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No. 80-L-970

REPORT OF PROCEEDINGS

April 2, 1986

MR. REX CARR and MR. JEROME SEIGFREID
on behalf of the Plaintiffs;

KIMBERLY GANZ, CSR, RPR, CM
Official Court Reporter

1 BE IT REMEMBERED, that on April 2, 1986, the same
2 being one of the regular judicial days of said court, the
3 above-entitled cause came on regularly for hearing before the
4 HONORABLE RICHARD P. GOLDENHERSH, one of the Judges of said
5 court, at the St. Clair County Building, 10 Public Square, in
6 the City of Belleville, St. Clair County, Illinois.

7 Whereupon the following proceedings were had:

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

10 MR. CARR: May we approach the bench, Your Honor?

11 THE COURT: Yes, you may.

12 (Bench conference had out of the hearing of the
13 jury.)

14 MR. CARR: Monday, counsel suggested that Doctor
15 Dost did not refer to the testimony with reference to the
16 Holmberg Penitentiary prisoners that he had stated in his
17 voir dire outside the jury and suggested that it had not been
18 repeated in front of the jury. It was on the 8th of
19 November, 1984, running from pages 111 to 136 and it was
20 specifically referred to and he acknowledged that he
21 testified that it showed damage to the liver in his earlier
22 testimony on pages 119 to page 124.

23 MR. HEINEMAN: May I get those numbers?

24 MR. CARR: November 8th of '85 pages 111 through 136

1 and specifically, this is -- that is the part of the
2 testimony dealing with the Holmberg prisoners. The specific
3 part what he repeated and acknowledged that he had said it is
4 contained on pages 119 to 124.

5 MR. HEINEMAN: And he acknowledged what? Let me
6 make sure.

7 MR. CARR: He acknowledged that he had said it in
8 front, on the earlier examination.

9 THE COURT: As far as tomorrow, we will break at
10 4:30 and then start because I have to be out of here by six.
11 So we will break at 4:30 and take a few minutes and set up
12 and go over some matters because no matter where we are in
13 the argument, I have to be out of here by six.

14 (The following proceedings were had in the hearing
15 and presence of the jury)

16 RAYMOND SUSKIND

17 having resumed the witness stand, being previously sworn,
18 testified further as follows:

19 CROSS EXAMINATION

20 By

21 MR. REX CARR.

22 Q. Doctor -- would you hand Plaintiffs' Exhibit 1652
23 to the witness. Doctor, in continuing with the line of
24 inquiry with reference to whether or not there are clinical

1 or laboratory effects on exposure to TCDD or dioxin even
2 though there may be no chloracne present, I have asked the
3 clerk to hand you Plaintiffs' Exhibit 1652. Do you have that
4 now, sir? It is an article written by Hanify, Metcalf, Nobbs
5 and Worsley?

6 A. Yes, sir, I have it.

7 Q. Are you familiar with that article, Doctor Suskind?

8 A. I am familiar with this article, sir, yes.

9 Q. All right. This article, according to the
10 testimony of Doctor Dost here earlier, shows that there were
11 defects of the heart, the penis, vagina and clubfeet called
12 birth malformations associated with the spraying of the
13 herbicide 2,4,5-T. Do you see that? Do you agree that the
14 article does so -- or whether you agree or not, are you
15 familiar with the article that so states?

16 A. I am familiar with the article, sir.

17 MR. HEINEMAN: Excuse me. May counsel approach the
18 bench?

19 THE COURT: Yes, you may.

20 (Bench conference had out of the hearing of the
21 jury.)

22 MR. HEINEMAN: May I have the citation of this
23 testimony of Doctor Dost?

24 MR. CARR: November 12, 1985, page 51.

1 MR. HEINEMAN: Thank you.

2 (The following proceedings were had in the hearing
3 and presence of the jury).

4 Q. Doctor, this article makes no mention of chloracne
5 being found in any of these persons who were exposed to
6 2,4,5-T, does it, sir?

7 A. I don't believe they looked at the mothers, sir.

8 Q. Excuse me, Doctor Suskind. Would you please start
9 out the day by answering my questions, sir?

10 A. It shouldn't make any mention of it, sir.

11 MR. CARR: Your Honor, would you direct the doctor
12 to answer the question?

13 THE COURT: You have been asked a question, it is
14 clear. It calls for a direct answer. Please do so.

15 A. There is no mention of chloracne in this particular
16 report, sir, of birth defects in children.

17 Q. And, Doctor, these birth defects are indeed
18 clinical effects, are they not, sir?

19 A. Again, these are clinical findings, sir, which can
20 be, in your terminology, clinical effects, sir.

21 Q. Doctor, I don't want to go through it again. You
22 are the one that used clinical effects in your testimony. Do
23 you --

24 A. Not insofar as birth defects, sir.

1 Q. Excuse me, Doctor. Do you acknowledge that you
2 have used the words clinical effects?

3 A. I have used it, sir.

4 Q. Doctor, it is not my use of it except secondhand
5 because you used it, isn't that correct, sir?

6 A. I don't know what you are saying, sir.

7 Q. Doctor, who described adverse marker reactions as
8 clinical effects in the laboratory effects?

9 A. I did, sir.

10 Q. You did, did you not, sir?

11 A. Yes.

12 Q. Now, Doctor, if one finds these birth deformations,
13 one has found a clinical effect, has not one, sir?

14 A. One has attempted to determine a clinical effect.

15 Q. Would you answer my question, sir?

16 A. I have answered it, sir.

17 MR. CARR: Your Honor, would you direct the witness
18 to answer my question?

19 THE COURT: Doctor, you are so directed. Please
20 answer the question. I will have the Court Reporter read it
21 back to you but please answer that question.

22 MR. HEINEMAN: Objection, Your Honor, may counsel
23 approach the bench?

24 THE COURT: Yes, you may.

1 (Bench conference had out of the hearing of the
2 jury.)

3 MR. HEINEMAN: Your Honor, again I am required to
4 object to the direction of counsel to the witness. The
5 witness has answered the question as best he knows how and I
6 object to the direction of the court to the witness that the
7 answer is not responsive. For the record.

8 THE COURT: Sure.

9 MR. HEINEMAN: My objection is overruled?

10 THE COURT: It is overruled. It is obviously not
11 responsive.

12 (The following proceedings were had in the hearing
13 and presence of the jury).

14 COURT REPORTER: "Now, Doctor, if one finds these
15 birth deformations, one has found a clinical effect, has not
16 one, sir"?

