed this Statute before?

A. I've read it in passing.

Q. And you've reviewed the information Monsanto put out to its employees, I believe you indicated you had seen Defendant's Exhibit 881, information was put out to employees with regard to the policy statement or regulations and the act?

1 A. Yes, sir.

2 Q. Now, I just want to ask you, if you would, with
3 regard to the act itself, to read along with me. It states,
4 does it not, sir, "Any person who manufactures, processes, or
5 distributes in commerce a chemical substance or mixture and
6 who obtains information," I would like you to focus on the
7 word information, "and who obtains information which
8 reasonably supports the conclusion that such a substance or
9 mixture presents a substantial risk of injury to health or
10 the environment shall immediately inform the administrator of
11 such information, unless such person has actual knowledge
12 that the administrator has been adequately informed of such
13 information." Just reading that as a layman, sir, what do
14 you understand the word information to refer to?

15 A. Probably toxicology information.

16 Q. Information that would support a conclusion that a
17 chemical or mixture presents a substantial risk of injury to
18 health or the environment. Toxicological information or some
19 type of data that supports that conclusion with regard to the
20 chemical?

21 A. Yes, sir.

22 Q. All right. If one were to simply report the fact
23 that a shipment of a particular chemical contained a
24 particular impurity at a particular level, would that be

1 supplying information that supports a conclusion that there
2 is a substantial risk to health?

3 A. It doesn't seem to me that it would.

4 Q. And, of course, the reporting of such information
5 it states right here is not necessary if the administrator of
6 the EPA already has the knowledge and if the person knows
7 that the administrator has that knowledge?

8 A. That's what it says here.

9 Q. Is that right?

10 A. Yes, sir.

11 Q. Now, Mr. Carr asked you an awful lot of questions
12 about the policy or the regulations interpreting the Statute,
13 that being Defendant's Exhibit 880, and you had some
14 difficulty it appeared in responding to some of the
15 assumptions that he asked you to make?

16 A. Yes, sir.

17 Q. Can you tell us why?

18 A. Well, again, you pointed out I'm not a lawyer, but
19 as I read through this document, it seems to me that in order
20 for this condition that Mr. Carr wanted to apply, in order
21 for that condition to apply, there had to be some indication
22 that the product itself in the form in which it was being
23 shipped was, what was the term, was an indicated chemical or
24 --

1 Q. Implicated chemical?

2 A. Implicated chemical.

3 Q. Because it poses substantial risk to health or the
4 environment?

5 A. Yes, sir. I was not instructed to assume that and
6 that was causing me a great deal of consternation as to how
7 to answer the question.

8 Q. So if you had a shipment of 2,4-dichlorophenol that
9 had an impurity in it, the first thing would have to be what
10 to determine your view of it?

11 A. At whether or not that level imposed a risk to
12 health.

13 Q. Do you have any information that it does, you would
14 report that information unless you knew the EPA had it?

15 A. Yes, sir.

16 Q. And if there were published reports maybe in
17 controversy as to whether or not there were levels that
18 caused certain problems or weren't levels that caused certain
19 problems, then the EPA may well be aware of those various
20 articles and the various information with regard to the
21 toxicity of various dioxins of various levels and various
22 mixtures?

23 A. Yes, sir.

24 Q. One last point on this, Mr. Carr, I believe, stated

1 in questioning you that, he kept reading to you the sentence
2 that the mere fact the implicated chemical is in commerce
3 constitutes sufficient evidence of exposure, and made the
4 statement to you, as I recall, that that indicated that you
5 could not, with an implicate chemical, that it would cause
6 death or serious injury, once that determination had been
7 made it was implicated, that the mere fact it went into
8 commerce meant that there was exposure, therefore, meant you
9 could not in any way consider the potential for exposure?

10 A. I believe that was when I was asked to make all
11 those assumptions, wasn't it?

12 Q. The sentence right before that does say, though,
13 "The human health effect listed in Subparagraph R below, for
14 example, are too serious that relatively little weight is
15 given to exposure?"

16 A. Yes.

17 Q. Then it states, "The mere fact the implicated
18 chemical is in commerce constitutes sufficient evidence of
19 exposure?"

20 A. Yes, sir.

21 Q. So it does not indicate even if it is an implicated
22 chemical that no weight is given to potential for exposure,
23 just says relatively little weight?

24 A. Says relatively little weight, yes.

1 Q. Now, Dr. Mieure, Mr. Carr asked you a lot of
2 questions about Plaintiff's Exhibit 1135, do you have that in
3 front of you, sir?

4 A. Yes, sir.

5 THE COURT: Before you get into 1135, I'd like to
6 take a short break if we can.

7 MR. MUSGRAVE: Fine.

8 THE COURT: Can I see you at the bench, please?
9 (The following Side Bar conversation was had outside the
10 hearing of the jury.)

11 THE COURT: Would Shelia have those documents?

12 MR. MUSGRAVE: I'll see.

13 THE COURT: Let's take a break. We will take a
14 short break at this time.

15 MR. CARR: Your Honor, I am going to use Brautigam
16 for a little bit so I won't get directly to Park.

17 THE COURT: Fine.
18 (Following a recess, these proceedings were had in open
19 court.)

20 THE COURT: Gentlemen, could I see you at the bench
21 for just a second?
22 (The following Side Bar conversation was had outside the
23 hearing of the jury.)

24 THE COURT: I haven't gone through all those yet

1 but I understand you are going to have Brautigam first?

2 MR. CARR: He will be short, but however long he is
3 we won't get to Park. You have some more to do?

4 MR. MUSGRAVE: Just a couple questions.

5 THE COURT: So some time late this afternoon with
6 Park.

7 MR. CARR: I should be on and off, I'm just going
8 to ask him about one exhibit.

9 THE COURT: I'll get this done over lunch.

10 MR. CARR: If we get through early, we will just
11 recess then.

12 (The following proceedings were had in open court.)

13 Q. (by Mr. Musgrave) Dr. Mieux, I was about to go to
14 Exhibit 1135, but I want to ask you one more question about
15 the regulations or policy statement that Mr. Carr was
16 examining you about. I think we had talked about the Statute
17 that I read with you, and the information, the word
18 information that was referred to in the Statute, you recall
19 that?

20 A. Yes, sir.

21 Q. And, if you would look at Defendant's Exhibit 880,
22 do you have that there?

23 A. Yes, I do.

24 Q. Which is the policy statement or regulations?

1 A. Yes, EPA policy statement on the Toxic Substances
2 Control Act Section 8E.

3 Q. Would you look at page 2 of that exhibit, you have
4 that, sir?

5 A. Yes, I do.

6 Q. There in is there a definition given by the EPA
7 what the term substantial risk information means that must be
8 reported, the EPA doesn't know this without this information?

9 A. Yes, there is.

10 Q. Would you just read what that statement says?

11 A. "The term substantial risk information means
12 information which reasonably supports the conclusion that a
13 chemical substance or mixture presents a substantial risk of
14 injury to health or to the environment.

15 Q. Thank you, sir. Now, turning you to Exhibit 1135,
16 Mr. Carr asked you about, and by way of background you will
17 recall that this is the report dated June 26th, 1979, that
18 summarized the various data that were gathered in looking at
19 the orthochlorophenol, parachlorophenol, 2,4-dichlorophenol
20 process to determine if there were dioxins there and to try
21 and determine how to eliminate them if that was the case?

22 A. Yes, sir.

23 Q. And, some of the tests were run with the caustic
24 and there were then samples taken from the process without

1 the caustic, you recall that?

2 A. Yes, sir.

3 Q. Now, Mr. Carr referred you to the
4 2,4-dichlorophenol samples taken with the caustic, I would
5 like you to refer you to the 2,4-dichlorophenol sample that
6 was taken and tested after caustic was removed, and I believe
7 that's MB 715.

8 A. Okay MB 715, that was in April 1979 sample.

9 Q. That was analyzed, it appears, two times, that
10 sample of 2,4-dichlorophenol?

11 A. Yes, sir.

12 Q. And one of those is asterisked, does that indicate
13 that that analysis was done by MIC, that is the laboratories
14 in Creve Coeur?

15 A. Yes, it does.

16 Q. And, as the other one is not asterisked that would
17 indicate that was done at the Dayton lab which is referred to
18 MRC?

19 A. MRC, Monsanto Research Corporation in Dayton.

20 Q. Both of the analysis found none detected, one at a
21 limit of detection limit of 10 parts per billion, the other
22 at detection limits of 20 parts per billion?

23 A. Yes, that's for the tetrachloro-dioxins.

24 Q. Yes, just for the tetras I'm speaking of, is that

1 correct?

2 A. Yes, sir.

3 Q. And then if you would, sir, with regard to the
4 Santophen exhibit, the Santophen samples that were tested,
5 examined, and analyzed without the caustic, I believe you'll
6 find that Mr. Carr referred to MB 739, would you look at that
7 one, sir, that's intermittent Santophen cut as described in
8 the document?

9 A. MB 739, I have it.

10 Q. That was tested three times, that one sample?

11 A. Yes, sir.

12 Q. And two of them found none detected at levels of,
13 or detection levels of 5 parts per billion and 10 parts per
14 billion?

15 A. That's correct.

16 Q. But another analysis found 79?

17 A. Yes, sir.

18 Q. Is there any way to reconcile those or how are
19 those results such as that viewed, or is there any way that
20 they are typically viewed that you could testify to with
21 regard to or how an analytical chemist would review those
22 results?

23 A. Well, it would be difficult for an analytical
24 chemist who didn't know the background to understand what was

1 going on there, he'd be confused, but during that time,
2 Monsanto Research Corporation had just started analyzing for
3 dioxins, and I think as we have testified previously the
4 analysis for dioxins is not an easy thing to do, takes even a
5 skilled analytical chemist several months to learn some of
6 the fine points and learn how to avoid sample contamination,
7 and during the start up phase of this analytical project at
8 MRC they encountered a large number of what we call false
9 positives, and I think this is just an example of a false
10 positive, and we know they were encountering false positives
11 because we are sending them blanks that weren't identified
12 and having them analyze those samples, and some of those
13 blank materials that were pure were coming back with
14 notations that they contained dioxins, so we know they were
15 having a false positive problem at that time.

16 Q. Those three runs, those three analysis of sample
17 MB 739, which is intermittent Santophen cut, one was done by
18 the Creve Coeur lab?

19 A. Yes, sir.

20 Q. That found the none detected at 5 parts per
21 billion?

22 A. That's correct.

23 Q. Then the other two of the same sample were done by
24 MRC in Dayton?

1 A. Yes, sir.

2 Q. And one they found none detected at 10 parts per
3 billion and other found 79 parts per billion?

4 A. Yes, sir.

5 Q. Now, MB 740, another Santophen cut analysis done
6 after removal of the caustic, that's right below that, you
7 see that one, sir?

8 A. Yes, I do.

9 Q. And again there are that sample was taken and
10 apparently split into three and there were three separate
11 analysis of the original sample, is that correct?

12 A. Yes, sir, two of them show none detected and one of
13 them shows 18 parts per billion.

14 Q. And the one 18 parts per billion was that that
15 Dayton or the Creve Coeur laboratories?

16 A. That was at Dayton laboratory.

17 Q. And then the next analysis of Santophen after
18 removal of the caustic would be MB 741 and that was a sample
19 that was split in two and analyzed, one of those portions was
20 analyzed in Creve Coeur and one of those portions was
21 analyzed in Dayton, is that correct?

22 A. According to the notations here, yes, sir.

23 Q. And the sample analyzed at Creve Coeur that
24 reflects 25?

1 A. 25 parts per billion.

2 Q. Right. If you look at Table 4, sir, does that not
3 reflect that MB 741 that reflected 25 parts per billion of
4 tetras, that those tetras that were compromised at 25 parts
5 per billion did not coelute with the 2,3,7,8 standard?

6 A. That is correct, they coeluted with the 1,3,6,8
7 standard.

8 Q. Now, the other analysis of MB 741 that was done in
9 Dayton, does reflect a finding of 48 parts per billion, isn't
10 that correct?

11 A. Yes, sir.

12 Q. And Dayton was not breaking out, separating the
13 peak in there reporting, were they?

14 A. They were just reporting total tetras at that time,
15 sir.

16 MR. MUSGRAVE: I believe that's all I have, Your
17 Honor.

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

20 MR. CARR: Yes, Your Honor.

21

22 RECROSS EXAMINATION

23 BY MR. REX CARR

24 Q. Dr. Mieure, with regard to the TSCA notification

1 and consideration of the chemical implicated as you've
2 discussed here now with Mr. Musgrave again, isn't it a fact
3 that because it had been reported that it was a carcinogen,
4 that that's the reason that you didn't take any chances with
5 2,3,7,8-TCDD?

6 A. No, sir.

7 Q. Dr. Mieure, you realize that the oath that you take
8 in one case is just as binding as the oath you take in
9 another case, you understand that, don't you, sir?

10 A. Yes, sir.

11 Q. You recall that you were deposed in the case
12 involving the workers at Nitro, West Virginia in that case on
13 the 14th of July, 1983, that your deposition was taken at
14 that time in that Federal Court case?

15 A. My deposition was taken, yes, sir.

16 Q. Yes, and you were there represented by your
17 attorneys and you were sworn, you were put under oath at that
18 time, weren't you, sir?

19 A. Yes, sir.

20 Q. And you were asked questions about 2,3,7,8, weren't
21 you, sir, the way you handled it?

22 A. I'm sure I was.

23 Q. And the reasons you handled it in a particular
24 way? Page 50 of that deposition, counsel. And, weren't you

1 asked these questions at that time, starting at page 49 and
2 I'll start so as to get it just in context at line one on
3 page 49. "Question: Any of those tetra levels in the hexa
4 level, didn't you say you found one in pentachlorophenol
5 that's toxic, isn't it? Answer: I don't know. Question:
6 Is 2,3,7,8 toxic? Answer: Everything I read in the papers
7 implies that it is. Question: But is that your only source
8 of information about 2,3,7,8 is what you read in the paper?
9 Answer: No, I have information from Monsanto toxicologists
10 as well. Question: What would they tell you? Answer: They
11 would periodically pass along questions about being careless
12 with the material. Question: What would they tell you?
13 Answer: Keep it in a hood, use gloves, use protective
14 clothing. Question: But did they tell you why it was
15 necessary to do that?" Your answer was, "Because it's a toxic
16 material. Question: What's that mean it's a toxic
17 material? Answer: Can cause harmful effects to biological
18 organisms. Question: And you're a biological organism?
19 Answer: That's not on my check. Question: What biological
20 effect does it cause in -- you want me to speculate?
21 Question: What you've been told, apparently those
22 toxicologists were talking to you about it, whatever you have
23 been told." And then you answer it causes those --

24 MR. MUSGRAVE: I object to him reading hearsay from

1 this deposition.

2 THE COURT: Overruled.

3 Q. "Answer: It causes those pimples as you referred
4 to them, this Chloracne, and there have been reports it
5 causes other effects. Question: Like what? Answer: Loss
6 of hair, nervousness, pigmentation, excess pigmentation of
7 the skin. There have been reports that it's a carcinogen.
8 Question: That's good enough reason not to take any chances
9 with it, isn't it?" And wasn't your answer, "As far as I'm
10 concerned." Wasn't that your answer under oath at that time,
11 Dr. Mieure?

12 A. I certainly don't remember what I testified to that
13 many years ago.

14 Q. Would you want to look at it and see if that wasn't
15 your answer at that time under oath in that case just like
16 you are under oath today, Dr. Mieure?