17 A. No, sir.

18 Q. Are you assuming that the clinician has found these
19 defects?

20 A. I am assuming that in this paper by Hanify,
21 Metcalf, Nobbs and Worsley they claim to have found a
22 clinical effect.

23 Q. Doctor, I have asked you to assume for the sake of
24 the question which I am asking you because you won't agree

1 that a clinical finding is the same as a clinical effect, I
2 am asking you to assume, sir, that these birth deformations
3 have been found clinically. Would you assume that, please?

4 A. If you are asking me to do it, I will assume it for
5 this paper, sir.

6 Q. Doctor, that is what I have asked you.

7 A. For this paper.

8 MR. CARR: Your Honor, would you direct the witness
9 to attempt to refrain from arguing with me?

10 THE COURT: Doctor, please, you are interrupting
11 the questions and it is just not possible to answer a
12 question before you have heard the whole thing so please wait
13 until the question is finished and then answer it directly.
14 You may continue, Mr. Carr.

15 MR. HEINEMAN: Your Honor, may counsel approach the
16 bench?

17 THE COURT: Yes, you may.

18 (Bench conference had out of the hearing of the
19 jury.)

20 MR. HEINEMAN: I am going to object to Mr. Carr's
21 request. Do you want to face the Court as the Court has
22 ordered you to do? I am going to object to Mr. Carr's
23 statement requesting for the witness to assume that the
24 authors found birth defects. There is no evidence that these

1 authors examined any of these babies or found any birth
2 defects. My recollection of this paper is that there are
3 theoretical calculations based upon data which had been
4 provided to these authors by the New Zealand government and
5 that they did not actually examine and find birth defects.
6 That they conducted a theoretical study of people who had
7 exposures versus reported birth defects and, therefore, I
8 object.

9 MR. CARR: Your Honor, this question is required
10 because this witness has said that these men found it. All I
11 am attempting to do is that if they found it, isn't that the
12 same as the clinical effect. The witness has brought up the
13 statement that these are clinical findings.

14 MR. HEINEMAN: Your Honor, the witness has not
15 testified that these particular authors found them in
16 examinations. He said if there are birth defects, they would
17 be clinical findings.

18 MR. CARR: That is exactly what I am asking. If
19 they are clinical findings, then is that not a clinical
20 effect and that is the whole purpose of this examination as
21 counsel well knows, as the witness knows. He is simply
22 trying to bog the trial down and with counsel constantly
23 approaching the bench, they have apparently succeeded.

24 MR. HEINEMAN: Your Honor, I am required by the

1 Court to come to the bench to make objections.

2 THE COURT: You are. What you said I think holds
3 Mr. Carr's argument. If they conclude that they were these
4 effects, whether by examination or by any other way, they can
5 be classified as clinical findings. According to the
6 question that you are saying because what you have said
7 implies that if they determine that these defects in fact
8 exist, then they were classified as clinical findings and
9 that is on the basis of what you said that he said about
10 clinical findings and that implies that it can be by
11 examination or by other means.

12 MR. HEINEMAN: No, Your Honor. The document itself
13 says in this investigation, hospital records were used to
14 identify the rates. These men didn't find anything. They
15 didn't examine anybody. They didn't find any birth defects.

16 THE COURT: What I am saying is that the quote
17 unquote find a particular condition need not be by the
18 examination according to what you just said in your first
19 argument. As far as classification of these things, given
20 the basis for the questioning of this witness by Mr. Carr
21 were in fact these were findings. Your objection is
22 overruled.

23 (The following proceedings were had in the hearing
24 and presence of the jury).

1 Q. Doctor, a clinical finding is is the finding of a
2 clinical effect, is it not, sir?

3 A. Yes, sir.

4 Q. Thank you, Doctor. Would you hand the witness
5 Plaintiffs' Exhibit 245 or 246. Doctor, 246, this is also
6 Defendant's 76, is the so-called Ranch Hand study and in that
7 study, there is a report that Ranch Hand offspring show an
8 excess of minor birth defects, neonatal deaths and physical
9 handicaps. And Doctor Dost has testified to the significance
10 of that on November 12, 1985, counsel, page 49. And, Doctor,
11 chloracne was not found in the Ranch Hand group, was it, sir?

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

13 Q. And, Doctor, if these birth defects, neonatal
14 deaths and physical handicaps exist, they would be clinical
15 effects, would they not, sir?

16 A. If they exist, sir, and I --

17 Q. Excuse me, Doctor.

18 A. I am at a loss to determine --

19 THE COURT: Doctor, please, just answer the
20 question that is asked of you and don't go beyond.

21 A. Well, I haven't had a chance to look at this, sir.

22 THE COURT: Doctor, the question was clear. Please
23 do not go beyond it. Mr. Carr, would you repeat the question
24 for him.

1 Q. Doctor, if these --

2 MR. HEINEMAN: Objection, Your Honor. May counsel
3 approach the bench?

4 (Bench conference had out of the hearing of the
5 jury.)

6 MR. HEINEMAN: Your Honor, I object to the witness
7 being questioned about the document without the witness
8 having a chance to look at it to see whether it reflects what
9 Mr. Carr is saying it reflects. He has been handed a
10 document that is a very thick document and Mr. Carr
11 immediately asks him about what it shows and he hasn't given
12 him a chance to look at it and it is unfair to the witness.

13 MR. CARR: I am relating what the document shows as
14 testified to by others, Your Honor. I am not asking this
15 witness to agree that it does or does not show what the other
16 witness has stated. What he views the document to be is not
17 important. My question simply is if these things do exist,
18 they are clinical effects, are they not. That is all.

19 MR. HEINEMAN: Well then, why hand him the document
20 at all?

21 MR. CARR: Because I want to, counsel.

22 MR. HEINEMAN: Well, that is fine. If you hand him
23 the document, it is only fair to give him a chance to look at
24 it or at least to direct his attention to the portion that

1 you are talking about.

2 THE COURT: That depends on the questions that have
3 been asked of him and again this witness whether asked if
4 this does in fact exist which implies the assumption that it
5 exists is refusing to take the assumption. Let me make this
6 suggestion that you rephrase that to the point of assuming so
7 it is absolutely clear to the witness and in the record that
8 in fact you are asking him to assume because this witness has
9 exhibited a recurrent path of refusing to take assumptions
10 when they are asked of him and I want to make it crystal
11 clear to him and crystal clear on the record that in fact he
12 is being requested to assume something. So if you would
13 rephrase the question and we will go from there.

14 (The following proceedings were had in the hearing
15 and presence of the jury).