17 A. I have no reason to believe that you are not
18 reading accurately.

19 Q. Well, read it and make sure.

20 A. Yes, sir, that appears to be an accurate
21 description of what I testified to.

22 Q. Dr. Mieure, when were you not telling the truth, in
23 that case or in this case?

24 A. Been telling the truth the whole time.

1 MR. MUSGRAVE: Object to that, improper
2 questioning.

3 THE COURT: Overruled.

4 Q. Didn't you tell us a moment ago that it wasn't the
5 reason that you didn't take any chances with it, that it's a
6 carcinogen, reported that it's a carcinogen, isn't that what
7 you said just before I read this deposition to you?

8 A. I believe you asked me if --

9 Q. Isn't that --

10 A. It was because it's a carcinogen that I felt it
11 needed to be handled carefully, and my answer to that was
12 no. My reason for believing it needs to be handled carefully
13 is because its high acute toxicity to certain laboratory
14 animals.

15 Q. Your question I asked you and I had the deposition
16 in front of me when I asked you the question whether or not
17 the fact that it's been reported that it's a carcinogen,
18 whether or not that's good enough reason not to take any
19 chances with it.

20 MR. MUSGRAVE: Is that what you are saying you
21 asked him before you read the deposition?

22 MR. CARR: Yes, I did indeed.

23 MR. MUSGRAVE: I request the Court Reporter read
24 back the question before he read him.

1 THE COURT: Overruled.

2 Q. Your Honor, I'll exceed to the request because if
3 there is any possible chance that the sense of what I've
4 asked him is not what I just said I want it to be made clear.

5 THE COURT: Okay. Both of you want to do it then
6 I'll let you to do this time.

7 COURT REPORTER: "Dr. Mieure, with regard to the
8 notification and consideration of the chemical implicated as
9 you've discussed here now with Mr. Musgrave again, isn't it a
10 fact that because it had been reported that it was a
11 carcinogen, that that's the reason that you didn't take any
12 chances with 2,3,7,8-TCDD."

13 THE COURT: And the objection was overruled.

14 MR. CARR: And his answer was?

15 COURT REPORTER: "No, sir."

16 A. The answer was no, sir, the reason I --

17 Q. Doctor, I didn't ask you that, did I, sir?

18 A. I thought that's what I just heard you ask.

19 Q. I ask the question that's good enough reason in
20 Charleston, West Virginia when your deposition was taken in
21 that case, that there have been reports that it's a
22 carcinogen, you are asked that's a good enough reason not to
23 take any chances with it, isn't it, and your answer was at
24 that time, "As far as I'm concerned," wasn't it, sir?

1 A. If you think you are reading correctly, yes.

2 Q. That was your answer then, wasn't it, sir?

3 A. Apparently so.

4 MR. CARR: I have no further questions Your Honor.

5 THE COURT: Do you have any further questions?

6 MR. MUSGRAVE: Just one.

7

8 CLARIFICATION EXAMINATION

9 BY MR. JOHN MUSGRAVE

10 Q. You said it was a good enough reason, was it your
11 reason though?

12 A. No, sir, wasn't my reason.

13 Q. What was your reason?

14 A. It's been reported to me as highly toxic, causes
15 Chloracne, that's good enough reason for me.

16 MR. MUSGRAVE: Nothing further.

17 THE COURT: Do you have any further questions?

18

19 RECROSS EXAMINATION

20 BY MR. REX CARR

21 Q. Doctor, were you telling the truth when you said in
22 the Nitro case that there had been reports that it's a
23 carcinogen and that's good enough reason not to take any
24 chances with it, isn't it, and wasn't your answer as far as

1 I'm concerned wasn't, that's your answer then?

2 A. Appears to be.

3 Q. And you were telling the truth then, weren't you,
4 sir?

5 A. Yes, sir.

6 Q. And that was a good enough reason for you not to
7 take any chances with it, isn't that correct, sir?

8 A. That's what I said then, yes.

9 Q. And it's still the fact today, isn't it, sir?

10 A. Still good enough reason if it's a carcinogen, but
11 that isn't the reason why I did it, sir.

12 Q. Isn't that what you said, that's good enough reason
13 not to take any chances with it, wasn't your answer, "As far
14 as I'm concerned?"

15 A. I think it's two different things.

16 Q. You think it's two different things?

17 A. Yes, sir.

18 Q. You think the answer of yours, there have been
19 reports that it's a carcinogen, and then your saying as far
20 as I'm concerned that's good enough reason not to take any
21 chances with it is something the same as what you are saying
22 now?

23 MR. MUSGRAVE: Mr. Carr read the deposition
24 question and answer, don't paraphrase it, sir, because --

1 THE COURT: It has been read.

2 MR. MUSGRAVE: I understand that. He's not doing
3 that now, he's paraphrasing it, and the way the question was
4 put to the witness and the way he answered is important here.

5 THE COURT: Been read to the jury.

6 Q. (by Mr. Carr) Isn't it?

7 THE COURT: Overruled.

8 Q. That there have been reports that it's a carcinogen
9 a good enough reason for you not to take any chances with it?

10 A. I answered then --

11 Q. My question -- I'm not caring about -- I'm asking
12 you now, isn't the fact that there have been reports that
13 it's a carcinogen a enough reason for you not to take any
14 chances with it?

15 A. If there were reports --

16 MR. CARR: Your Honor, would you direct the witness
17 to answer the question? I think he can answer that.

18 MR. MUSGRAVE: He's trying to, Your Honor.

19 THE COURT: I don't believe so. It's not
20 responsive. Overruled. Dr. Mieure, you have to answer the
21 question as posed?

22 A. The question as posed was isn't the fact -- if
23 there are indeed such reports, yes, that's a good enough
24 reason to not take chances with it.

1 Q. And there have been reports that it's a --

2 A. There have been and as I testified --

3 Q. Doctor, I ask you there have been reports that it's
4 a carcinogen and the fact it's been reported it is a
5 carcinogen is a good enough reason for you not to take any
6 chances with it, isn't that correct, sir?

7 A. It's a good enough reason.

8 Q. Isn't that correct, sir?

9 A. I said it's a good enough reason.

10 Q. But the people at Lehn and Fink don't know that, do
11 they, sir, that they are handling something that has
12 2,3,7,8-TCDD, they don't know that, do they, sir?

13 MR. MUSGRAVE: Object to counsel questioning the
14 witness as to what other people know or don't know, also
15 vague and indefinite.

16 THE COURT: Overruled on both.

17 A. I don't know what the people there know.

18 Q. As far as you know it's never been reported to
19 them, has it?

20 MR. MUSGRAVE: Objection, asked and answered.

21 A. I don't know whether it's been.

22 Q. My question as far as you know it's never been
23 reported, correct?

24 MR. MUSGRAVE: Same objection.

1 THE COURT: Overruled.

2 A. I don't know whether it's been reported or not.

3 MR. CARR; No further questions.

4 THE COURT: Anything further?

5 MR. MUSGRAVE: Nothing further.

6 THE COURT: You may step down, Dr. Mieure. Thank
7 you.

8 MR. CARR: Call Mr. George Brautigam at this time.

9 THE COURT: Gentlemen, could you approach the
10 bench, please?

11

12 (The following Side Bar conversation was had outside the
13 hearing of the jury.)

14 THE COURT: Any offers of proof or anything on this
15 witness, are there?

16 MR. MUSGRAVE: No, Your Honor.

17 THE COURT: Fine. Just wanted to check.

18 (The following proceedings were had in open court.)

19 MR. CARR: The witness has been previously sworn.

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GEORGE BRAUTIGAM

(being called as a witness on behalf of the Plaintiff under
Section 2-1102, having been previously sworn, testified as
follows)

CROSS EXAMINATION

BY MR. REX CARR

Q. Mr. Brautigam, you understand that the oath you
took earlier in this trial still binds you today, to tell the
truth?

A. Yes, I do, sir.

Q. Handing you now what's been marked Plaintiff's
Exhibit 1287 you recognize that as a report prepared by Mr.
Taulli and that you received a copy of it, the very first
copy apparently or at least the top of it, is that correct,
sir?

A. Yes, sir.

Q. And there is a table in that exhibit, a Table 1 in
that exhibit, is there not, Mr. Brautigam?

A. Yes.

MR. CARR: Your Honor, I'll offer this exhibit into
evidence.

MR. MUSGRAVE: If I may have a moment, Your Honor.

THE COURT: Sure, go ahead.

MR. MUSGRAVE: Your Honor, it appears to be a

1 document dealing with 2,4-dichlorophenol, and I would object
2 to it for the same reasons as stated before.

3 THE COURT: Fine. It's admitted over objection.
4 I'll incorporate your prior argument.

5 MR. CARR: Leave to pass Table 1 to the jury, which
6 doesn't have a number on it.

7 THE COURT: Fine.
8 (Table 1, Plaintiff's Exhibit No. 1287 passed to the jury.)

9 Q. (by Mr. Carr) Mr. Brautigam, this exhibit deals
10 with an, at least part of the report deals with the degree of
11 specificity that you can get by 1982, does it not, sir?

12 A. Appears to, yes, sir.

13 Q. And Table 1 shows that batch A101 apparently
14 manufactured on the 25th of January, 1982, contains various
15 dioxins from the tri level up to the octa level, isn't that
16 correct, sir?

17 A. It appears like it's from the tetra level values
18 for the tetra level through the octa level.

19 Q. And the tetra level is 4 parts per billion and that
20 batch manufactured in '82?

21 A. That's the value here, yes, sir.

22 Q. And, the parenthesis represents, 3.1 represents the
23 data previously reported?

24 A. Note, one says that the parentheses are GC/mass

1 spec data.

2 Q. Previously reported?

3 A. Yes.

4 Q. Now, actually then there was more tetra in this
5 batch of 2,4-dichlorophenol than had been previously reported
6 by nearly, nearly one-third more, as a matter of fact, isn't
7 it, sir, 3.1 to 4 is, .9 is nearly one-third of three, isn't
8 it, sir?

9 A. Yes.

10 Q. So actually this, the more precise method that you
11 have by '82, reveals that there was more tetra dioxins in the
12 product by factor of 30 percent than had been previously
13 reported.

14 MR. MUSGRAVE: You mean in this sample, Mr. Carr?

15 Q. In this sample, isn't that correct, sir?

16 A. I couldn't conclude that, sir.

17 Q. Well --

18 A. This tells me --

19 Q. This tells you, does it not, that there have been
20 previously reported for the tetras 3.1, doesn't it, sir?

21 A. By GC/mass spec.

22 Q. Yes, that had been previously reported, correct,
23 sir?

24 A. By GC/mass spec.

1 Q. Yes, and that's what was used to report it earlier?
2 A. Correct?
3 A. But not for the 4.
4 Q. I'm sorry?
5 A. But not for the 4, as I would understand.
6 Q. Right, that's exactly correct, the 4 is what's
7 being shown by this method of analysis?
8 A. That's correct.
9 Q. All right. So, the earlier method of analysis for
10 2,4-dichlorophenol found and reported 3.1 parts per billion
11 of tetra in the 2,4-dichlorophenol, isn't that correct, sir?
12 A. That's what it says, yes, sir.
13 Q. And the better method or the newer method, the more
14 precise method reports 30 percent more
15 tetra-chlorodibenzo-p-dioxin in this product than what had
16 been previously reported by the earlier methods used, isn't
17 that correct, Mr. Brautigam?
18 A. Not with all of those adjectives, sir. Our method
19 -- they are not necessarily better or worse, our method
20 showed 4 nanograms, a gram.
21 Q. I didn't indicate it was a better or worse?
22 A. Yes, you did, I thought you said --
23 Q. Well, Mr. Brautigam I'll --
24 MR. MUSGRAVE: You want to read it back, Mr. Carr?

1 Q. The later method, yes, it is a later method.

2 Q. And it reported finding more tetra than the older
3 method?

4 A. Yes, that is a true statement.

5 Q. So the newer method found 30 percent more
6 tetrachlorodibenzo-p-dioxin in this particular product than
7 had been found and reported by the older method, isn't that
8 correct, sir?

9 A. Yes, that is correct.

10 MR. CARR: That's all the questions I have, Your
11 Honor.

12 THE COURT: Mr. Musgrave?

13 MR. MUSGRAVE: Just a couple.

14

15 CLARIFICATION EXAMINATION

16 BY MR. JOHN MUSGRAVE

17 Q. Did the new method, did you work with Mr. Taulli in
18 developing this method for analyzing Santophen?

19 A. In the sense that I did the sample extractions, I
20 extracted prepared the sample.

21 Q. And was this, was this analysis of Santophen?

22 MR. CARR: 2,4-dichlorophenol.

23 MR. MUSGRAVE: I understand that, Mr. Carr.

24 Q. Is analysis of Santophen?

1 A. Batch 10A1 doesn't describe that to me, I'd say
2 from the title of the table it is analysis of
3 2,4-dichlorophenol.

4 Q. So this new method Mr. Carr was talking about you
5 understand that to be developed for Santophen, do you not
6 recall that being done?

7 A. No, I do not.

8 Q. So you don't know whether this new method, well,
9 here, let me ask you this, Mr. Brautigam, whatever method was
10 used for this 2,4-dichlorophenol analysis, do you know
11 whether it was any more specific or any better than any other
12 method we were using at that time for determination of levels
13 of tetra?

14 A. I would judge it was not any better.

15 Q. For the tetra level?

16 A. Correct.

17 Q. All right. Now, if you have results -- let me back
18 up a minute. Is it an unusual occurrence to take a sample
19 and run it two or three times and find differences in what
20 you are getting in your analysis?

21 A. Certainly.

22 Q. You say it's unusual?

23 A. No, it is not unusual, it's normal, I'm sorry.

24 Q. It's normal. And if you do get such results that

1 vary what do analytical chemists then conclude with regard to
2 the levels of whatever they are trying to detect when they
3 have those varying results?

4 A. The normal practice would be to take the answers of
5 the various analyses on the sample, average those through
6 statistical analysis and establish a standard deviation, this
7 is the amount of variance you would get within the analysis.

8 Q. All right. Now, and if the analysis that you do of
9 a particular sample a couple of times are pretty close, then
10 would you stick with the average?

11 A. You are bound to in the sense that those are the
12 answers that you get.

13 Q. All right. If you have analysis --

14 A. Certainly.

15 Q. -- That are far apart that might raise some other
16 question?

17 A. This would cause you to recheck a further time and
18 deeper to see if you have a variable that you aren't aware
19 of.

20 Q. For instance, if you had a none detected on one
21 occasion then you had 80 or 90 parts per billion, that might
22 cause you to look further into the matter to determine why
23 there was such a wide variation?

24 A. It could, yes, sir.

1 Q. In this situation where you had on one indication 4
2 parts per billion and on another 3.1 parts per billion, would
3 that be a situation where you might well just average those
4 because they are close?

5 A. Certainly. Certainly.

6 MR. MUSGRAVE: All right. That's all I have, Your
7 Honor.

8 THE COURT: Do you have anything further?

9 MR. CARR: Just one thing
10

11 RECROSS EXAMINATION

12 BY MR. REX CARR

13 Q. Mr. Brautigam, this technique is described in the
14 exhibit that you have in front of you as the technique for
15 2,4-dichlorophenol/chlorinated dibenzo-p-dioxins, new
16 technology, isn't it, sir, the very first page of it?

17 A. Yes.

18 Q. And it's a report about using the technique not for
19 Santophen but using it for 2,4-dichlorophenol, isn't it, sir?

20 A. Yes.

21 Q. And it also points out that you have, with this
22 technique, you have a high degree of selectivity within the
23 chlorinated dioxin family, at least from the tetras, isn't
24 that correct, sir?

1 A. Yes, sir.

2 MR. CARR: That's all I have.

3 MR. MUSGRAVE: Nothing. Nothing further.

4 THE COURT: Mr. Brautigam, you may step down.

5 Ladies and gentlemen we will break for lunch at this point in
6 time, it's a little early, but it's convenient. And the
7 admonishments that I've given you earlier apply during this
8 lunch break also. We will resume again at 1:30. Court's in
9 recess for lunch.

10 (The following proceedings were had in Chambers, outside the
11 presence of the jury.)

12 THE COURT: I have reviewed the notes that were
13 submitted to me in camera along with the memoranda that they
14 belonged to. And, in view of all the circumstances, taking
15 into consideration the arguments that have been made, as far
16 as production and incorporating those, since I understand you
17 didn't have time to submit a formal memorandum.

18 MR. NASSIF: Thank you, Judge.

19 THE COURT: I have incorporated all of those
20 arguments both pro and con that have been made as far as
21 production of this type of material and in view of the
22 circumstances and the standards, this Court is obliged to
23 follow as far as those production questions, I think they
24 should be produced, and also I want them produced instanter.

1 And also to help them make sense, because it was immensely
2 helpful to me, I would like them produced in the same form
3 that it was attached to the memorandum to which the notes
4 were formed.

5 MR. NASSIF: I don't have extra copies of the
6 memorandum if you can just give that back to me.

7 THE COURT: Or I can give them to Mr. Carr and he
8 can give me my copy back.

9 MR. NASSIF: All right.

10 THE COURT: Those are just my notes on what's to be
11 produced, and they all were.

12 MR. CARR: I'll just run down the hall and get
13 copies of it made right now. There is only four pieces.

14 THE COURT: Okay.

15 (The following proceedings were had in open court.)

16 THE COURT: Mr. Carr?

17 MR. CARR: I'd now like to call Mr. Phocion Park as
18 an adverse witness.

19 MR. MUSGRAVE: It's Phocion.
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PHOCION PARK

(being called as a witness on behalf of the Plaintiff under
Section 2-1102, upon being duly sworn, testified as follows)

CROSS EXAMINATION

BY MR. REX CARR

Q. Would you state your name, please, sir?

A. My name is Phocion S. Park.

Q. And how old a man are you, Mr. Park?

A. I am 55 years old.

Q. By whom are you employed?

A. By Monsanto Company, I am an attorney.

Q. And when did you first become employed by Monsanto?

A. The Fall of 1960.

Q. And are you licensed to practice law in any of the
various states?

A. Yes, in Texas in 1959, and Missouri in 1961.

Q. All right. And, you've been how many years with
Monsanto?

A. It would be about twenty-four and a half.

Q. And have you always been located physically in the
St. Louis area?

A. Yes, I have.

Q. And you are in the Law Department for Monsanto, are

1 you not?

2 A. That's correct.

3 Q. And from time to time in the past, you've been
4 called upon to meet with something that for want of a better
5 word I would describe as the TSCA committee, or task
6 committee?

7 A. You may be referring to a group that I guess really
8 has no formal name, but, deals with the question of whether
9 or not given a situation a reporting obligation would rise
10 under Section 8E of the Toxic Substances Control Act.

11 Q. And you have been associated with, sitting with
12 persons like Dr. Roush and Dr. Wilson and Callis and
13 Kilbourne and folks of that sort from time to time in making
14 a judgment as to whether or not the product at a particular
15 point in time needs to be reported to the EPA under the Toxic
16 Substances Control Act, isn't that correct, Mr. Park?

17 A. Actually, our practice is that there are three
18 individuals or functions that deal with this. Dr. Roush, the
19 Director of our Department of Medicine and Environmental
20 Health, the Appropriate Director of Environmental Operations,
21 which in some instances has been Dr. Callis, in others it
22 would be another DEO, and myself, we three would always be
23 involved, other individuals might participate or might not as
24 the need would arise.

1 Q. And, you have met, at least you met in May of 1979,
2 did you not, Mr. Park, along with others to discuss
3 2,4-dichlorophenol that had been produced?

4 A. Now, you have -- I don't have this documentation
5 before me and --

6 Q. Let me help you. Jerry, do we have an exhibit that
7 is marked May 14th, '79? I'll hand you what's been
8 previously admitted into evidence dated June 6, '79,
9 Plaintiff's Exhibit 1275, if that would help you, Mr. Park,
10 if you need to take a moment to read it, why go right ahead.

11 A. Okay. Yes, I finished reading it.

12 Q. And that document, 1275, is a memo prepared by you
13 of the Law Department signed by you and dated June 6th, 1979?

14 A. That's correct.

15 Q. And, it refers to a memo that you had written on
16 May the 14th, 1979, does it not, sir.

17 Q. Where it says reference PSP memo 5-14-79?

18 A. Yes, it does.

19 Q. Could you mark this as an exhibit. I'll hand you
20 what's been marked Plaintiff's Exhibit 1288, and as far as
21 I'm checking now to see if it's been previously identified
22 and put in evidence and --

23 MR. SEIGFREID: I don't think.

24 Q. I confess I don't know that it was, identify that

1 please as your memo referred to, if you can, that is?

2 A. Yes, this is my memo.

3 Q. All right. Fine.

4 MR. CARR: I'll offer this into evidence, Your
5 Honor, it's the only copy I have, unfortunately, unless you
6 have your --

7 MR. MUSGRAVE: I have one, I believe, if you will
8 again give me the date.

9 MR. CARR: May 14th, 1979.

10 MR. MUSGRAVE: Plaintiff's 1288?

11 THE COURT: Right. Any objection?

12 MR. MUSGRAVE: Yes, Your Honor, in this is dealing
13 with 2,4-dichlorophenol and dealing with the consideration of
14 2,4,6-trichlorophenol it's irrelevant and immaterial, has no
15 probative when weighed against other factors.

16 THE COURT: I'll admit it over objection.

17 THE COURT: Mr. Park, could you keep your voice up
18 a little bit?

19 A. Certainly.

20 THE COURT: Appreciate it. And that microphone is
21 just for in-house taping so it wouldn't amplify your voice.

22 Q. Doesn't help you a bit. Doesn't help me either, I
23 have the same problem, Mr. Park. Now, Mr. Park, the Exhibit
24 1275 refers to a meeting held on this same subject on May

1 22nd, 1979, does it not?

2 A. Yes, it does.

3 Q. There has been produced to me last week documents
4 -- minutes, rather, notes made by various persons at that
5 meeting and I'd like to hand those to you so that it might
6 help you because I intend to ask you some questions about
7 that particular meeting. Now, Mr. Parks, I'm informed that
8 one of those sets of notes is yours and I may be in error on
9 that, are your notes included in this group?

10 A. No, I don't see them here.

11 Q. All right. 1290 has Dr. Wilson's initials on it,
12 do you recognize that to be his writing?

13 A. No, I'm sorry, I don't know his handwriting.

14 Q. Well, the others at that meeting, there were five
15 people at that meeting of May 22nd, were there not, Callis,
16 Park, Paget, Corey and Dr. Wilson?

17 A. Yes, that would appear to be the case.

18 Q. And the 1290 bears the date of May 22nd, '79, and
19 it also has the names, the last names of those four persons,
20 including yours, and the initials of Dr. Wilson, doesn't it?

21 A. Yes, sir, it does.

22 Q. Now, 1291 also is a memo apparently dated the same
23 time, bears Jim Wilson's signature on this one, this is a
24 memo to somebody by the name of Head that discusses and

1 informs what happened with that meeting, is that correct,
2 sir?

3 A. It appears to be, yes.

4 Q. And 1289, would you know who that might be?

5 A. I can see no name of an author on it.

6 Q. But we do know that -- well, if it's not you and
7 it's not Wilson then it's either Corey or Callis, or Paget,
8 is that correct?

9 A. I have no way of knowing.

10 Q. I don't either, it's not particularly important.
11 I'll offer those three exhibits into evidence if it please
12 the Court, 1290, I'm sorry, 1289, 1290 and 1291.

13 MR. MUSGRAVE: I would object again on the same
14 basis as with regard to 1275, 1288, Your Honor, and 1275 the
15 subject matter. And I would object to 1289 on the grounds
16 that the author is not identified and there is no way to link
17 this up. 1289 to the meetings or meeting. There is no
18 author identified on exhibit 1290, and I would object on
19 those bases.

20 MR. CARR: Your Honor, with response to that, 1289
21 was described to the Court when they filed a motion
22 attempting to prevent us from getting those notes, was
23 described to the Court as notes of one of the employees of
24 Monsanto that attended that meeting, they claimed

1 confidentiality for that reason, they identified this memo
2 themselves. All of those notes they have identified.

3 MR. MUSGRAVE: I wasn't aware of any such
4 identification, Your Honor, and I'm not aware of who the
5 author is.

6 THE COURT: Okay. I will admit them over
7 objection. All three, 1289, 1290, and 1291.

8 MR. CARR: And ask leave to pass copies to the
9 jury, please the Court.

10 THE COURT: Yes, you may.
11 (Plaintiff's Exhibit Nos. 1289, 1290, and 1291 passed to the
12 jury.)

13 Q. Now, Mr. Parks, to put things in a frame of
14 reference here, the Exhibit 1275, that is the memo dated,
15 written by you on June 6th, 1979, refers to the May 22nd
16 meeting, doesn't it, sir?

17 A. Yes, it does.

18 Q. And it contains a direct quote about Dr. Paget's
19 evaluation of the report relative to the 2,4-dichlorophenol
20 that was described in the Federal Register which prompted
21 that meeting, isn't that correct, sir?

22 A. It does contain a quote that apparently is from Dr.
23 Paget's evaluation, I cannot say at the moment whether that
24 is all of Dr. Paget's memorandum describing that.

1 Q. I didn't suggest that it was all, Mr. Park, if you
2 assumed that I meant it was all, I really don't know whether
3 it is all or part, this is all that I have of his evaluation,
4 however, his report was not given to me.

5 A. Yes.

6 Q. In any event, he describes the recently released
7 NCI bioassay study of 2,4,6-trichlorophenol in rats and shows
8 very weak carcinogenic responses in both species, points out
9 doses very large, 5,000, 10,000 parts per million and the
10 material tested was a commercial grade material analyzing at
11 least 17 impurities, and that TCDD was not analyzed for it,
12 is that correct, sir, did I read that more or less correctly?

13 A. Well, it says that it was commercial grade material
14 containing at least 17 impurities, and then as you say the
15 TCDD was not analyzed.

16 Q. Now Exhibit 1290, that is Dr. Wilson's notes that
17 bears the date circled in the -- well, it has the five names,
18 four names and the initials of Dr. Wilson in the upper
19 right-hand corner, and in the middle of that exhibit, it
20 refers to the bioassay and in paragraph numbered 2 there, it
21 points out that 6 micrograms per two grams of total lifetime
22 dose of 2,3,7,8-TCDD is fatal to rats, and quote one part per
23 billion?

24 MR. MUSGRAVE: Mr. Carr -- Mr. Carr, I would

1 object, Your Honor, I don't know that he's reading this
2 correctly.

3 MR. CARR: Correct me if I'm wrong.

4 MR. CARR: I don't know, Mr. Carr, those are
5 handwritten notes of somebody else.

6 MR. CARR: Don't you have the note?

7 MR. MUSGRAVE: Yeah, I have the note but I can't
8 tell whether that's a two or twelve or kilogram mark and I
9 object.

10 MR. CARR: It is a kilogram mark.

11 MR. MUSGRAVE: You said two grams, 6 milligrams per
12 two grams.

13 MR. CARR: I'm sorry, I misread it. Thank you for
14 correcting me. It's 6 micrograms per kilogram and I did say
15 two grams, I did misread it. 6 micrograms per kilogram total
16 lifetime dose of 2,3,7,8-TCDD is fatal to rats, and then the
17 next line under that says 1 part per billion 2,3,7,8-TCDD in
18 2,4,6-TCP would cause effects described, do you see that,
19 sir?

20 A. I do see the note, yes.

21 Q. And, the next line says that in some if the TCP is
22 a carcinogen at all it is extremely weak, isn't that correct,
23 sir?

24 A. Yes.

1 Q. Now, was the only medical person there, the only
2 toxicologist there, was it Dr. Paget?

3 A. Assuming that those five were present, yes, yes,
4 Dr. Paget would be the only medical person.

5 Q. Well, the memo of 1275 says the above-named person
6 C. F. Callis, W. R. Corey, G. E. Paget, J. D. Wilson and
7 yourself were the ones that were present?

8 A. That's correct.

9 Q. Now, and Paget is the -- was the resident
10 toxicologist or doctor at that time, was he not?

11 A. Yes.

12 Q. And he pointed out to the rest of you that this
13 2,4,6-TCP has the same effect that is the 5,000 and 10,000
14 parts per million of TCP in the diet would have the same
15 effect as one part per billion of 2,3,7,8-TCDD, he equates
16 the two, does he not?

17 A. I guess I don't see how we could draw that
18 conclusion, I don't know who the author of this Exhibit 1290
19 is.

20 Q. Well, I thought we identified that as being Dr.
21 Wilson, J. D. W.?

22 MR. MUSGRAVE: I think that was 1291, counsel?

23 A. Yeah.

24 Q. 1290 has his initials, Dr. Wilson wrote two memos

1 1291 and 1290.

2 MR. MUSGRAVE: There is no testimony to that, Mr.
3 Carr, is there?

4 MR. CARR: The witness and I established that a
5 moment ago. It's really immaterial who wrote it, those are
6 notes that were taken of that -- if they are not Wilson's
7 then they are either Callis', Park's, Paget, and the witness
8 said Corey. They are not Park's, so it must be J.D.W.'s.

9 MR. MUSGRAVE: That's your -- I object to that
10 being your conclusion.

11 THE COURT: Well, I don't really think it's
12 material either, why don't you just move on.

13 MR. MUSGRAVE: Can his comment be stricken as to
14 whose it is if it's not material?

15 THE COURT: No, because I think it was supported by
16 what was said before. Your objection is overruled, and all
17 I'm saying it's not material, something that's material that
18 we can spend more time on. Mr. Carr, you may proceed.

19 MR. CARR: Your Honor, if there is any question
20 about it, counsel, just compare the NCI on the memo that's
21 signed by Dr. Wilson, 1291, and the NCI that's on document
22 1290 and much of the other writing if there is any question
23 at all in your mind that Dr. Wilson wrote the memo?

24 A. Counsel, I'm not prepared to say who the author of

1 1290 is.

2 Q. I'm not asking you to.

3 A. Yeah, yeah.

4 Q. Do you -- and do you see the similarity, Dr.,
5 rather Mr. Park in the writing?

6 A. Where is the NCI on 1290?

7 Q. On 1290 a number of places, one place is --

8 A. Yeah, okay, I see that.

9 Q. You see that?

10 A. No, I guess I see a difference in the NCI on 1290
11 and 1291.

12 MR. MUSGRAVE: Are you trying to qualify him as
13 handwriting expert? If it doesn't make any difference why are
14 we going into this?

15 THE COURT: Gentlemen, that's enough, just go on.

16 Q. In any event, whoever the author is, wrote what was
17 discussed at that meeting, didn't he, sir, some
18 representative of Monsanto wrote this document, didn't he,
19 sir?

20 A. Yeah, in fairness, it isn't clear whether the
21 reference to one ppb 2,3,7,8-TCDD and so on came just from
22 the mind of the author of Exhibit 1290 or from someone else.

23 Q. Mr. Park, I really don't care whether it did or
24 not. It's not material to my purposes to know or identify

1 who said what. This is a document of Monsanto, written by
2 Monsanto, everybody there were representatives of Monsanto,
3 weren't they, sir?

4 A. Yes, there were, I'm sorry, you had asked earlier
5 if Dr. Paget had said that and I guess --

6 Q. Well, what I asked you earlier was there any other
7 medical person there or toxicologist there other than Dr.
8 Paget?

9 A. None.

10 Q. All right. And, somehow or other this got written
11 down equating one part per billion of 2,3,7,8-TCDD with the
12 doses of dichlorophenol that was fed to those rats, isn't
13 that correct, sir?