16 Q. Doctor, for the purpose of this question, I would
17 like for you to assume, if you would, sir, that the Ranch
18 Hand study showed a significant excess in minor birth defects
19 and that neonatal deaths and physical handicaps significantly
20 predominated in the Ranch Hand group and that no -- Your
21 Honor, the witness is answering my question with the shaking
22 of his head. He is indicating that he is not going to assume
23 it.

24 A. I didn't say that, sir, and you have no right to

1 assume.

2 MR. CARR: Would you direct the witness not to
3 responds by shaking his head?

4 A. I am not responding, sir.

5 MR. CARR: Your Honor, would you direct the witness
6 to let me finish addressing the Court.

7 THE COURT: Doctor, please. Counsel have the right
8 to address the Court directly.

9 A. Thank you.

10 THE COURT: You may continue.

11 MR. CARR: The witness was shaking his head in a
12 negative fashion as I was yet reciting the question -- just
13 reciting the assumption, Your Honor. I would like to have
14 the witness instructed not to so respond until such time as I
15 have finished the question.

16 MR. HEINEMAN: Your Honor, I object. How does
17 anybody know that is a response?

18 THE COURT: It could be interpreted as a response.
19 Doctor, I directing you not to do that. You have to respond
20 to the question. You have to wait as I have told you before
21 until the question is finished. Gestures, things like that
22 are something that, first of all they are not proper as a
23 response and, number two, they can't be made part of a
24 record. We have to deal with an oral record so it is rather

1 hard to articulate that so if you would please wait until the
2 question is finished and when the question is finished, reply
3 to it directly, reply to it verbally and in no other way and
4 I think this will go a little smoother. You may continue.

5 Q. Doctor, once again I would like for you to assume,
6 if you would, sir, that the Ranch Hand report stated that for
7 minor birth defects, the Ranch Hand offspring showed a
8 significant excess, and that reported neonatal deaths and
9 physical handicaps significantly predominated in the Ranch
10 Hand group contrasted to the full comparison group and also
11 to assume as you have stated that no chloracne was found.
12 Will you do that, sir?

13 A. I will assume this erroneous assumption, sir.

14 MR. CARR: Your Honor, the witness knows what he has
15 just said is clearly improper. He has been here so long he
16 does the same thing. He knows it is improper but yet he
17 persists in doing it. I would ask the Court to instruct the
18 witness to refrain from -- I have asked him would he assume
19 it. All he can do is say yes or no.

20 A. I will not assume it, sir.

21 MR. CARR: Your Honor, would you direct the witness
22 to assume it.

23 THE COURT: Doctor, I am directing you to assume
24 what counsel has stated. I am also reminding you and

1 pointing out to you that your prior answer to the request to
2 assume it was not a proper answer. I am also ordering the
3 jury to disregard the prior answer that the doctor made to
4 the request to assume. You may continue, Mr. Carr.

5 Q. Now, Doctor Suskind, will you follow the Court's
6 instructions and assume as I have indicated to you --

7 A. I will assume, sir.

8 Q. -- what the facts are, sir, would you? You will
9 assume that, Doctor?

10 A. I will assume that what you have said is accurate.

11 Q. Yes. Now, Doctor, if that is true, the birth
12 defects, the predominating neonatal deaths and physical
13 handicaps are -- would be clinical effects, would they not,
14 sir?

15 A. I cannot answer that question with a yes or no
16 answer, sir, because if I do, it would be inaccurate.

17 Q. Doctor, are birth defects -- can birth defects be
18 results of toxic exposures?

19 A. In animals, yes.

20 Q. Can birth defects be the result of toxic exposures
21 in human beings?

22 A. In certain drugs that we know of, yes.

23 Q. And, Doctor, can neonatal deaths be the result of
24 toxic exposure?

1 A. They might be.

2 Q. That was my question.

3 A. And in the other instance they might be.

4 Q. Can they be, sir?

5 A. Yes.

6 Q. And can physical handicaps be the result of toxic

7 substance absorption?

8 A. I cannot answer that question because I don't know

9 what the physical handicaps are.

10 Q. Well, physical handicaps that one are born with,

11 sir?

12 A. Such as, sir?

13 Q. I don't have it in my mind right now, Doctor. The

14 full study, they don't break down in the table that I am

15 referring to the physical handicaps and I take it if you

16 don't know at this point in time what the physical handicap

17 is, you don't know whether it can or cannot be birth defects?

18 A. I cannot answer the question, sir. Naturally --

19 Q. Doctor --

20 A. -- if I don't know what it is.

21 Q. Physical handicaps can be any one of a number of

22 things, can they not, sir? Babies, for instance, were born

23 without legs in some instances and arms in others?

24 A. That is quite true.

1 Q. Those are physical handicaps, aren't they?

2 A. They are.

3 Q. Can physical handicaps be the result of toxic
4 substances?

5 A. In certain instances, yes.

6 Q. All right, Doctor, and these things, then, are
7 clinical effects, are they not, sir, of toxic substance
8 exposure, can they be?

9 A. No, sir.

10 Q. They cannot?

11 A. Not in this instance.

12 Q. Would you direct the -- I am not talking about this
13 instance.

14 A. I thought you were.

15 Q. I am asking you, sir, whether or not physical
16 handicaps, birth defects, neonatal deaths, can be clinical
17 effects resulting from toxic exposure?

18 A. They might be, sir.

19 Q. All right.

20 A. They might be.

21 MR. CARR: And could you give the witness, then,
22 Plaintiffs' Exhibit 1654.

23 A. Are we through with this, sir?

24 Q. Yes. Doctor, you have been handed now a report

1 entitled Retrospective Study of the Relationship Between
2 Agricultural Use of 2,4,5-T and Cleft Palate Occurrence in
3 Arkansaw. I would like you to assume, if you would, that this
4 article describes incidence of cleft palate increase in a
5 population that was exposed to the use of 2,4,5-T. Would you
6 do that please, sir?

7 A. If the Court will ask me to assume it, I will
8 assume it, sir.

9 THE COURT: You are so asked, Doctor.

10 A. Thank you.

11 MR. HEINEMAN: Your Honor, may counsel approach the
12 bench?

13 THE COURT: Yes.

14 (Bench conference had out of the hearing of the
15 jury.)

16 MR. HEINEMAN: I object to that request for the
17 assumption, Your Honor, because I don't believe that is what
18 this particular document demonstrates. I believe the
19 document itself talks about the difference in reporting
20 having to do with the different rates found and it doesn't
21 say that the people exposed had a higher rate of cleft palate
22 as Mr. Carr suggests.