14 MR. MUSGRAVE: Object to counsel's interpreting the
15 documents, interpreting the document, Your Honor,, the
16 document was not authored by this witness. He is now asking
17 the document to be interpreted by this witness and that's an
18 improper question to ask of this witness as to what this
19 document means other than what the words say, document
20 otherwise speaks for itself.

21 THE COURT: Objection is overruled.

22 MR. MUSGRAVE: May my entire -- I anticipate where
23 this is going, Your Honor, may the continued examination of
24 this witness with regard to interpreting Plaintiff's Exhibit

1 1290 and what it means other than what the document says on
2 it's face to the extent that the handwriting can be
3 deciphered, may my objection continue to run to all such
4 questions?

5 THE COURT: Without agreeing with your
6 characterization, I will allow your objection to be
7 continuing on to this line of questioning. It is so noted in
8 the record as a continuing objection. My ruling is the
9 same. Mr. Carr, you may proceed.

10 MR. CARR: Thank you, Your Honor.

11 Q. (by Mr. Carr) Mr. Park, does it state that one
12 part per billion of 2,3,7,8-TCDD, if it were in that batch of
13 2,4,6-trichlorophenol that was tested, would cause the
14 effects described?

15 A. Counsel, I'm reluctant to go beyond the notes that
16 someone took here. I can see them, I agree that this wording
17 does appear on this document, but I really cannot go into the
18 mind of the author.

19 Q. I'm not asking you to go into the mind of the
20 author, I'm asking you to read and understand the meaning of
21 those notes, Mr. Park, that it says would cause the effect
22 described, if it were in the 2,4,6-TCP, does it not, sir?

23 A. It does say that.

24 Q. What are the effects that were described?

1 A. I'm sorry, I have no idea what he's referring to.

2 Q. Turn to the document Plaintiff's Exhibit 1275, Mr.
3 Park.

4 A. Yes.

5 Q. And the effect described is a very weak
6 carcinogenic response in both species, isn't that correct,
7 sir?

8 MR. MUSGRAVE: You --

9 A. This is an effect.

10 Q. I'm sorry?

11 A. Document 1275 --

12 Q. Are there any other effects described other than
13 the carcinogenic effect?

14 A. Counselor, there may have been some effects
15 discussed at the meeting.

16 Q. Mr. Park, do you know of any other effects that
17 were discussed?

18 A. I cannot recall much about the meeting.

19 Q. Do you have any recollection of what was discussed
20 at the meeting at all?

21 A. Frankly I do not without the notes.

22 Q. We do have what is stated here and is there any
23 other description in the memo or anyplace else in your mind
24 of any effect other than a weak carcinogenic effect that was

1 associated with the bioassay study of 2,4,6-trichlorophenol?

2 A. I really feel I'm not in a position to interpret
3 someone else's document.

4 Q. I'm asking you to examine the document and tell me
5 whether or not there is any other effect described in those
6 documents other than what I've asked you about that it shows
7 a very weak carcinogenic effect?

8 A. May I point out that --

9 Q. I would appreciate it, Mr. Park, if you would
10 answer that question so that I can move to the next question.

11 MR. MUSGRAVE: Which document are you referring to,
12 counsel?

13 Q. All the documents I've given him relating to the
14 May 22nd meeting.

15 MR. MUSGRAVE: Would you -- well, I think, Your
16 Honor, it's going to take a bit of time for this witness to
17 review all of those documents so he can attempt to answer
18 counsel's question.

19 MR. CARR: If he needs more time all he has to do,
20 counsel, is say so. I will not rush him.

21 A. Let me review those documents, then, to see if I
22 can see any reference to other effects.

23 Q. Please. If it would help you, Mr. Park, let me
24 hand you your memo of May 14th, '79.

1 A. Thank you.

2 Q. In which you refer to the report in the medical
3 register.

4 MR. MUSGRAVE: Are you asking him now, counsel, to
5 go beyond May 22? Can we have one question at the time so
6 the witness can focus on that.

7 THE COURT: I don't think another question was
8 asked.

9 MR. MUSGRAVE: I think --

10 THE COURT: Wait a second, I think the record
11 reflects he was given another document if it might assist in
12 using such. I don't think that's a question, he was just
13 handed another document to help him.

14 A. I guess the only references to effects that I can
15 see in those documents are the references in the minutes of
16 the meeting and the Exhibits 1288, 1275, refer to the effect
17 in the NCI bioassay study. I point out that those two
18 memoranda were simply minutes of a meeting for one purpose
19 and were not intended to contain all matters discussed at the
20 meeting including --

21 Q. Mr. Park --

22 A. Any references to effects.

23 Q. I didn't suggest to you that they did.

24 A. Oh, okay.

1 Q. All I'm asking you is the -- and if you will look
2 at your own memo of May 14th, 1979, in which you have a
3 direct quote from the Federal Register report, that's the
4 reason I gave it to you to help you, it says, doesn't it,
5 sir, "under the conditions of this bioassay,
6 2,4,6,-trichlorophenol was carcinogenic in male F344 rats,
7 inducing lymphomas or leukemias. The test chemical was also
8 carcinogenic in both sexes of B6C3F1 mice, inducing
9 hepatocellular carcinomas as or adenomas." Does that help
10 you?

11 A. That's correct.

12 Q. Now, those are cancers they are talking about,
13 aren't they, sir, lymphomas, leukemias, carcinomas, adnomas,
14 those are all cancers, aren't they, sir?

15 A. I believe so.

16 Q. What the Federal Register published was that
17 2,4,6-trichlorophenol induced those cancers in those mice and
18 rats, isn't that correct, sir?

19 A. The very high doses, yes.

20 Q. Mr. Park, if you could just answer my question, I
21 read the doses, the doses were 5,000 to 10,000 or whatever
22 the dose was that I just read you, 5,000 to 10,000 parts per
23 million in the diet, right, sir?

24 A. Yes.

1 Q. And, the note that I'm referring you to 1290, the
2 notation says that one part per billion of 2,3,7,8-TCDD in
3 2,4,6-trichlorophenol would cause effects described, isn't
4 that correct, sir?

5 A. That's what it says.

6 Q. Now, what other effects are described in those
7 documents other than lymphomas, leukemias, hepatocellular
8 carcinomas or adnomas, all of which are cancerous?

9 A. I guess on my review here, I see no other effects,
10 I don't know that this reference, though, is to something
11 that would be expressed in those other documents.

12 Q. Mr. Park, I am not asking you to be psychic or to
13 go back and remember something that isn't in your mind, all
14 we have is the evidence in front of us here. We don't have
15 any shorthand notation of it, all we can do from those
16 documents attempt to deduce what you all discussed since none
17 of you have any memory of what you discussed. And, Mr. Park
18 --

19 MR. MUSGRAVE: Is that a question, Mr. Carr?

20 MR. CARR: No, I'm responding to his statement that
21 he's sorry he doesn't know exactly what went on.

22 MR. MUSGRAVE: I object, it's not a question.
23 Request it be stricken.

24 THE COURT: Overruled, it was properly given to the

1 witness in clarification.

2 Q. (by Mr. Carr) Now, Mr. Park, you pointed out or
3 Dr. Paget pointed out in his note Exhibit 1275, that TCDD was
4 not analyzed for in the 2,4-triphenol that had been tested,
5 isn't that correct?

6 A. Yes.

7 Q. And, Mr. Park, you do know, don't you, sir, that
8 dioxins have been present in your trichlorophenol, your
9 dichlorophenol products at the level of 5 parts per million
10 in the past prior to the time you eliminated your caustic?

11 A. I'm sorry, I cannot recall that off the top of my
12 head, if you could --

13 Q. Well, did you discuss when you made the decision
14 that you are not obligated to and that's the decision that
15 you made, that you are not obligated to inform the EPA of the
16 fact that your 2,4-D, your 2,4-dichlorophenol is not such a
17 chemical as needs to be reported, since it doesn't have a
18 substantial risk, did you all discuss at those meetings the
19 fact that dioxins were contained and had been found in your
20 2,4-dichlorophenol at relatively high levels?

21 A. I'm sure we discussed all relevant information, Mr.
22 Carr, this was what, five years ago. I suspect that you are
23 more familiar with those documents at this moment than I am.

24 Q. Mr. Park, if you knew that one part per billion of

1 2,3,7,8-TCDD in a product could cause cancer, in your
2 position as a representative of Monsanto on that committee
3 determining whether or not the EPA should be notified that
4 your products contained 2,3,7,8 or other dioxins that can
5 cause cancer, do you believe that the EPA should have been
6 notified?

7 A. I feel secure that the correct decision was reached
8 at those meetings.

9 Q. Then you believe then that the EPA should not be
10 notified?

11 A. That's correct.

12 Q. Because they weren't notified, were they, sir?

13 A. That's correct.

14 Q. Now, did you have given to you at that meeting any
15 toxicological information other than what is contained in
16 those notes that you know of, that you can remember?

17 A. There may have been. Off the top of my head, I
18 frankly, cannot recall at the moment.

19 Q. Well, then, if you can't recall it and if there
20 isn't anything else in those notes that can help you, then I
21 suppose we have to accept that this is the only information
22 that's available to us now, that is that one part per billion
23 of TCDD and 2,4,6-trichlorophenol would cause the effects
24 described that we have discussed, isn't that correct, Mr.

1 Park?

2 A. Mr. Carr, those are handwritten notes by someone I
3 don't know, I have no idea.

4 Q. I understand.

5 A. I have no idea what he was thinking of.

6 Q. No, I differ, you do know the person, you just
7 don't know which of those persons wrote this memo?

8 A. This reference to that I think we are referring to
9 is in document 1290, that the author is unknown, does not
10 appear to be the same handwriting to me as appears on 1291,
11 which is apparently authored by Jim Wilson.

12 Q. Well, I'm really not concerned in convincing you
13 whether it is or is not Jim Wilson's writing. The Judge has
14 ordered me not to proceed any further in that area, and I
15 don't intend to because it's not important. The only
16 important thing that is, is that you at this committee had
17 this information -- at least one person on that committee had
18 this information and knew this fact, isn't that a fair
19 statement, Mr. Park?

20 MR. MUSGRAVE: What is this fact, Mr. Carr?

21 MR. CARR: One part per billion TCDD in
22 2,4-trichlorophenol would cause lymphomas, leukemias.

23 MR. MUSGRAVE: Just a moment.

24 MR. CARR: Hepatocellular carcinomas or adenomas.

1 MR. MUSGRAVE: Object, he's connecting the two up.
2 The witness cannot connect the two up. Mr. Carr is drawing
3 the conclusion, it's improper, I object.

4 THE COURT: Overruled. It's a proper question.

5 MR. CARR: I submit the witness has connected the
6 two up, there are no other effects described.

7 MR. MUSGRAVE: You've drawn the conclusion, Mr.
8 Carr.

9 THE COURT: Okay, I've ruled, it's a proper
10 question. Mr. Park. If you would answer the question,
11 please.

12 A. I didn't understand that it was a question, Your
13 Honor.

14 THE COURT: Could you restate the question?

15 Q. Mr. Park, is there any other toxicological
16 information that you need, that you needed, that you have in
17 your mind to decide at that point in time whether or not the
18 EPA should be notified?

19 A. I can only assume on the basis of my memoranda that
20 all information propose to be considered was considered and a
21 conclusion was reached that the information before us simply
22 did not indicate a substantial risk of injury to health or
23 environment, therefore, section 8E did not require
24 notification.

1 Q. Would you make that same statement if your product
2 contained, oh, one -- one thousand parts per billion?

3 A. We would have to consider all the information about
4 the intended use, how it would go into a process, so forth,
5 there are other factors to be considered.

6 Q. Just assume that that's what the exposure is going
7 to consist of, that they are going to be at 1 thousand parts
8 per million of dioxin, 1 thousand parts per billion of
9 dioxin, that is 1 part per million?

10 A. I don't know that --

11 MR. MUSGRAVE: Just a moment, Mr. Park. Are you
12 now asking this witness a hypothetical question?

13 MR. CARR: Yes, I am.

14 MR. MUSGRAVE: I object unless he wants to qualify
15 the witness as having the expertise in toxicology and
16 medicine so as to make determinations with regard to
17 substantial health hazards.

18 THE COURT: I don't think this question calls for
19 that kind of expertise. Objection is overruled. Mr. Park,
20 please answer the question.

21 A. I don't know that that fact alone would require
22 notification to the EPA under Section 8E.

23 Q. And why not, Doctor -- Mr. Park?

24 A. Because it might not effect a substantial risk to

1 health or environment. That is the requirement.

2 Q. At what level -- it's the level then that you are
3 saying doesn't present a substantial risk or is it because
4 it's dioxin and not cyanide?

5 A. No, it's -- it simply -- there must be other
6 factors.

7 Q. I'm sorry. I'm trying to find out what those other
8 factors are. Is it because it's one thousand parts per
9 billion of dioxin and not one thousand parts per billion of
10 cyanide in this product?

11 A. Very difficult to deal with such an abstract
12 example and not a real life one.

13 Q. Well, the real life one is that if there were a
14 thousand parts per billion of cyanide in your product that's
15 leaving your plant and that somebody is going to be exposed
16 to that thousand parts per billion of cyanide --

17 A. Someone may not be exposed to it. The mere fact
18 that there is a thousand --

19 Q. Are you taking into consideration whether someone
20 would or would not be exposed, Mr. Park?

21 A. I think exposure is a factor to be considered.

22 Q. Assume the exposure. Assume they will have
23 exposure to it. I'm asking you to assume that.

24 A. Yeah. Yeah. This is somewhat difficult because,

1 for example, the EPA --

2 Q. Mr. Park, what I'm asking you to do, I'd like for
3 you to proceed along with me, so we can be as expeditious as
4 we can, I want you to assume that there is exposure to the
5 product that contains 1 thousand parts per billion of
6 cyanide.

7 MR. MUSGRAVE: Object, vague, it's the use of the
8 term exposure.

9 THE COURT: Overruled.

10 A. I would have to say that I don't know that that
11 would require notification to the EPA.

12 Q. Well, do you know that it would not require or is
13 this a doubt in your mind?

14 A. If there was a situation where someone said, look,
15 I think we should sit down and discuss whether or not a
16 notification might be appropriate --

17 Q. No, I'm not asking you that, what I'm asking you is
18 do you believe that a product containing 1 thousand parts per
19 billion of cyanide, if it contains that, that the EPA should
20 be notified of that fact under this Section 8E?

21 A. Not necessarily. The question is is there a
22 substantial risk of injury to health or the environment, that
23 is what's critical.

24 Q. Well, the question is is there a substantial risk

1 and that's the question that I'm asking you based upon the
2 work that you've done in this, to answer that question for
3 me?

4 A. Yeah, what I'm trying to do, sir, I would say, no,
5 it is not reportable until there is something more to
6 indicate a substantial risk besides mere concentration.

7 Q. What more do you need, sir?

8 A. Someone who feels there is a substantial risk
9 should describe it.

10 Q. What more do you need? What more do you need
11 before you can decide whether it is or is not a substantial
12 risk?

13 A. Well, here you've asked me, I was trying to
14 explain. Again, the vast majority of submissions to the EPA
15 under Section 8E have been results of toxicity studies on
16 chemicals.

17 Q. Mr. Park, I'm not asking you that question.

18 A. I know you are not.

19 Q. What I'm asking you is what are the risks that you
20 will consider before you decide that it is going to be
21 reported to the EPA?

22 A. It will --

23 Q. What is a substantial risk?

24 A. Do we have information previously unknown to the

1 EPA that supports the conclusion that this chemical presents
2 a substantial risk of injury to health or the environment?

3 That is what we consider.

4 Q. Well, did you report to the EPA that your
5 2,4-dichlorophenol contained a dioxin or contained cyanide?

6 A. No. No. Huh-uh.

7 Q. Then it's information that they don't have, isn't
8 that correct, sir?

9 A. Yes.

10 Q. If it's not reported. Now, it's in there and it
11 hasn't been reported, now I want to know what else do you
12 need to know before you're going to report that fact to the
13 EPA?

14 A. The facts that you have described so far simply
15 don't indicate a substantial risk of injury.

16 Q. What do you need to know more to tick this thing
17 off, that it causes cancer, that it causes paralysis?
18 Cyanide causes death. And I gave you a hypothetical assuming
19 a thousand parts per billion of cyanide, it causes death, no
20 question about that, is there, sir?

21 A. That's correct. It's acutely toxic.

22 Q. No question that causes death?

23 A. Right.

24 Q. Now, if your product contained one thousand parts

1 per billion of cyanide, as a member of this committee, do you
2 believe the EPA should be notified?

3 A. Of course, here you have questions as to what level
4 is cyanide toxic. As you know, it's found in nature in
5 seeds, for example.

6 Q. I'm just asking you what else do you need to know,
7 what other facts do you need to know?

8 A. You need to have facts that would indicate that a
9 chemical is going to present a substantial risk of injury to
10 health or the environment.

11 Q. Mr. Park, what you are doing is giving me the words
12 of the law back, and what I'm asking you, is you are a member
13 of this committee, a member that has met a number of times, I
14 have more than just one of those documents, a number of
15 documents in which you've met, and I am asking you, sir, what
16 are the risks that you consider substantial associated with
17 exposure to your chemical that will tick off this process of
18 notifying the EPA, what are the risks that you consider
19 substantial?

20 MR. MUSGRAVE: Your Honor, so the record again is
21 clear, I'd like to make two objections, request they be made
22 continuing ones. One is to the continuing or the questioning
23 of the witnesses as to questions applying law to hypothetical
24 facts which are not stated with any specificity. The other

1 is that the question is vague and indefinite and calling upon
2 this witness to speculate and conjecture as to what certain
3 sets of facts might or might not require application of the
4 law again being objectionable.

5 THE COURT: Overruled on both. I will note it as a
6 continuing objection.

7 MR. MUSGRAVE: Thank you.

8 THE COURT: You are welcome.

9 A. I guess off the top of my head, I don't know that
10 out of all the 8E submissions to the EPA by everyone, there
11 have been any that dealt with concentration. There may have
12 been, but I don't know. The vast majority deal with new
13 health effects. That's the way this interpretative policy of
14 the EPA is structured. Deals with, really with toxicity
15 studies and reports that might indicate new health effects
16 not previously known now. If that --

17 MR. CARR: Would you instruct the witness to answer
18 the question? I simply don't want to ask it all afternoon.

19 THE COURT: Mr. Park, you have to answer the
20 question as posed..

21 A. I don't feel that one thousand parts per billion
22 cyanide in a product would in and of itself require
23 notification to the EPA.

24 Q. What other additional facts do you need is my

1 question, sir? You've answered that already, I want to know
2 -- Your Honor, must I ask this question over and over again,
3 could you direct the witness to answer the question?

4 THE COURT: Mr. Park, that was the question before
5 the last one. Please answer the last question posed.

6 A. All right, I would need to know, to have
7 information as to the anticipated exposure of health and the
8 environment.

9 Q. Slow down a second, anticipated exposure and what
10 else, sir?

11 A. I guess type of exposure.

12 Q. Yes, type of exposure.

13 A. Toxicity of the product. And that we are concerned
14 with a new not previously known health effect.

15 Q. Now, on the latter, a new not previously known
16 health effect, do you interpret that to mean that you could
17 make a product which has a contaminant in it, let's say 50
18 percent cyanide, let's just suppose it's 2,4-dichlorophenol
19 that's going to be used in a number of ways, it's got
20 something like cyanide in it, and we all know that the toxic
21 effects of cyanide is well-known, you mean to say you don't
22 believe you'd have to notify the EPA that your product has
23 got cyanide in it simply because the toxic effects of cyanide
24 are known?

1 A. I would do that, look at the product as the whole.

2 Q. The product as a whole contains, and you don't want
3 it in there, it's a contaminant, your customers don't know
4 that it's in there, the EPA doesn't know that it's in there,
5 but you know that half of it is cyanide but yet you also know
6 that the EPA is aware of the toxic effects of cyanide, are
7 you saying because the toxic effects of cyanide are already
8 known to the EPA that you need not report the fact that this
9 particular batch of chemical is now instead of being a
10 hundred percent 2,4-dichlorophenol is in fact 50 percent
11 cyanide, are you saying you don't need to report that to the
12 EPA?

13 A. You are saying that -- I want to make sure I
14 understand your hypothetical, Mr. Carr. You are saying that
15 we suddenly learned that -- in fact, let's make hypothetical
16 manufacturer A over here suddenly learns that the product
17 that he thought was chemical X now is only 50 percent
18 chemical X and 50 percent cyanide?

19 Q. Yes.

20 A. Of course there are probably other things that that
21 manufacturer ought to consider, he may elect not --

22 Q. Mr. Park, we are not -- I don't want to get down
23 any other paths, I simply want to know whether or not you
24 mean what you say when you said it would have to be a new,

1 not previously known, health effect before you would report
2 the contaminant in your product to the EPA?

3 A. I guess if that manufacturer decided not to ship
4 that product, once he had learned, then --

5 Q. We are not talking about -- we are talking about
6 because the product doesn't count unless it's shipped, you
7 don't have to notify the EPA if it is not shipped, so, you
8 know that, Mr. Park, and I don't need to include that in my
9 question. I don't need to do this fencing with you. Now
10 please answer the question.

11 A. I'm afraid you have me a little confused, the
12 question was would the EPA be, would there be an 8E
13 notification requirement where knowledge was suddenly
14 obtained that half the product was cyanide.

15 Q. Even though the health effects and the toxicity of
16 cyanide are well-known to the EPA?

17 A. (pause) To what use? Is the use to which the
18 product is to be put part of the hypothetical? I think it
19 should be.

20 Q. Now, Mr. Park, you gave me that as one of the -- I
21 assume one of the conditions when you said anticipate
22 exposure, that would include use.

23 A. That's right.

24 Q. And type of exposure you gave me as one of those

1 elements, that it is a new not previously known health
2 effect, and I'm asking you does it have to be a new not
3 previously known health effect of the contaminant, or of the
4 product, if the product contains for the first time to the
5 EPA's knowledge 50 percent cyanide, do you not believe that
6 the EPA must be notified of that fact, even though the health
7 effects of cyanide are well-known, been known for centuries?

8 A. There may be other reasons, but I don't believe
9 that 8E would require that notification under only those
10 circumstances.

11 Q. Then you would not be required, if you start -- if
12 you know that your product, because of some process change,
13 contains, it's now going out 50 percent cyanide, you don't
14 have to notify the EPA under Section 8E, is that what you are
15 saying, sir?

16 MR. MUSGRAVE: Been asked and answered. He's given
17 his answer to the question already, Your Honor.

18 THE COURT: I believe he answered, yes, that he
19 would not have to. I believe it was asked and answered.

20 Q. And why do you believe you would not have to notify
21 the EPA that this product now that you are shipping out
22 contains half cyanide? It's going on people's lawns, you
23 know what 2,4-dichlorophenol is used for, being put in oil
24 wells, kids are playing on the lawns, you know that, and you

1 -- the EPA doesn't have to be notified that half of it is
2 cyanide, is that what you are saying?

3 A. I'm sorry, your knowledge of the use of the product
4 exceeds mine, I'm sorry, but I think you are overly
5 broadening Section 8E of TSCA, it just is not intended to
6 apply to every situation, it applies to certain situations
7 where evidence arises that a chemical presents a substantial
8 risk.

9 Q. We know that cyanide presents a substantial risk,
10 do we know that, is there any question about health effects
11 of cyanide? Is there any question but what if any children
12 play on a lawn that was impregnated with cyanide there would
13 be a substantial health risk, is there a doubt in your mind,
14 Mr. Park?

15 A. I would think heavy exposure to cyanide would be,
16 could be a hazard.

17 Q. There is no question in your mind it would be a
18 substantial risk to the health of my children if they are
19 playing on a lawn that's covered with cyanide?

20 A. Yes, but, if the use of the cyanide were as an
21 intermediate chemical so that it is impregnated in something
22 else, as happens for example, I believe with arsenic.

23 Q. Mr. Park --

24 MR. MUSGRAVE: Just a moment, may he finish his

1 answer?

2 MR. CARR: Sure.

3 A. I think arsenic and gallium I believe now go into
4 the make-up of certain semi-conductor units, where they are
5 impregnated into what in a finished product is a glasslike
6 substance. There is no way anything can escape from it, can
7 get out of it. The EPA has recognized that the arsenic,
8 gallium arsenide presents no hazard to the environment. One
9 could swallow it like a pill, it presents no hazard.

10 Q. Don't you think that the manufacturer that first
11 started using arsenic in his product was required under TSCA
12 to let the EPA know that so they could make a decision as to
13 whether or not that was in fact the arsenic was impregnated,
14 could not get out?

15 A. No, not under 8E would not require it.

16 Q. Some other more stringent requirement would come
17 into effect, wouldn't it?

18 MR. MUSGRAVE: We are talking about 8E, Mr. Carr,
19 that's where your questions are going?

20 THE COURT: Objection is overruled.

21 MR. MUSGRAVE: If you are talking about other law,
22 it's other law to be talked about.

23 THE COURT: Objection is overruled.

24 A. I don't know if it necessarily follows that a

1 government regulation would require that disclosure. I think
2 manufacturers apply careful thought into protection in the
3 way they manufacture and market the products as the rule.

4 Q. The manufacturer decides, if it's one of those
5 that's careful, then the law doesn't apply to it, is that
6 what you are saying, Mr. Park?

7 A. Not at all. I don't know of a law that would apply
8 in the way you describe.

9 Q. Mr. Park, are you now still of the view that the
10 EPA under any rule or regulation of which you have knowledge
11 doesn't have to be notified that your product is half cyanide
12 because of a change in manufacturing process simply because
13 the health effects of cyanide is well-known?

14 A. Well, of course now we have an OSHA, Occupational
15 Safety Health --

16 Q. I'm not talking about OSHA, I'm talking about the
17 EPA and TSCA. Are you still maintaining that you are not
18 obligated to notify the EPA that half of your
19 2,4-dichlorophenol is cyanide.

20 MR. MUSGRAVE: Under what -- Mr. Carr, under 8E or
21 anything else?

22 Q. Are you still saying that, sir?

23 A. Saying there would be other factors that should be
24 considered.

1 THE COURT: I didn't hear you. I didn't hear your
2 answer.

3 A. There are other factors which should be considered
4 in determining whether a notification to the EPA under 8E of
5 TSCA is required besides concentration in the product.

6 Q. You know that I am taking the points that you've
7 given me one at a time, please don't confuse it by throwing
8 in the other things, I'm talking now only on the point that
9 cyanide health effects are well-known, and I'm directing your
10 attention to that point. Do you still say that because the
11 health effects of cyanide is not a new effect that you, the
12 manufacturer of 2,4-dichlorophenol, you don't have to notify
13 the EPA that it's half cyanide? Are you still saying that,
14 sir?

15 MR. MUSGRAVE: Under 8E, Mr. Carr, are you still
16 asking that?

17 Q. Are you still saying, Mr. Park --

18 A. Your hypothetical -- your question is that if new
19 previously unknown information is that the product is now one
20 half cyanide, is the fact that the health effects of cyanide
21 were previously known a factor in consideration?

22 Q. No. More than that. You said that if it's -- it's
23 got to be a new health effect of the material in question
24 before you have to notify the EPA, that's what you said, Mr.

1 Park. Now, I'm asking you again and again the health effects
2 of cyanide is well-known, there are -- there is nothing new
3 to be learned about cyanide, it's a deadly poison and it's
4 well-known. Now, are you still saying your product is half
5 cyanide, because the health effects of cyanide are
6 well-known, you do not have to report the 2,4-dichlorophenol
7 now contains cyanide, half cyanide?

8 A. No, I think other factors would have to be
9 considered.

10 Q. So that is no longer a factor, it is not a fact, is
11 it, sir, that the product in question, the poison in question
12 has to have new health effects it's not a factor at all, it's
13 the product you are talking about that contains the poison,
14 isn't that correct, sir?

15 A. It's the total product, I think.

16 Q. Which contains the poison. Now, simply because the
17 2,3,7,8-TCDD toxic effects is well-known, just like the
18 health effects of cyanide is well-known, that does not
19 relieve you, the manufacturer, of the obligation reported
20 under TSCA, does it, sir?

21 A. It would be considered with other factors.

22 Q. My question is it does not permit you to ignore the
23 toxicity of that product, of that contaminant, even though
24 the health effects of 2,3,7,8-TCDD is well-known, isn't that

1 correct, sir?

2 A. Mr. Carr, I don't know that to what extent the
3 health effects of 2,3,7,8 are well-known.

4 Q. That's not what I'm asking you.

5 A. I'm sorry, I thought you did.

6 Q. Just consider the health effects that are known
7 associated with 2,3,7,8, that it is a carcinogen, as your
8 notes indicate, it's a carcinogen, no new health effects came
9 in about 2,3,7,8 in this meeting, you learned nothing new
10 about it.

11 MR. MUSGRAVE: Object to the reference to his notes
12 as the carcinogen. We are talking about humans, talking
13 about animal species. Object to the question as misstating
14 the evidence.

15 THE COURT: Overruled.

16 A. I think it was probably concluded --

17 Q. Mr. Park, please direct your attention to the
18 question that I'm asking you about. Isn't it a fact that you
19 don't need to consider the health effects of 2,3,7,8 or need
20 to consider that there must be some new health effects of
21 2,3,7,8 that requires you to be aware of that before you
22 notify the EPA that 2,3,7,8 is in your product, or cyanide is
23 in your product, or arsenic is in your product, or any other
24 substance that has a substantial risk of harm to those

1 persons that are exposed to it? Isn't that a fact, Mr. Park?

2 A. Certainly there would be a number of factors to be
3 considered.

4 Q. Mr. Park, that isn't what I'm asking you. I'm
5 directing your attention to one factor alone at this time.
6 Could you answer that question, please, sir?

7 A. And that question, would you mind repeating the
8 question, Mr. Carr?

9 Q. Mr. Park, isn't it a fact that you are not released
10 from reporting the presence of toxic substances in your
11 product simply because the health effects of the toxic
12 substances are well-known and it's not new that those toxic
13 substances have injurious health effects?

14 A. I feel that that fact alone would not relieve a
15 manufacturer of an obligation to report.

16 Q. Thank you, sir.

17 A. There might be other factors that would.

18 Q. I understand that, that's all I'm asking you about
19 is that factor.

20 THE COURT: Mr. Carr, is this a good point for a
21 short break?

22 MR. CARR: Yes.

23 THE COURT: Ladies and gentlemen, we will take a
24 short break at this time. And the admonishments that I've

1 given you earlier during the other breaks will apply during
2 this one also. Court is in a short recess.

3 (Following a recess, these proceedings were had in open
4 court.)

5 Q. (by Mr. Carr) Now, Mr. Park, I think you mentioned
6 the other two or three elements that you would need to
7 consider before you notify OSHA would be the toxicity of the
8 product, the type of exposure, and the anticipated exposure,
9 correct, sir?

10 A. Yes, I don't know that I intended those would be,
11 they would be exclusive, could well be other factors.

12 Q. I want to know those other factors, sir, that
13 causes this committee --

14 A. Mr. Carr, I don't know if I could tell you all the
15 factors we consider, the Statute, as you know, is extremely
16 brief.