23 MR. CARR: It does so state, Your Honor.

24 MR. HEINEMAN: Where?

1 MR. CARR: On page 382. It states it on page 383.

2 MR. HEINEMAN: May I read to the Court --

3 THE COURT: Wait a second. Okay.

4 MR. HEINEMAN: Your Honor, may I direct the Court's
5 attention to that portion on page 383 which says, "The data
6 are not available to compare individual exposures. There is
7 no assurance that cases in the high exposure group were
8 indeed exposed to 2,4,5-T nor that cases in the no exposure
9 group had little exposure. The article thereafter states
10 that no inference of a resolution of cause and effect should
11 be drawn from this study." Now, therefore, it is clearly
12 improper to ask this witness to assume that the study shows
13 that 2,4,5-T exposure caused cleft palate in these people.

14 MR. CARR: Your Honor, I will also include in my
15 question to him if counsel would let me finish that the
16 authors found the increased cleft in the group exposed to
17 2,4,5-T, that stated that it may have probably been involved,
18 attributable of a better case ascertainment.

19 MR. HEINEMAN: Well, that isn't enough. Certainly
20 they talk about better case ascertainment. They also say
21 they didn't even know there was exposure. They can't say
22 whether there was exposure. They can't say whether there is
23 cause and effect. The paper doesn't reach any conclusion on
24 it.

1 THE COURT: The objection on that is overruled.
2 They can't talk about individual exposure. The objection is
3 overruled. With that amendment to the assumption that he is
4 or addition, rather, to the assumption that he is to make, I
5 will overrule the objection. You may proceed.

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

8 Q. Doctor, I would like you also to assume, if you
9 would, please, sir, that the authors of this report, Nelson
10 Holson, Green and Gaylor, while finding as I suggested the
11 increase in cleft lip, they said that it increases for both
12 high exposure and low exposure groups and that that is
13 probably attributable to better case ascertainment though
14 other causative factors may be involved as well and they
15 concluded by saying, "The present study does not indicate any
16 overt causal relationship between 2,4,5-T use and facial
17 clefts but that it is important to recognize that such an
18 effect, if it were to exist, would not have been detected if
19 the increase in facial clefts was less than two-fold. A
20 two-fold increase in any anomaly is extremely large."

21 Now, Doctor, I would like you to assume those
22 facts, if you would, sir, and are you aware, sir, in addition
23 that this study does not report the existence of any
24 chloracne? First of all --

1 A. You want me to assume --
2 Q. Doctor, first of all I would like you to answer.
3 A. Assume, and I will say --
4 Q. Doctor, first of all, I would like for you to
5 answer me whether or not this article reports chloracne, sir?
6 A. I don't know, sir.
7 Q. Well, would you -- Have you read the article
8 before, Doctor Suskind?
9 A. No, I have not.
10 Q. Would you take a moment and read it to ascertain
11 whether or not it does report chloracne?
12 A. Chloracne in whom, sir?
13 Q. In anybody mentioned in that report?
14 A. Are you talking about chloracne in the newborn or
15 chloracne in the mothers?
16 Q. I am talking about chloracne in anybody mentioned
17 in that report.
18 A. They didn't examine the mothers, sir.
19 MR. CARR: Your Honor, would you direct the witness
20 to answer my question.
21 THE COURT: Doctor, please. Answer the question.
22 You were not asked anything about the last thing you just
23 stated.
24 MR. HEINEMAN: Objection, Your Honor. The mothers

1 are not mentioned.

2 THE COURT: Objection is overruled. He was not
3 asked about it. Objection is overruled. Doctor, please
4 examine the report and answer the question that counsel asked
5 of you.

6 A. Chloracne unfortunately is not mentioned in here.

7 MR. CARR: Your Honor, would you ask the jury to
8 disregard the use of the word unfortunately by the Doctor?

9 THE COURT: The jury is so instructed. It is not
10 responsive to the question.

11 A. It is not mentioned.

12 THE COURT: Doctor, please don't interrupt me?

13 A. I am sorry.

14 THE COURT: The jury is instructed to disregard the
15 word unfortunately in the Doctor's response. It was not
16 responsive to the question that was asked of him.

17 Q. Doctor, first of all, a cleft palate is a clinical
18 effect, is it not, sir?

19 A. A cleft palate is a birth defect, yes, sir.

20 Q. Is the answer yes, that is a clinical effect?

21 A. If you want to use the term again, yes, sir.

22 Q. No, Doctor. I am asking you, sir.

23 MR. CARR: Your Honor, would you ask the witness to
24 quit arguing with me about the use of the term? I thought we

1 had put that to rest.

2 THE COURT: Doctor, answer the question that is
3 asked of you, please. The subject you referred to in your
4 comment which was not responsive to the question has been
5 gone over a number of times.

6 A. It is a clinical effect.

7 MR. HEINEMAN: Objection. May counsel approach the
8 bench?

9 THE COURT: Yes, you may.

10 (Bench conference had out of the hearing of the
11 jury.)

12 MR. HEINEMAN: Your Honor, I object to Mr. Carr's
13 statement with respect to the witness arguing with him. I
14 object to the Court's instruction to the witness. The
15 witness is obviously trying to argue, to state the answer as
16 best he can and --

17 THE COURT: I think you were right the first time.

18 MR. HEINEMAN: Well, it was a fraudian slip on my
19 part, Your Honor. The witness is carefully trying to get the
20 facts out which Mr. Carr is very carefully trying to conceal
21 and, therefore, I object to his, to everytime the witness
22 tries to get the facts out, Mr. Carr claims he is arguing
23 with him. And I object to the request of the Court. I
24 object to the Court's instruction of the witness.

1 THE COURT: Editorializing is not getting the facts
2 out. Editorializing is coloring something which is not
3 responsive to the question where the question does not ask
4 for one's opinion and these questions have not asked for his
5 opinion on these matters. They have asked for acknowledgment
6 of certain, of the existence of certain factual matters
7 and/or assumptions as to certain factual matters and he has
8 editorialized at least three times this morning. This
9 witness has, in fact, editorialized when not called to do so
10 and it is improper. If he continues to do so, I will
11 continue to admonishment and I will continue to instruct the
12 jury to disregard his non responsive answer. I don't have to
13 tolerate the patent disregard of this Court's request and I
14 have to let the record suggest by silence that in fact he has
15 truthfully and completely answered a question when in fact he
16 is trying to insert something that was not in the question
17 and non responsive to it.