17 Q. What I want to know is the factors that you, as
18 part of this committee considers before you determine whether
19 or not you are going to notify the EPA that you have a
20 product that has a substantial risk or hazard associated with
21 it as far as the public is concerned?

22 A. The Statute, I believe, is just one sentence, at
23 most two, it's very brief, and we would consider everything
24 that might have any relevance whatsoever to a determination

1 of substantial risk of injury.

2 Q. Tell me what those things are, sir?

3 A. Might have with a given situation?

4 Q. Well, the situation we are discussing right now is
5 this 2,4-dichlorophenol that Monsanto is manufacturing and
6 that you've discussed at those meetings in May and your memos
7 in June?

8 A. All right, we are no longer discussing
9 hypotheticals then?

10 Q. No, we are discussing right now, we have taken care
11 of one of your four requirements, and you now, since the
12 recess there may be other requirements, other things, that
13 you will consider. I want to know what they are.

14 A. Mr. Carr, again, this was five years ago, I deal
15 with a great many matters, I'm looking at those two
16 memoranda, I cannot pull back into my mind every bit of the
17 discussion that went on at those two meetings.

18 Q. Mr. Park, I didn't ask you that.

19 A. No, what you are asking me --

20 Q. I asked you for -- now, I don't want to jump ahead
21 in this examination that I have, but you are presently doing
22 the same thing that you did in 1979, you are still part of
23 that committee that has the obligation to decide whether you
24 will or will not notify the EPA that there are substantial

1 hazards associated with your product, isn't that correct,
2 sir?

3 A. Whether there would be --

4 Q. You are still on that committee, aren't you?

5 A. Whether --

6 A. You are still on that committee, aren't you, sir?

7 A. That's correct.

8 Q. And you have exercised your function, you
9 participated as late as January of this year, according to
10 documents that were delivered to me at 1:30 today, isn't that
11 correct, sir?

12 A. That's correct.

13 Q. And you are considering today the law hasn't
14 changed in the meantime, has it, sir?

15 A. No.

16 Q. The law is the same as it was when it was enacted
17 by Congress and signed by the President. I don't know who
18 was President then, '77, somebody was President, but in any
19 event, that is the same law that you are operating under
20 today, hasn't changed, has it, sir?

21 A. That's correct.

22 Q. And the considerations haven't changed, the
23 elements that you must consider haven't changed, isn't that
24 correct, sir?

1 A. I might point out --

2 Q. Could you answer that question, please, sir, I'm
3 not really interested in you pointing out, I'm interested in
4 you answering that question.

5 A. The law has not been judicially interpreted, it is
6 still one sentence.

7 Q. Did I ask you that, Mr. Park, I asked you is the
8 law the same today as it was in 1977, '78, and '79, sir?

9 A. That's correct.

10 Q. And you are -- you are considering the same things
11 today in making your judgment as to whether or not you notify
12 the EPA as you are considering in 1979, isn't that correct,
13 sir?

14 A. It might vary with the situation.

15 Q. The only variance would be if there are different
16 health effects from a particular chemical, isn't that
17 correct, sir, everything else is the same, it's the health
18 effects that we are talking about, that's what the whole law
19 is about, is it not, sir?

20 MR. MUSGRAVE: Which question, Mr. Carr? Object to
21 the multiplicity.

22 THE COURT: Overruled.

23 Q. (by Mr. Carr) Isn't that the only thing that the
24 law is about is the health effects on human beings, at least

1 that section of the law that I'm asking you about now, not
2 the environment and not, although that is a part of it, but
3 what I am concerned with and what this case is concerned
4 about are human beings, now, that is what that law is about,
5 isn't it, sir?

6 A. Well, the law specifically reads health and the
7 environment.

8 Q. Yes, and I'm now talking about health, health of
9 human beings, isn't it, sir?

10 A. Yes.

11 Q. And was health in '77, '78, '79 and today, isn't
12 it, sir?

13 A. That's correct.

14 Q. So the only thing that might vary is whether or not
15 the chemical you are producing today might have different
16 health effects. Now, if you learn today that a chemical that
17 you had thought was harmless in '77, if you learned today for
18 the first time that a chemical thought to be harmless in '77
19 because you studied it and you've investigated and put it in
20 the laboratory, if you found today that what had been
21 considered a harmless chemical was no longer harmless, that
22 is your duty, your obligated to notify the EPA, isn't that
23 correct, sir?

24 A. If we determine there is a substantial risk of

1 injury to health or the environment, we will do so.

2 Q. Is the answer to my question yes?

3 A. No.

4 Q. Are you saying, Mr. Park, that if you discovered
5 today for the first time that there were new health effects
6 in what had been theretofore thought to be a harmless
7 chemical, that you are not obligated to notify the EPA? I
8 thought I spent a half an hour on that point with you?

9 A. Mr. Carr, you probably know the Statute as well as
10 I do, you know.

11 Q. Mr. Park, could you please answer that question?

12 MR. MUSGRAVE: He's trying to, Mr. Carr.

13 A. I did.

14 Q. And if you discovered that one of your chemicals
15 that everybody had thought was harmless before your
16 laboratories, you had bioassays and you had toxicological
17 studies conducted and you found that that chemical thought to
18 be harmless in fact is not harmless, that it is harmful to
19 human beings, are you saying that you are not obligated to
20 report that discovery to the EPA?

21 A. I'm saying that a group --

22 Q. Could you answer that question, please, sir?

23 MR. MUSGRAVE: Object, it's vague.

24 THE COURT: Overruled?

1 A. We may not be, depending upon it's use, anticipated
2 exposure, whatever, other factors.

3 Q. You are bringing the other factors into play again
4 then, anticipated exposure and use, I'm talking about --
5 those are other points that we will get to. I'm talking
6 about the health effects, Doctor, Mr. Park?

7 A. Yes.

8 Q. Other things being equal, if you find new health
9 effects, harmful health effectf from your chemicals, you are
10 obligated to report that, aren't you, sir?

11 A. That alone might not be sufficient to require a
12 notification.

13 Q. Mr. Park, I'm asking you to assume the other things
14 are there, only that you've got the other elements that
15 you've required, but you have now discovered that this
16 heretofore thought to be harmless chemical is now harmful,
17 hypothetically speaking, and assume all the other elements
18 are that that is in your mind necessary, the law obliges you
19 to report it to the EPA, doesn't it, Mr. Park?

20 A. The law obligates us to report whenever there is a
21 substantial risk of injury or of health or environment and
22 that we do.

23 MR. CARR: Would you instruct the witness to
24 answer?

1 THE COURT: Please assume them and answer the
2 question as posed?

3 A. If I must answer, as I understood the question I'd
4 have to answer no.

5 Q. And --

6 Q. I feel it's an improper hypothetical.

7 Q. And have you been -- Mr. Park, you understand that
8 you are not the judge of that, the Court is the judge whether
9 or not it's proper, you cannot take the law into your hands
10 in this courtroom, Mr. Park, you understand that, don't you,
11 sir? You are a lawyer, you understand that, don't you, sir?

12 A. Certainly.

13 Q. And if the Court tells you to assume certain facts
14 and by ruling on the question whether he's right or wrong, it
15 isn't for you to decide, he has told you that you must assume
16 those facts and now you are saying that it is an improper
17 hypothetical, you have taken unto yourself the obligation and
18 function of the Court, Mr. Park, and I please ask you to obey
19 the Court. Will you assume that it is a proper hypothetical
20 question and answer, sir?

21 A. All right, I think I did so, Mr. Carr.

22 Q. And your answer is still no, even assuming the
23 hypothetical is proper?

24 A. Yes.

1 Q. Now, are you giving -- when you sit on this
2 committee, Mr. Park, are you advising the other members of
3 this committee of your view of what you at Monsanto are
4 obligated to do, are you doing that job?

5 A. I'm trying to interpret the law to this committee.

6 Q. And you have been advising Monsanto in the same
7 framework as you have been discussing it with us today?

8 A. No, we don't deal with hypotheticals, Mr. Carr.

9 Q. Is that correct?

10 A. No, we deal with actual situations that arise.

11 Q. And did you understand that my hypothetical wasn't
12 telling you to assume that it's a real life situation, did
13 you misunderstand the question, Mr. Park?

14 A. I understood you to describe to me a hypothetical
15 situation that I was required to answer.

16 Q. Mr. Park, you understand that when we in the law
17 use the word hypothetical, that you must assume that it is a
18 true life situation, you understand that, Mr. Park?

19 A. Well, Mr. Carr, but your description was
20 incomplete.

21 Q. You understand that Mr. Park or not?

22 A. It --

23 Q. Because I don't wish to continue this unless you do
24 understand those basic rules, if I think a word means

1 something and you think it means something else, we can't
2 communicate. Now do you understand that you must assume this
3 is a real life situation that I'm giving you, that it really
4 occurred, that you really discovered that one of your
5 products that you thought to be harmless has now, you've
6 discovered it's, harmful that it hurts people, it kills
7 people, it paralyzes people, does all kind of horrible things
8 to people, do you persist in your judgment, sir, that you are
9 not obligated to tell the EPA that this harmless chemical is
10 not harmless?

11 A. Now, are you referring to an obligation under
12 Section 8E?

13 MR. CARR: Your Honor, would you direct the witness
14 to answer that question?

15 THE COURT: Mr. Park, you have to answer the
16 question as posed. It's a proper question.

17 A. Under the circumstances described, Section 8E would
18 not require a notification of the EPA, and in the absence of
19 other considerations --

20 Q. And, that is the way you've been administering the
21 requirements, the way you at Monsanto have been interpreting
22 and administering the requirements since it's enactment, is
23 that correct, Mr. Park?

24 A. We consider all factors --

1 Q. Excuse me, that's the way you've been interpreting
2 and administering the Statute since it's enactment in 1977?

3 A. We consider all factors.

4 MR. CARR: Your Honor, would you direct the witness
5 to answer?

6 THE COURT: Mr. Park, again, and you are licensed
7 in Missouri, I really don't have to tell you this again.
8 Answer the question as posed, Mr. Park.

9 A. Yes.

10 Q. And, is that true of all the products that come to
11 your attention, not just the chlorinated phenols, but the
12 wide range of products that Monsanto makes?

13 A. Yes, we comply fully with the laws requirements.

14 Q. Mr. Park, I didn't ask you that, I asked you
15 whether or not you use the same judgment and interpretation
16 with all the products as you have described to us today in
17 answer to my questions, or is that correct, sir, you do use
18 that same judgment with all Monsanto products?

19 A. We comply fully with all requirements.

20 MR. CARR: Your Honor, would you direct --

21 A. Yes.

22 MR. CARR: -- the witness to answer that question?

23 THE COURT: Mr. Park, just answer the question.

24 It's perfectly clear. What is your answer, Mr. Park?

1 A. Your Honor, I feel that Mr. Carr is trying to
2 develop an appearance that we don't consider all factors.

3 THE COURT: Mr. Park, I don't care what your
4 feeling are about whatever Mr. Carr is trying to do with his
5 questioning. You have an obligation as a sworn witness to
6 answer the question as posed, and you are licensed in a
7 couple states, you know that. I'm licensed in Missouri, too,
8 I know the rules are not different over there. Now, please
9 answer the question as posed.

10 A. I would answer it, Your Honor, but he's posed a
11 question requiring a yes or no that --

12 THE COURT: I believe that it can be answered by a
13 yes or no, I'm directing you to answer.

14 MR. MUSGRAVE: May my objection be noted requiring
15 the witness to answer yes or no when he wants to give an
16 explanation?

17 THE COURT: Your objection is noted, objection is
18 overruled. Mr. Park, please answer the question.

19 A. Then I would respond yes.

20 THE COURT: Thank you.

21 Q. (by Mr. Carr) Now, Mr. Park, another element that
22 you mentioned and is -- dealing with the toxicity of the
23 product now, assume at what level of contamination of your
24 products with 2,3,7,8-TCDD or some, or the dioxins in

1 general, at what level do you believe is required before you
2 think Monsanto should notify the EPA under TSCA, assuming
3 other things being equal.

4 MR. MUSGRAVE: I object to the question as calling
5 for the witness to state conclusions that are medical or
6 toxicological in nature, and I don't believe he's been
7 qualified as an expert in that catagory.

8 THE COURT: Overruled. I don't think they do call
9 for that.

10 A. I don't really know what to say, Mr. Carr, I am not
11 a toxicologist. I rely on our experts in our Medical
12 Department.

13 Q. I understand that, but you've been relying on those
14 experts for a number of years, they have given you your
15 advice, you sit as a committee, you participate in those, you
16 make those decisions based upon what you know about
17 toxicology, don't you, sir?

18 A. Not on the basis of what I know, I think it would
19 presumptuous of me --

20 MR. MUSGRAVE: Just a moment.

21 Q. From what you've been told --

22 MR. MUSGRAVE: Just a moment, Mr. Carr, may he
23 finish his answer, Mr. Carr?

24 THE COURT: You may finish your answer.

1 MR. MUSGRAVE: Go ahead.

2 A. I think it would be presumptuous of me to express
3 views on toxicology when it is not my field when we have
4 available to us at those meetings, where we consider how to
5 respond to this reporting requirement, qualified experts in
6 our Medical Department.

7 Q. Mr. Park, the memos that you have in front of you
8 that you prepared, that you wrote, that bear your signature,
9 you consider, do you not, the toxicity of the product, don't
10 you discuss it in those memos, the toxicity of the product?

11 A. I certainly do, please understand that those --

12 Q. Mr. Park, I understand that you are not a
13 toxicologist, that you act upon information given to you by
14 those that you consider to be certain at that meeting, now,
15 bearing that in mind, Mr. Park, at what level for
16 2,4-dichlorophenol, at what level do you consider it requires
17 notification to the EPA that dioxin is there?

18 MR. MUSGRAVE: Same objection.

19 THE COURT: Same ruling.

20 Q. If there is any level, there may not be any level.

21 A. I really have no idea, Mr. Carr.

22 Q. Have you not been advised, at least meetings as to
23 the levels of dioxin content of the product?

24 A. I would certainly have been made aware of all

1 information that was presented at the meetings.

2 Q. My question is, sir, have you not been advised at
3 those meetings of the level of dioxin content? Now,
4 directing your attention specifically to this meeting, the
5 meetings in May and June dealing with the 2,4-dichlorophenol?

6 A. I would certainly be aware of the information
7 that's expressed in those memoranda.

8 Q. Mr. Park, at those meetings, did the toxicologist
9 present tell you the levels at which the 2,3,7,8-TCDD is
10 toxic? We have the information here that one part per
11 billion in TCDD in 2,4,6-trichlorophenol would cause cancer
12 in those animals that were tested.

13 MR. MUSGRAVE: Object to that, that's counsels
14 interpretation. The document speaks for itself. I continue
15 my objection.

16 THE COURT: Overruled. It is a continuing
17 objection, and it has been so noted.

18 Q. (by Mr. Carr) Now, were you given information as
19 to other levels of dioxin contaminant other than the one part
20 per billion that you know of?

21 A. I don't even know of that, Mr. Carr, beyond just
22 this reference in this one memo with --

23 Q. Well, is there any other information that you have
24 available to you other than those memos and those notes as to

1 what level of contamination was discussed with reference to
2 dioxins?

3 A. At those two meetings?

4 Q. Yes.

5 A. I note here down in the beginning of the bottom
6 paragraph on the first page, of the May 14, 1979 memorandum,
7 that is Exhibit 1288, says, "It was mentioned that the
8 product (93% 2,4-dichlorophenol) may contain mono-, di-,
9 tri-, and tetrachlorodibenzo-dioxins in trace amounts. After
10 a process change the product contain no detectable dioxin (at
11 the detection level of 10-20 parts per billion).