18 MR. HEINEMAN: Your Honor, again I would like to
19 object if I may to the Court's requirement that I make all of
20 my objections at the bench when Mr. Carr is given free reign
21 to make whatever statements and comments he likes in front of
22 the jury. I have noticed a clear reaction from the jury of
23 -- I am using the term discouragement, but frustration at the
24 time that it takes for me to come up here and make these

1 objections. I hear them let out a breath and go whoosh and
2 that sort of thing and that is when I am forced to come up
3 here and interrupt proceedings and make these objections and
4 again I think it is unfair to the defense that I have to do
5 that.

6 THE COURT: They are not done only to you. It is
7 also done as far as the plaintiff having to make those
8 objections at the bench during your direct examination. I
9 know it takes a little more time, it takes less time than
10 matters in chambers. In view of what went on before in these
11 arguments in front of the jury, I think it is proper. Do you
12 have anything you wish to say?

13 MR. CARR: Your Honor, in addition of our trips this
14 morning with the exception of the first one before we started
15 testimony has been because Mr. Heineman objects to the Court
16 instructing the witness to respond to the question. He
17 objects to the Court instructing the jury to disregard those
18 things that are not responsive. This instant trip to the
19 bench was caused because Mr. Heineman objects to the Court
20 instructing the witness to not use the words, if you want to
21 use the word -- if you are using the word effects or if you
22 want to use the word clinical effects or something like
23 that. He is objecting to the Court instructing the witness
24 that that is not a responsive answer. I didn't ask him to

1 use the word effects. I just simply asked him whether or not
2 it was clinical effect and he said yes if you want to use the
3 word clinical effects and that is what caused this last trip
4 up here and counsel will continue to make those kind of
5 objections because this witness is clearly not responsive.

6 He is clearly arguing with me and no need to argue with me.

7 MR. HEINEMAN: Well, I am happy to have Mr. Carr's
8 paternal advice on how I should make any records.

9 MR. CARR: It is not advice. I object to your
10 constant delay, of this constant petty, useless trips to the
11 bench that you and the witness apparently have gotten
12 together as a device to prolong the length of this case.

13 MR. HEINEMAN: Mr. Carr, that is an absurd
14 statement. Many of my objections have been to your request
15 -- for example, the last time up here had to do with your
16 request to ask the witness to assume something which clearly
17 was not demonstrated, in fact, was contradicted by the
18 document you were asking him to assume it from and again at
19 this time objected in addition to the Court's instruction, I
20 objected to your request of the Court and your statement to
21 the jury that the witness was arguing with you. Now, I
22 objected to that as well and I have the right and indeed the
23 Court imposes upon me the obligation to come up here to the
24 bench in order to make any records and, therefore, that is

1 what I have to do.

2 THE COURT: I impose it on both of you and after
3 seeing what goes on here, I am going to give it to both of
4 you. Let's go.

5 (The following proceedings were had in the hearing
6 and presence of the jury).

7 MR. CARR: Could you hand the witness Exhibit 1665
8 or 1627 whichever one you may have. It is that green book,
9 Tammy.

10 Q. Doctor, handing you Plaintiffs' Exhibit 1665 and
11 referring your attention to page 924, you recognize that as
12 the EPA Health Assessment Document for Polychlorinated
13 Dibenzo-p-dioxin, do you not, sir?

14 A. Yes. I recognize the document, sir.

15 Q. And, Doctor, I would like you to assume that that
16 document reports, "That the United States EPA concluded in
17 discussing a spraying of 2,4,5-T in Alsea, Oregon, that the
18 EPA did a study on spontaneous abortion rates and concluded
19 that the 1972-'77 spontaneous abortion rate index for the
20 study was significantly higher than in the rural control area
21 or the urban area. There was a statistically significant
22 seasonal cycle in the abortion index in each of the areas
23 with a period of four months. In particular, there was an
24 outstanding peak in the study area in June and there was a

1 statistically significant correlation between the spontaneous
2 abortion rate index and spray patterns in the study time when
3 a lag time of two or three months was included and that the
4 U.S. EPA concluded, however, that this analysis is a
5 correlational analysis and correlation does not necessarily
6 mean causation." Would you assume those facts, please, sir?

7 A. I am reading it. I am assuming those facts are in
8 the report.

9 Q. Doctor Suskind, all I have asked you to do is to
10 assume those facts, sir. Will you do that?

11 A. I will assume that those are facts.

12 Q. And, Doctor, spontaneous abortion is a clinical
13 effect, is it not, sir?

14 A. Spontaneous abortion is a clinical effect.

15 Q. And, Doctor, there was no chloracne reported in
16 this study, was there, sir?

17 A. I don't know, sir.

18 Q. Well, do you know of any chloracne that was
19 mentioned? Is there any chloracne mentioned in this
20 document, sir, relating to the spraying of 2,4,5-T?

21 A. I believe -- Yes. In the following article by
22 Milby.

23 Q. Doctor --

24 A. The following article by Milby.

1 MR. CARR: Your Honor, would you direct the witness
2 again. He is interrupting me. I am referring to this
3 document that you have in your hands.

4 A. So am I, sir. It is the next paragraph. Milby
5 citing three critiques of the Alsea study published in open
6 literature stated "That the statistical method and the basic
7 design" --

8 MR. CARR: Your Honor, would you direct the
9 witness. He is trying to get something in that is best left
10 for redirect. My question is aimed at chloracne.

11 A. It is part of the study, sir.

12 MR. HEINEMAN: Objection.

13 THE COURT: I want to tell you again when there are
14 objections made, please stop talking. Gentlemen, could the
15 two of you approach the bench, please.

16 (Bench conference had out of the hearing of the
17 jury.)

18 THE COURT: Before we start, could I see the next
19 page. Let me read it before we start on it. Three people
20 were talking at the same time. I think you were trying to
21 make an objection.

22 MR. HEINEMAN: Your Honor, what clearly happened,
23 Mr. Carr got hoist on his own petard. He asked the witness
24 whether there was anything in the study relating, anything in

1 the document related to the the spraying of 2,4,5-T.

2 MR. CARR: Chloracne is exactly what I said,
3 counsel. Does it mention chloracne.

4 MR. HEINEMAN: And the witness is answering the
5 question and he says well, I am telling you to refer to the
6 document and the witness says I am referring to the
7 document. I am referring to the next paragraph and he begins
8 to read the next paragraph and Mr. Carr interrupts him
9 because he obviously doesn't want the jury to hear what is in
10 the next paragraph.

11 THE COURT: Keep your voice down. What is your
12 reply?

13 MR. CARR: My reply is, Your Honor, I asked him
14 whether or not the document makes any mention of chloracne
15 found in the study. He goes on to try to argue that Milby
16 says the study that the EPA refers to was fraud. We have
17 gone into that. There has been witnesses testify about that.
18 The jurors remember that and I am not asking about that.
19 Counsel can attack the Alsea study all that he wants on
20 redirect. My question is simple. The Alsea study shows
21 spontaneous abortions, whether it is good, bad, indifferent
22 or fraud is not what I am asking him. I am asking him to
23 assume that that study as it is stated in this document, what
24 I gave in the document is said in that document and then I

1 asked does it mention chloracne in this group of people that
2 was studied.

3 MR. HEINEMAN: No, sir. The question was --

4 THE COURT: That is the question.

5 MR. HEINEMAN: Excuse me. May I make my record?

6 THE COURT: Yes, you may.

7 MR. HEINEMAN: The question was does the document
8 mention anything about chloracne in 2,4,5-T spraying. He
9 didn't say a word about Alsea in connection with it. He said
10 does the document say anything about chloracne in connection
11 with the 2,4,5-T spraying.

12 THE COURT: Okay. First of all, the context of
13 this Alsea that was pointed to, he was asked directly about
14 chloracne before the argument at the bench. I read the next
15 paragraph and nothing in the paragraph says anything about
16 chloracne in existence or non existence. It is not found
17 related to the chloracne. The paragraph after that goes into
18 the EPA's comments on the unconsulted spraying so that is off
19 the subject of the Alsea all together. I am afraid this is
20 another example of this witness trying to interject something
21 not responsive to the question which was very pointedly
22 directed to the question of mention of chloracne. His answer
23 was not responsive. It was properly interrupted. You have
24 this document in front of you, I assume, and you could see as

1 well as anyone else. You can read the English language that
2 chloracne is not mentioned and what he was trying to read,
3 his response was improper. It was properly interrupted.
4 Your objection as to the interruption of it is overruled.
5 Let's proceed.

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

8 MR. CARR: Would you read my last question to the
9 witness, please?

10 COURT REPORTER: "Well, do you know of any
11 chloracne that was mentioned? Is there any chloracne
12 mentioned in this document, sir, relating to the spraying of
13 2,4,5-T"?

14 A. Yes, I believe there is, sir.

15 Q. Direct me to the page, would you, Doctor?

16 A. All right. In the original Milby report, sir.

17 Q. Doctor, direct me to the page of this document?

18 A. It is page 9-25. The quotation from Doctor Milby.

19 Q. Now, Doctor --

20 A. In Doctor Milby's original paper.

21 Q. Doctor, there is no mention of chloracne in that
22 paragraph, is there?

23 A. In Doctor Milby's original paper there is, sir.

24 MR. CARR: Would you direct the witness to answer my

1 question?

2 THE COURT: Please respond to the question. That
3 was not responsive to the question.

4 MR. CARR: Would you ask the jury to disregard what
5 the witness has said?

6 THE COURT: The jury is so instructed.

7 Q. Doctor, is there any mention of chloracne being
8 found in these women who were exposed to the 2,4,5-T
9 spraying, in this document that I have referred you to, sir?

10 A. In this document which quotes Milby --

11 MR. CARR: Your Honor, the witness is not responding
12 to my question.

13 A. I am. I absolutely am, sir.

14 THE COURT: Doctor, you are not. It is my
15 determination as to whether you are responding or not. And
16 you are not. Now, start your question over again, I mean
17 your answer over again and respond to the question, please,
18 that has been asked of you without any extraneous comments,
19 editorializing or answering any other question that you might
20 have in mind.

21 A. This summary does not mention chloracne.

22 Q. Thank you, Doctor.

23 A. This summary.

24 THE COURT: Thank you, Doctor.

1 Q. Doctor, I will now hand you what has been marked as
2 Plaintiffs' Exhibit 1806 and ask if you recognize that as
3 Chapter 18 from the book Dioxin In The Environment and
4 authored by Mr. Merlo that you have discussed with us his
5 identification a little earlier. Do you recognize that as
6 written by him, sir?

7 A. Yes, I do, sir.

8 MR. CARR: I offer that exhibit into evidence, if it
9 please the Court.

10 MR. HEINEMAN: May counsel approach the bench,
11 Judge?

12 THE COURT: Sure.

13 (Bench conference had out of the hearing of the
14 jury.)

15 MR. HEINEMAN: Your Honor, I object to the
16 document. He has not laid an adequate foundation with this
17 witness. He has not asked if the witness thinks it is
18 authoritative. The witness may well think it is but he has
19 not asked him that. Secondly, even if the witness did say it
20 was authoritative, it is still hearsay. It is not
21 admissible. There has been no adequate foundation laid for
22 its admission and it is just simply hearsay and I object to
23 it.

24 MR. CARR: I have established the foundation in my

1 earlier examination of this witness, Your Honor. He
2 acknowledged that Merlo accurately reported the things that
3 went on in Seveso, Italy, and that he considered him
4 authority in his own field and that he accurately reported in
5 this book whether or not it was.

6 MR. HEINEMAN: Whatever, the record stands, that is
7 how it stands, Your Honor. That is not an adequate
8 foundation for the admission of the hearsay document.

9 THE COURT: It is admitted over objection.

10 (The following proceedings were had in the hearing
11 and presence of the jury).

12 Q. Now, Doctor, this chapter is entitled Adverse
13 Health Effects in Human Population Exposed to 2,3,7,8
14 Tetrachlorodibenzo-para-dioxin, TCDD, in Seveso: An Update,
15 is it not, sir?

16 A. That is the title of this paper, sir.

17 Q. And, Doctor, the introduction portion of it
18 discusses when the production started. It gives some of the
19 background running from 1947 up through '76 in a very brief
20 fashion, does it not, sir?

21 A. It describes what the ICMESA plant made, sir, yes.

22 Q. And it contains, the last two sentences say,
23 "During the years before the accident, many animal deaths
24 were observed but local authorities were never informed about

1 these. Moreover, local authorities were never informed about
2 the TCP production at the ICMESA plant despite the fact that
3 the TCP operation was considered notifiable by Italian
4 Environmental Occupational Laws", does it not say that, sir?

5 A. That is what this report says, sir.

6 Q. And, Doctor, there is referring to animal deaths,
7 there is a drawing in there, is there not, sir, in which --
8 on page 254 -- in which it has little triangles for breeding
9 farms with animal deaths to little black dots for breeding
10 farms without animal deaths for distribution occurring after
11 July 10th of '76 in the polluted area. Do you see that, sir,
12 on that page?