12 Q. And did you accept that as fact at that time that,
13 after the process changed there was no detectable dioxin at
14 this level of 10 to 20 parts per billion?

15 A. Yes.

16 Q. And, you got that information, I take it, from the
17 chemists involved, the analytic chemists, perhaps Mr. Wilson,
18 Dr. Wilson?

19 A. Certainly from someone at the meeting.

20 Q. And, they -- he told you that it was present in
21 trace amounts prior to the process change?

22 A. Yes.

23 Q. And what did you consider, what do you consider to
24 be trace amounts?

1 A. Those are amounts that are quite low.

2 Q. I know that, but at what level, what you consider
3 trace amounts?

4 A. Okay, I would consider trace amounts, you know,
5 that's something I guess that may have with time, five years
6 ago I have no idea really what it would mean.

7 Q. Well, what do you consider it means today then?

8 A. I have no idea. I would guess it would mean --

9 MR. MUSGRAVE: I object to the witness guessing, I
10 object to what the witness may today think trace amounts mean
11 when we are talking about a document and what a document
12 meant back in May of 1979.

13 THE COURT: Overruled.

14 A. Five years or so trace amounts could be anything
15 from probably parts per billion to parts per million
16 depending upon the analytical capabilities.

17 Q. And what is your idea of trace amounts today?

18 A. I think it would depend upon the same thing in the
19 products.

20 Q. Well, the 2,4-dichlorophenol, Santophen,
21 orthochlorophenol?

22 A. I think the term trace amounts is used when it's
23 felt that the amounts are so small as to not be significant.

24 Q. My question is, Mr. Park, what are -- and you still

1 are meeting on those committees and you discussed it just as
2 late as January the 25th, because the memo was delivered to
3 me two hours ago that you had such a meeting in which you
4 discussed the levels of dioxin. Please don't fence with me,
5 Mr. Park, the meeting was just a couple of months ago. What
6 do you consider trace amounts?

7 MR. MUSGRAVE: I object Your Honor, he's asked him
8 and he's answered the question.

9 THE COURT: Overruled.

10 Q. The level?

11 A. I'm not a toxicologist, Mr. Carr, I would -- if a
12 toxicologist tells me trace amounts are present, I guess I
13 don't feel I need to go further, there would be something
14 insignificant.

15 Q. You are saying at those meetings you do not cover,
16 you do not discuss the level of contamination?

17 A. It would if it was significant.

18 Q. Well, what are the levels that you consider
19 significant then, put it -- that would be non-trace, I take
20 it?

21 A. (pause) You are asking me levels of what would I
22 consider significant, because I guess it would vary, I really
23 am reluctant.

24 Q. 2,4-dichlorophenol, orthochlorophenol-crude,

1 parachlorophenol, Santophen, what levels do you consider to
2 be significant, sir, that, is by your definition they would
3 not be trace?

4 A. Mr. Carr, don't we have toxicologists that have or
5 will testify here that can give you a much more qualified
6 response?

7 Q. Mr. Park, they have been and will be examined
8 insofar as their knowledge is concerned. You are being
9 examined at this time with all due respect, Mr. Park, about
10 your knowledge of the matter, because you all jointly go
11 together and you make up Monsanto -- you make the decisions
12 for Monsanto as to whether or not you notify EPA, whether or
13 not you notify the people at Sturgeon, whether or not you
14 notify the workers in the plant. You are Monsanto, you are
15 part of it, I'm asking you now about your knowledge, what do
16 you consider significant amounts based upon your experience
17 in this department? For twenty years or longer you've been
18 doing the work and having conference after conference with
19 medical doctors, conference after conference on health
20 effects, conference after conference with chemists on levels
21 and amounts, conference after conference with toxicologists
22 I'm. Asking you, Mr. Park, what you've learned in that
23 period of time and what you consider to be significant
24 amounts of dioxin in the chemicals produced by Monsanto.

1 MR. MUSGRAVE: Object to counsel's speech, request
2 it be stricken, assuming facts that are not in evidence, have
3 never been proven.

4 THE COURT: Overruled. Proper question.

5 A. I guess I would consider trace amounts to be parts
6 per billion up into parts per million.

7 Q. At what level?

8 MR. MUSGRAVE: Object to witness' guess, Your
9 Honor, request it be stricken. We are not here to have
10 witnesses guess.

11 THE COURT: Overruled.

12 Q. At what level of parts per billion, Mr. -- did it
13 start at one, at two?

14 A. I simply cannot go any further, I'm not a
15 toxicologist, I'm not a chemist.

16 Q. Mr. Park, we have gone through this a number of
17 times, do you not consider that level when you have those
18 meetings?

19 MR. MUSGRAVE: You mean Mr. Park or others?

20 Q. Do you not, Mr. Park, do you not as the member of
21 the committee that considers whether or not the EPA should be
22 notified, do you not consider the level of contamination?

23 A. If the meeting concerns something of that sort,
24 then --

1 Q. That's what we are talking about, Mr. Park.

2 MR. MUSGRAVE: Well, you didn't tell him that, Mr.
3 Carr, you just said do you not consider, didn't give him any
4 particular facts.

5 THE COURT: Go ahead, Mr. Carr.

6 Q. Would you answer the question, please?

7 A. The trace amounts would be again from I guess
8 detectable amounts up to so many parts per million, something
9 less perhaps than one percent.

10 Q. Detectable amounts, you have the capacity to detect
11 it then it is not a trace chemical, is that correct?

12 A. No. No. No. You have to detect it before it can
13 become a trace.

14 Q. Well, what is it, at what level?

15 A. Anything let's say up to one percent.

16 Q. Anything that you can detect up to one percent is
17 considered a significant amount?

18 A. See, your question was what would I consider trace.

19 Q. Or is it anything from detectable levels up to one
20 percent is considered trace, which do you mean, Mr. Park?

21 A. Do I understand your question, Mr. Carr, that you
22 are asking me to describe what I would consider trace
23 amount?

24 Q. You gave to me that you would consider trace

1 amounts to be something other than significant, so either way
2 you want to look at it, what do you consider trace amounts,
3 or to put it another way, what could you consider to be of
4 significance for dioxin in your chlorinated phenols?

5 A. As a lawyer responding to a chemist's question, I
6 would say I would guess that, depending upon the substance, a
7 trace amount could be anything, any concentration perhaps up
8 to 1 percent.

9 Q. I'm sorry, your voice dropped and I could not hear
10 your answer. Would you repeat it please, sir, what do you
11 consider trace amounts in chlorinated phenols for dioxin?

12 THE COURT: I had trouble hearing the last part,
13 too, if you would repeat it, Mr. Park?

14 A. Okay.

15 THE COURT: Your voice dropped right toward the
16 end.

17 A. When pressed I would guess that in my view, a trace
18 amount depending upon the chemicals involved --

19 Q. Mr. Park, I gave you the chemicals. Mr. Park,
20 don't fence on that, chemicals are chlorinated phenols, tell
21 me what you consider as a member of this committee to be
22 trace amounts of dioxins in chlorinated phenols.

23 MR. MUSGRAVE: I object to his prior question will
24 be noted, Your Honor?

1 THE COURT: It's noted.

2 A. (pause) If your question is directed toward those
3 memoranda, it may be able to be determined what the trace
4 amount referred to specifically right here.

5 MR. CARR: Your Honor, would you direct the witness
6 to answer?

7 THE COURT: Mr. Park, that wasn't the question,
8 please answer the question as posed.

9 A. Well, if I'm required to answer.

10 THE COURT: Yes, you are, Mr. Park.

11 A. I would guess that a trace amount in general means
12 something up to several parts per million.

13 Q. I'm sorry?

14 A. Up to several parts per million.

15 THE COURT: Thank you.

16 Q. And --

17 MR. MUSGRAVE: Again for the record, I object to
18 the witness guessing.

19 THE COURT: So noted.

20 Q. And what is your view of several?

21 MR. MUSGRAVE: View of several?

22 Q. What do you mean when you say several?

23 A. I really don't know, Mr. Carr, I do not know.

24 Q. You know what you mean, Mr. Park. I'm asking you

1 what is your definition of the word "several"?

2 A. I've done my best to explain that I do not know not
3 being a chemist, not being schooled.

4 Q. Mr. Park, you are misunderstanding my question, I
5 simply want you to define a word that you use every day.

6 When you use the word several, what do you mean?

7 A. I do not know what I mean in terms of trace
8 amounts, Mr. Carr.

9 Q. I'm not even asking you in terms of trace amounts,
10 you said several parts per million, I'm simply trying to find
11 out is one several?

12 A. I don't know, Mr. Carr.

13 Q. You don't know whether or not one is several, Mr.
14 Park. Well, perhaps is two several?

15 A. I don't know.

16 Q. Is three several?

17 A. I don't know.

18 Q. Sir?

19 A. I don't know.

20 Q. Is four several?

21 A. I don't know.

22 Q. Is five several?

23 A. I don't know.

24 Q. Is six several?

1 A. I don't know.

2 Q. Is a thousand several?

3 A. A thousand may be a little more than several.

4 Q. Well, then is 900 several?

5 A. I don't know.

6 Q. Is eight several?

7 A. I don't know.

8 Q. Is twenty several?

9 A. I don't know.

10 Q. Is thirty several?

11 A. Could be.

12 Q. Could be?

13 A. Yes.

14 Q. Mr. Park, when you took the bar exam, I'm sure some
15 of those questions included the word several, didn't it,
16 sir?

17 MR. MUSGRAVE: Object, that has nothing to do in
18 the context of a question asked of this witness with regard
19 to a field he has no expertise in as to what might constitute
20 several parts per million as being trace. Object as improper
21 question.

22 THE COURT: Overruled, does not deal with that at
23 all.

24 A. I don't recall, Mr. Carr.

1 Q. When you see -- when you come home and you tell
2 your son or your daughter, I saw several children on the
3 street today, what is the limits, the lower limit that you
4 would define or use the word several with, the very lowest
5 limit that you would use the word several in connection with?

6 A. I don't know, Mr. Carr.

7 MR. CARR: Your Honor, would you direct the witness
8 to answer that question?

9 MR. MUSGRAVE: He has answered the question, he
10 doesn't know. There is nothing in the law that says a
11 witness cannot say he doesn't know.

12 Q. Okay, I'll accept that for the moment.

13 THE COURT: Okay.

14 Q. If you don't know then one could be several,
15 couldn't it, sir?

16 A. Possibly.

17 THE COURT: Mr. Carr --

18 Q. We have got it defined that several can be between
19 one and thirty, don't we, sir?

20 A. Yes, at that point -- I didn't intend to so limit
21 it.

22 THE COURT: We will take about a five minute break
23 and we will resume testimony. The admonishments I gave you
24 earlier will apply during this break also. Court is in a

1 very short recess.

2 (Following a recess, these proceedings were had in open
3 court.)

4 Q. (by Mr. Carr) Now, Mr. Park, if I understand you
5 correctly, products that contain what you believe to be trace
6 amounts of the contaminant such as dioxins, need not be
7 reported under the TSCA Section 8E, is that correct, sir?

8 A. I wouldn't want to make that general a statement,
9 Mr. Carr, there might be other factors that could require.

10 Q. The factors we are talking about is dioxin content
11 of the chlorinated phenols, that's the factors that we are
12 talking about, Mr. Park. Have I correctly quoted you? Do I
13 understand you to say that chlorinated phenols that contain
14 what you define as trace amounts of dioxin need not be
15 reported to the EPA under Section 8E of the toxic control,
16 Toxic Substances Control Act, is that correct, sir?

17 A. I wouldn't make that broad a statement, it
18 obviously was a consideration at the meeting to consider the
19 8E obligation on May, May 11.

20 Q. Mr. Park, do you understand my question?

21 A. Yes, I think I did.

22 Q. Then, is there -- are there levels lower than trace
23 amounts at which you consider in those chlorinated phenols
24 one or all that need to be reported to the EPA under TSCA?

1 A. Not because of their dioxin content.

2 Q. Then I am correct in saying that other things being
3 equal in your chlorinated phenols, if they contain dioxin
4 levels, trace amount levels, as you have stated here, that
5 need not be reported to the EPA, is that correct, sir?

6 MR. MUSGRAVE: I object to counsel's
7 characterization of the witness' testimony as to what he has
8 stated with regard to trace amounts. He has never testified,
9 never been asked whether trace amounts need be or need not be
10 reported. He's never testified to that.

11 THE COURT: Objection is overruled, it's a proper
12 question?

13 A. I note the comment on the memorandum that in --

14 MR. CARR: Your Honor, would you direct the witness
15 to answer that question, please?

16 THE COURT: Mr. Park, please answer the question as
17 posed?

18 A. Could I have the question read again?

19 THE COURT: Read it one time.

20 COURT REPORTER: "Then I am correct in saying that
21 other things being equal in your chlorinated phenols, if they
22 contain dioxin levels, trace amount levels, as you have
23 stated here, that need not be reported to the EPA, is that
24 correct, sir?"

1 MR. MUSGRAVE: Also object to the vagueness of
2 being equal.

3 THE COURT: Overruled.

4 A. Your Honor, may I ask you a question?

5 THE COURT: No, sir, just answer the question.

6 A. It would depend upon I think some other factors
7 such as --

8 Q. I already gave you, Mr. Park, the -- Sir, I gave
9 you already other things being equal, I said assume anything
10 else that you want to assume with regard to the consideration
11 that you want to consider, is it your view that chlorinated
12 phenols that contain trace amounts as you have defined trace
13 amounts or less than those amounts need not be reported to
14 the EPA under the mandatory provisions of the Toxic
15 Substances Control Act Section 8E?

16 A. Yes, my answer to that question would be that it
17 need not be reported.

18 Q. And, has that been your view since the first
19 obligation that you had connected with the committees that
20 considered those things for Monsanto?

21 A. Taking your words as I understood them, Mr. Carr,
22 considering all other factors with this, that this would not
23 of itself require reporting, yes.

24 Q. And to be fair with you, you have considered that

1 there will be exposure, you have considered the knowledge
2 that you have that you've been told by toxicologist as to the
3 toxicity of various levels of dioxin including what you've
4 defined as trace amounts, you've considered all those things
5 in giving this answer, have you not, Mr. Park?

6 A. Mr. Carr, I've considered such things as the fact

7 --

8 Q. Excuse me, could you answer that question, please,
9 Mr. Park?

10 A. Mr. Carr, that question raises a question in my
11 mind as to whether I understood you earlier when I was
12 responding to an earlier question. If a product has been in
13 use for many many years and there are no known health effects
14 as a result of that use, and then it is found that it
15 contains a trace amount of dioxin or anything else, the mere
16 fact that a trace amount of contaminant is found is not of
17 itself a reason for submitting an 8E report to the EPA.

18 Q. And that is your understanding of the law?

19 A. That's correct.

20 Q. That if you have a trace amount, as you defined it,
21 that it need not be reported.

22 MR. MUSGRAVE: I object to counsel paraphrasing
23 what this witness defined.

24 Q. I have every right to paraphrase and I intend to do

1 so.

2 MR. MUSGRAVE: You do not, because the testimony
3 was a guess and the witness so stated it.

4 THE COURT: I ruled on that point. Objection is
5 overruled. His paraphrasing was proper, Mr. Carr, you may
6 proceed.

7 Q. Would you read the question to him, please.

8 COURT REPORTER: "That if you have a trace amount,
9 as you defined it, that it need not be reported."

10 A. Didn't I answer that?

11 COURT REPORTER: There was an objection.

12 Q. Answer that question, please.

13 A. In the absence of a substantial risk of injury of
14 health or environment there would be no reporting required.

15 MR. CARR: Your Honor, would you direct the witness
16 to answer the question as I posed it to him?

17 THE COURT: Mr. Park, it's been asked of you once,
18 it's been read back to you once. Answer the question as
19 posed.

20 MR. MUSGRAVE: I object. He answered, let it be
21 noted, he has not.

22 A. Would you again ask the question?

23 Q. Would you read the question to him again.

24 THE COURT: No, my Court Reporters are not

1 dictating machines. It's been read to you once, asked of you
2 once, answer the question as posed, Mr. Park.

3 A. I don't remember what the question was, Your Honor,
4 I'm sorry.

5 THE COURT: Mr. Carr, would you ask it again,
6 please?

7 Q. Is it your view of the law that if the chemical
8 contains trace amounts as you have defined it, that you need
9 not report the presence of those trace amounts as you have
10 defined it in the chlorinated phenols to the EPA under the
11 Toxic Substances Control Act Section 8E?

12 A. That's correct, that is my view.

13 Q. And, is that your belief, sir, based upon the fact
14 or what you believe to be the fact that the substance, the
15 chemical in question has been used for years?

16 A. I'm sorry, Mr. Carr, I'm not sure, you say is it my
17 understanding the chemical has been used for years.

18 Q. Yes, you gave that as a factor that you took into
19 play when you answered the question?

20 A. Yes, it is my understanding that that's the case.

21 Q. And, does that presuppose that you know that all
22 the chemicals that have been manufactured before contained
23 those levels of dioxin that is from 1 part per million to 30
24 parts per million?

1 A. It merely supposes that there are no known adverse
2 health effects from use of the chemical over many years.

3 Q. Does that not include, Mr. Park, that you didn't,
4 that you don't know whether or not that chemical did or did
5 not contain the contaminant, the dioxins?

6 A. I guess it would contain an assumption that the
7 composition over the years --

8 Q. Remained the same, doesn't it, Mr. Park?

9 A. Remained the same.

10 Q. But now, if you learned that your products vary,
11 that perhaps 90 percent of your products, perhaps 99 percent
12 of your chlorinated phenols contained very ultra ultra, not
13 your definition of trace, but ultra ultra trace levels of
14 dioxin but that every now and then you find a batch that
15 contains higher levels of dioxin, would not that change your
16 assumption, Mr. Park?

17 A. Here I would rely on our toxicologists as to the
18 extent of whether to which a variation might have any impact.

19 Q. And you would then rely on your toxicologist for
20 dioxin content then even though your product had theretofore
21 been used in your belief without harmful effects, wouldn't
22 you, sir?

23 A. I would rely on our toxicologist.

24 Q. You would do that because you do know that 2,3,7,8

1 and other dioxins nearly as toxic as 2,3,7,8, you do know
2 that that does have injurious health effects on people, you
3 do know that, don't you, sir?

4 A. I believe on the basis of --

5 Q. You've been told that, haven't you, Mr. Park, by
6 the toxicologist?

7 MR. MUSGRAVE: He asked him what he knew.

8 MR. CARR: I think if he knows he can say he knows,
9 he can say he doesn't know.

10 MR. MUSGRAVE: You asked him, you said you do know,
11 you challenged him to answer, I would request he be permitted
12 to answer the question as posed.

13 A. I think there are some questions as to the
14 injurious effect of dioxin.

15 Q. And you've had those questions in mind when you've
16 made your decisions, haven't you, sir?

17 A. Yes.

18 Q. And have you --

19 THE COURT: I'm sorry, I didn't hear your answer,
20 did you say yes?

21 A. Yes.

22 THE COURT: Thank you.

23 Q. And you decided, did you, sir, that there were no
24 injurious health effects from exposure to any level of

1 dioxin?

2 A. Now again, I don't participate as a member of this
3 group as a toxicologist or a chemist. I participate to try
4 to interpret the law for them and merely to take down the
5 minutes.

6 Q. Mr. Park, you know when you have to interpret the
7 law you've got to know whether or not the substance is toxic,
8 that's part of the law interpretation?

9 A. And here I have to rely on other experts.

10 Q. And have the experts told you -- what have they
11 told you as far as health effects, that there are none other
12 than Chloracne, is that what you've been told, Mr. Park?

13 A. I believe I've been told that there is no known
14 death resulting from dioxin exposure.

15 THE COURT: Mr. Park, I missed the whole last part
16 of what you said. Could you please keep your voice up?

17 A. I'm sorry. I believe I can recall having been told
18 that there is no known death as a result of dioxin exposure.

19 THE COURT: Thank you.

20 A. I have been told that it is highly toxic to certain
21 species of animals, apparently considerably less toxic to
22 other species and to humans.

23 Q. And what do you believe that the injurious health
24 effects that dioxin exposure is to human beings, what have

1 you been told that?

2 MR. MUSGRAVE: Asked him what he believes or what
3 he's been told, there are two different questions there, Mr.
4 Carr.

5 Q. All right, first of all what you believe.

6 MR. MUSGRAVE: You want him to testify as an
7 expert? I don't believe he's been qualified as an expert to
8 testify.

9 THE COURT: Objection is overruled. Go ahead.

10 Q. Then what you've been told, I don't care, give me
11 either one that you want to give as your counsel might want
12 you to do?

13 A. I'm trying to recall what I have been told, what I
14 have heard about dioxin toxicity, because it is not my
15 field. I believe I am aware that the first sign of an
16 adverse effect is Chloracne.

17 Q. You've been told there are any other bad results
18 from dioxin exposure?

19 A. Here it is my understanding there is some question
20 as to what --

21 Q. My question, have you been told there are any other
22 bad effects in dioxin?

23 A. I have --

24 Q. Other than acne?

1 A. I have been told there is some question as to other
2 effects and frankly I cannot remember what they are.

3 Q. So the only one you can remember that you've been
4 told is acne?

5 A. Chloracne, yes.

6 Q. Yes. And, have you been exercising your judgment,
7 have you been using your roll based upon that that you can
8 remember is the bad result from dioxin that is Chloracne?

9 A. My roll is really not to speak to toxicity, it's to
10 try to see that the group properly complies with the law.

11 Q. Now, Mr. Park, I again insist that your memo that
12 you've given us indeed deals with toxicity, you talk about
13 carcinogenic effects, you talk about toxic effects, you are
14 dealing with it, and you may not again say it today, the memo
15 you have in front of you, you discuss it, don't you, sir?

16 A. Mr. Carr, I'm writing down what toxicologists tell
17 me, you see.

18 Q. And you are using that knowledge, aren't you, sir?

19 A. No.

20 Q. You are not using it when you prepare those memos,
21 you are not using it, aren't you speaking as a part of this
22 committee, and aren't you speaking for the committee when you
23 make those reports?

24 A. Those reports contain information provided to me by

1 the toxicologist, they participate in writing.

2 Q. I'm certainly aware of that, Mr. Park, are you not
3 participating, are you not speaking for the committee when
4 you write those reports?

5 A. I am speaking for the committee.

6 Q. And you discuss the toxicity, do you not, sir?

7 A. The toxicity information from the toxicologists is
8 placed into those reports.

9 Q. And the only thing that your committee so far as
10 you can remember the ill health effects of dioxin is
11 Chloracne?

12 A. I do remember that the Chloracne is apparently the
13 first sign of an adverse effect.

14 Q. And you can remember no other adverse effects from
15 dioxin exposure other than the Chloracne, is that what you
16 are telling us, sir?

17 A. Not specifically. I can recall that there are some
18 others, but I believe there is some question as to other
19 effects.

20 Q. Have you ever seen the 1267 A, or the page from
21 which it comes?

22 A. I frankly don't recall.

23 Q. Have you ever been told that those as shown in
24 Plaintiff's Exhibit 1267 are the toxic effects of

1 2,3,7,8-TCDD dioxin in man, have you ever been told that,
2 sir?

3 A. I'm sorry, that those are the effects?

4 Q. Have you ever been told that?

5 A. I could well have been.

6 Q. But you don't remember anything except the first
7 one Chloracne, is that right, sir?

8 A. I remember that one specifically. Can you tell me
9 what this is?

10 Q. Mr. Park, it's not important that you know what it
11 is because I don't want to influence your judgment. You may
12 decide well so and so said it, I'll accept it, if somebody
13 else said it, I don't want to accept it. I'm asking you,
14 have you been told when you sit on that committee, when you
15 make a decision as to whether or not to notify the EPA about
16 substantial health risks, have you ever been told that
17 porphyria is a health risk that's associated with dioxin
18 exposure?

19 A. I frankly cannot remember hardly any details about
20 those meetings.

21 Q. You had one just --

22 A. That took place years ago.

23 Q. You had one just in January, I have the memo here,
24 just January the 25th you had a meeting and what you

1 discussed toxic effects and whether or not you should report
2 to the Government, just in January, you had to have discussed
3 those things?

4 A. Which substance was that, Mr. Carr, the January --
5 you refer to that a couple of times, I'd like to bring that
6 back into my mind.

7 Q. It deals with dioxin content of a substance.

8 A. Which substance.

9 Q. Makes no difference which substance, what it is,
10 dioxin content, we are talking about the toxicity of the
11 dioxin, we are not talking about a particular product. Do
12 you believe that we are really talking about
13 2,4-dichlorophenol or really talking about orthochlorophenol
14 or really talking about Santophen? We are talking about
15 dioxin?

16 A. Mr. Carr, I believe I can remember the January
17 one. As I recall --

18 Q. I'm not asking you about that.

19 A. There was no tetra in the product, so there was no
20 need to get into any of those things that you have on your
21 board.

22 Q. Mr. Park, we will get to that in a few moments, we
23 are talking about dioxins in your products, get to the tetra,
24 to that particular exhibit in a moment, but I'm asking you,

1 have you been told, sir, that dioxin causes porphyria,
2 2,3,7,8-TCDD causes porphyria?

3 A. I cannot recall.

4 Q. Have you been told that it causes liver damage?

5 A. I cannot recall.

6 Q. Have you been told that it causes elevated serum
7 hepatic enzyme levels?

8 A. Is this --

9 Q. Mr. Park, would you answer that question, please,
10 sir?

11 A. Mr. Carr, you are not being quite fair with me, I
12 can see now barely, my eyes are not like they used to be.
13 Thank you. Across the top it says toxic effects of
14 2,3,7,8-tetrachlorodibenzo-para-dioxin. Now, I am just a
15 lawyer, but I do know enough to know that that is said to be
16 the most toxic of the dioxin isomers, yet in your discussions
17 out here with me, you just used the word dioxin, which is
18 much broader.

19 Q. That's true, no question about that, Mr. Park, you
20 are a hundred percent right. You are absolutely correct.

21 A. The tetra, as I believe, was not a part of the
22 consideration at this 8E meeting in January.

23 Q. And I'm not asking about the January meeting other
24 than to remind you that you have discussed dioxins, and tetra

1 was discussed at that meeting, wasn't it, sir?

2 A. To the extent saying, okay, it was not found in the
3 product.

4 Q. Oh, no, what you did at that meeting, if I remind
5 you, you compared the toxicity of the dioxins that were
6 present with the toxicity of 2,3,7,8-TCDD, that's exactly
7 what you did, Mr. Park, and I do not want to digress from
8 that to argue with that, because I'm asking you now this
9 question, have you been told that 2,3,7,8-TCDD will cause a
10 toxic effect in man, elevated serum hepatic enzyme levels,
11 have you been told that in the past, sir?

12 A. Can you tell me --

13 MR. CARR: Would you direct the witness to answer
14 the question?

15 THE COURT: Mr. Park, answer the question.

16 A. I cannot recall.

17 THE COURT: Okay.

18 Q. Have you been told that exposure to 2,3,7,8-TCDD
19 can cause disorders of fat metabolism in man?

20 A. I'm sorry, I just can't recall.

21 Q. Have you been told that exposure to TCDD causes
22 cardio-vascular disorders, heart trouble?

23 A. I'm sorry, I do not recall.

24 Q. Have you been told that it can cause disorders of

1 carbohydrate metabolism?

2 A. I don't recall.

3 Q. Have you been told that it causes urinary tract
4 disorders in man?

5 A. I don't recall.

6 Q. How about respiratory disorders, have you been told
7 about that?

8 A. I don't recall.

9 Q. Have you been told whether or not it causes
10 pancreatic disorders?

11 A. I don't recall.

12 Q. Have you been told whether or not it causes per--
13 polyperipheral neuropathy, that's pain in the nerves?

14 A. I don't recall.

15 Q. Have you been told that it causes lower extremity
16 weakness?

17 A. I'm sorry, I don't recall.

18 Q. Have you been told that it causes sensory
19 impairment, sight, hearing, smell, taste, photophobia?

20 A. I can't recall.

21 Q. Have you been told that it causes psychiatric
22 disorders, makes people depressed, neurasthenic syndromes,
23 have you been told that, sir?

24 A. I believe I can recall some vague discussion of

1 that, but I can't recall anything.

2 Q. Now --

3 A. Specific.

4 Q. Now --

5 THE COURT: Could you keep your voice up again, Mr.
6 Park?

7 A. Yeah.

8 THE COURT: Thank you.

9 Q. Mr. Park, when you have those meetings, and you
10 discuss whether or not exposure to those chlorinated phenols
11 that contain dioxin, you must of necessity, in order to
12 exercise an intelligent decision, you must of necessity be
13 told what the possible health effects can be, isn't that
14 correct, sir?

15 A. It would depend upon whether there was a
16 sufficiently high concentration of dioxin present to bring on
17 a health effect.

18 Q. All I've asked you about that concentration, and
19 you've told me that anything from 1 to 30 parts per million
20 is what you consider something above trace?

21 A. Only when you pressed me and required my answer.

22 Q. Certainly I pressed you.

23 A. Those are questions that I rely on a toxicologist
24 to answer.

1 Q. I understand that. What if a toxicologist told you
2 that 250 parts per billion of total dioxins can have a
3 harmful effect upon human beings, what if a toxicologist told
4 you that?

5 A. If a toxicologist tells us that a given exposure is
6 likely to result from the use of a product, and that that
7 exposure would present a substantial risk of health or to
8 environment --

9 Q. You are talking about exposure again, I want to
10 leave that out of it.

11 THE COURT: Gentlemen, could I see you at the bench
12 for just a moment, please?

13 MR. CARR: Could I finish this?

14 THE COURT: You can finish this one question.

15 Q. I want to get this point established. If a
16 toxicologist told you that 250 parts per billion was
17 injurious to man, would you accept that, sir?

18 A. If one of our toxicologists --

19 Q. Yes, one of your toxicologists told you that?

20 A. Yes, I would accept what he said.

21 THE COURT: Okay. Fine. We will break at this
22 point. Ladies and gentlemen, we will resume tomorrow at
23 9:30. I would remind you as I do on any overnight break that
24 you are not to read, listen to, or watch anything about this

1 STATE OF ILLINOIS)
2 TWENTIETH JUDICIAL CIRCUIT) SS
3 COUNTY OF ST. CLAIR)
4

5 I, DEBRA M. MUSIELAK, certify the foregoing to be a
6 true and accurate transcript of the testimony and proceedings
7 in the above-entitled cause.

8 Dated this 13 day of April, 1985.
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Debra M. Musielak

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
6 for the Twentieth Judicial Circuit, do hereby certify that I
7 have examined the aforesaid transcript of proceedings, and
8 certify the foregoing to be a true and accurate transcript of
9 the testimony and proceedings in the above-styled cause.

10 Dated this _____ day of April, 1985.

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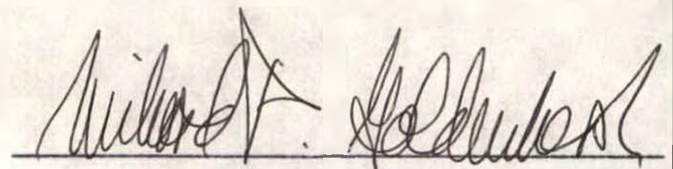
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HON. RICHARD P. GOLDENHERSH