13 A. Yes, sir, I do, sir.

14 Q. The exhibit has been marked 1806A is an accurate
15 blowup of that figure on that page that we have just referred
16 to, is it not, sir?

17 MR. HEINEMAN: Excuse me, Your Honor. May counsel
18 approach the bench?

19 THE COURT: Yes, you may.

20 (Bench conference had out of the hearing of the
21 jury.)

22 MR. HEINEMAN: May I object to this as being
23 absolutely irrelevant to the entire lawsuit and certainly to
24 the direct examination of this witness. It is outside the

1 scope of the direct examination and it is irrelevant to any
2 issues in the lawsuit and I object to it on those basis and
3 would ask if the Court sees fit to overrule my objection that
4 it be made a continuing one.

5 MR. CARR: The relevance is clear, Your Honor. We
6 have had reams of testimony relating to animal studies and
7 how animals are affected and humans may be affected from
8 exposure to TCDD. It is perfectly relevant.

9 THE COURT: What about the scope?

10 MR. CARR: Well, this witness has testified as to
11 the adverse effects of TCDD in all kinds of populations and
12 he set himself up as an expert and he commented on the
13 effects of TCDD and it is clearly within the scope of his
14 expertise and his examination.

15 MR. HEINEMAN: I don't believe the witness, Your
16 Honor, discussed animal breeding farms around Seveso and the
17 incidence of deaths of animals around Seveso in those
18 breeding farms and I object to it as being beyond the scope
19 and irrelevant.

20 THE COURT: That is an awful narrow view of the
21 scope. I think it is within the scope. There is no question
22 it is relevant.

23 MR. CARR: He visited Seveso.

24 MR. HEINEMAN: So what? He didn't examine the

1 breeding farms.

2 THE COURT: No, but I think it is relevant and it
3 is within the scope. Do you have a reply to Mr. Carr's memo
4 today or --

5 MR. HEINEMAN: I don't know, Your Honor.

6 THE COURT: If you have it today, I would like to
7 have it so I could look it over before tomorrow.

8 MR. HEINEMAN: I don't know.

9 THE COURT: Could you check that, please?

10 MR. HEINEMAN: Sure. Your Honor, may my objection
11 be a continuing one to this entire line of examination?

12 THE COURT: Sure.

13 (The following proceedings were had in the hearing
14 and presence of the jury).

15 MR. CARR: Your Honor, I would offer 1806A into
16 evidence.

17 THE COURT: It is admitted over objection.

18 MR. HEINEMAN: The same objection, Your Honor.

19 THE COURT: It is admitted over objection.

20 Q. Doctor, to help the jury on this drawing, the black
21 square in the upper left-hand side of this figure is the
22 plant, is it not, sir?

23 A. I believe it is so designated. That is ICMESA,
24 sir.

1 Q. And you know from earlier drawings in this study
2 and as well as drawings in other studies, that the
3 contamination went in the area on this picture, it would be
4 in a diagonal area from the upper left to the lower right,
5 would it not, sir, as I have indicated here?

6 A. If one can judge by that drawing and figure three,
7 that would appear to be the general direction.

8 Q. And the area that is in the letter, has the letter
9 A and that is bounded by a jagged line as I am indicating
10 here is the area of greatest contamination, is it not, sir?
11 The area listed as A, in this area here, sir?

12 A. I believe the area listed as A is a small area,
13 sir, demarcated by several lines. It doesn't extend all the
14 way down as you have pointed out, sir. It is limited.

15 Q. Right. And I missed that line. Actually what it
16 is --

17 A. There is an L-shaped limitation.

18 Q. In the exhibit on page 342, it shows the various
19 zones. The dark area A would go as I have indicated here,
20 would it not, sir?

21 A. That is area A.

22 Q. That is area A. That is the area of the greatest
23 contamination, correct, sir?

24 A. I believe they considered that the area of greatest

1 contamination.

2 Q. And then Zone B is an area that starts at the
3 bottom of Zone A and this diagonal as I am indicating goes
4 down to this point and then comes back like thus, does it
5 not, sir? So this area in a broad scope is as I am
6 indicating here. That is Zone B, correct, sir?

7 A. That long, that elongated line.

8 Q. Isn't that correct?

9 A. Yes, I believe so.

10 Q. And the R Zone is the area that is indicated as I
11 am doing now, is it not, sir? That is the so-called R Zone,
12 correct, sir?

13 A. That is correct, sir.

14 Q. Now, each of these triangles, according to the
15 author, shows animals, the breeding farm with animal deaths
16 following the July 10th of '76 accident, does it not, sir?

17 A. The triangles are supposed to demonstrate the
18 breeding farms with animal deaths.

19 Q. And there is a large number of those breeding
20 farms, are there not, sir, where they had such animal deaths
21 as indicated by these triangles?

22 A. I don't know how many breeding farms there were. I
23 believe --

24 Q. Doctor, my question is simple. If each of these

1 triangles indicate a farm, a breeding farm with animal
2 deaths, there is a large number of triangles, are there not,
3 sir, on this drawing?

4 A. Sir, I am not sure that that represents breeding
5 farms or number of animals.

6 Q. Doctor, it says, does it not, sir, breeding farms
7 with animal deaths?

8 A. That is right.

9 Q. Each of those triangles. And, Doctor, that
10 drawing, then, showing these animals deaths can be seen, that
11 that is associated with the most contaminated areas, are they
12 not, sir, these deaths?

13 A. Well, there were a larger number of triangles. No,
14 I couldn't really say that, sir, because there are -- Is that
15 figure 5 or figure 4, sir?

16 Q. That is figure 5, Doctor. You are on figure 4?

17 A. No. I am on figure 5 and those so-called animal
18 deaths extend out into Area B and also Area R.

19 Q. Yes, Doctor. I certainly agree with that.

20 A. So, I can't answer your question about whether
21 there were a larger number of --

22 Q. Doctor --

23 A. I don't know, sir.

24 Q. There is a larger number of deaths in the areas

1 with the greatest contamination, that is A and B, are there
2 not, sir?

3 A. Well, not having counted them and I don't know
4 whether or not Mr. Merlow has provided numbers for this.

5 Q. Doctor, please, if you would, just look at the
6 triangles. You can see they are concentrated in Zones A and
7 B primarily, are they not, sir?

8 MR. HEINEMAN: I object. Interrupted the answer.

9 THE COURT: Objection is overruled.

10 A. Perhaps you can see this better than I can but --

11 Q. Well, Doctor, take the three contaminated areas, if
12 you will, Zones A, B and R. Will you do that, sir? It is
13 clear, is it not, sir, that the largest number of farms,
14 breeding farms with animal deaths in the drawing that is
15 called figure 5, the largest number of animal deaths are in
16 Zones A, B and R, are they not, sir?

17 A. There is a concentration of them in A and B and
18 some in R, sir.

19 Q. As compared to the other areas, Doctor, in this
20 figure, the great number of breeding farms with animal deaths
21 have occurred within Zones A, B and R, have they not, sir?

22 A. They have occurred in A and B and there is some in
23 R. That is all I can say.

24 MR. CARR: Your Honor, would you direct the witness

1 to answer my question.

2 THE COURT: Doctor, please answer the question
3 directly.

4 A. Mr. Carr, I don't know how to answer it any better
5 than that.

6 Q. Doctor, you can say yes or you can say no.

7 A. Well, if I do, then I may be mistaken, if I say yes
8 or no.

9 Q. Doctor, we can all make mistakes but looking at
10 this figure, sir, it doesn't take much to count the number of
11 triangles that are outside of A, B and R, isn't that correct,
12 sir? Relatively few in the area outside of Zones A, B and R,
13 isn't that correct, sir?

14 A. No, sir. It may be there -- let me finish. It may
15 be wider spread but not more and if you count triangles, sir,
16 in that large area, you may have the same number as in R or
17 in B. What you are asking is concentrations of.

18 Q. Doctor, I said animal farms with, breeding farms
19 with animal deaths. There is probably not more than 30
20 triangles or 40 triangles in the area shown in this figure
21 outside of A, B and R, isn't that correct, sir?

22 A. I haven't counted them, sir. I can't say.

23 Q. Well, count them, sir, the triangles, if you will,
24 outside of Zones A, B and R.

1 A. I count 80, sir.

2 Q. And, Doctor, count the deaths in Zones A, B and R,

3 if you will, the triangles within --

4 A. Count in all of them?

5 Q. Yes, Doctor.

6 A. Or individually.

7 Q. That is what I asked you.

8 A. I have so far 80 in R.

9 Q. No. I wanted you to count the ones outside of

10 Zones A, B and R.

11 A. I am sorry. Outside of A --

12 Q. A, B and R.

13 A. 80, sir.

14 Q. Yes.

15 A. What else do you want me to do, sir?

16 Q. Now count the ones within A, B and R.

17 A. I count 25 in A, sir.

18 Q. Doctor, you haven't even come close in A. Are you

19 counting, Doctor, these that go down to this line, sir?

20 A. I absolutely am. Are those all triangles, sir? So I

21 am off by 5, sir.

22 Q. And A goes on up into the plant itself, sir?

23 A. No. That is the limit of A. It is south of the

24 plant, sir. I know this area.

1 Q. If you look at the drawing of the pollution, it
2 includes, does it not, sir, the area right up to the plant?
3 A. It includes up to the plant and you counted 30.
4 Q. Doctor, it includes right up to here, does it not,
5 sir? I count 35 or 36, Doctor.
6 A. I don't, sir, but that is besides the point.
7 Q. All right, Doctor. And over here in the Zones A
8 and B, Doctor, I get 50 to 60 in just this far?
9 A. In what?
10 Q. In Zones B and R.
11 A. If you combine them, yes.
12 Q. I am combining them, Doctor.
13 A. Okay. If that is what you want to do.
14 Q. Doctor, that is what I have asked you to do, have I
15 not? I have asked you to compare the number of animal deaths
16 within Zones A, B and R as compared to the animal deaths,
17 breeding farms outside the Zones A, B and R.
18 A. Okay.
19 Q. Doctor, there are many, many more breeding farms
20 with animal deaths within Zones A, B and R than there are
21 outside of it, isn't that correct, sir?
22 A. I am not all together sure because we haven't
23 finished counting.
24 Q. Doctor, why don't you finish counting.

1 A. I leave it up to you, sir.

2 Q. Sir?

3 MR. CARR: Your Honor, rather than count these on
4 jury time, it is 5 minutes after 11 and we could count them
5 during the break.

6 THE COURT: I think that is an excellent idea. We
7 will take a break at this time and then resume testimony. I
8 would remind you and this would go for any other breaks that
9 we take during the day, whether counting or not, that you are
10 not to discuss this matter among yourselves, with anyone
11 outside the jury panel or as of yet form any opinions or
12 conclusions about the matters on trial. Court is in a short
13 recess.

14 COURT RECESSED:

15 (The following proceedings were had in the hearing
16 and presence of the jury)

17 RAYMOND SUSKIND

18 having resumed the witness stand, being previously sworn,
19 testified further as follows:

20 CROSS EXAMINATION

21 By

22 MR. REX CARR.

23 Q. Doctor, how many did you count?

24 A. I counted 186 in the combined areas.

1 Q. In A, B and R?

2 A. A, B and R, yeah. Triangles.

3 Q. And that area is a much lesser geographic area than
4 the outside area, is it not, sir?

5 A. I haven't measured it but from the looks of it, it
6 might be smaller, yes.

7 Q. Doctor, is there any question in your mind that it
8 is perhaps a third of the size of the outside area that is
9 shown in that exhibit?

10 A. It might be smaller, sir. Yes. I agree.

11 Q. You are saying it might be. Now, this is something
12 that you can't speculate about. It is clear and obvious it
13 is significant. It is not might. It either is or it isn't?

14 A. It looks smaller to me, sir.

15 Q. Doctor, is there any question in your mind that it
16 is significantly smaller, perhaps a third the size of the
17 outside area?

18 A. Well, I don't want to be argumentative about little
19 matters like this, sir, but it looks like it is. Zone A, B
20 and R look smaller than the outside area.

21 Q. Well, Doctor, if you don't want to be argumentative
22 about it, my suggestion to you is that it is about one-third
23 the outside area, is it not, sir?

24 A. I haven't measured it with my ruler, sir.

1 Q. Well, would it help you to measure it with your
2 ruler?

3 A. No, it would not, sir.

4 Q. Can you not just see by looking at it, Doctor, that
5 it is about one-third?

6 A. Mr. Carr, I am willing to agree that it is smaller.

7 Q. Well, Doctor, I want more than that, sir.

8 A. What do you want, then?

9 Q. What I want is an agreement as to what the facts
10 are, sir.

11 A. Those are the facts, that --

12 Q. Is it a fact, sir, that it is not just smaller but
13 it is about one-third the size of the outside area?

14 A. I can't say that it is one-third.

15 Q. Then please measure it, Doctor.

16 A. Do you have a ruler, sir? I can measure it with --
17 I don't bring rulers with me for things like this.

18 Q. Doctor, you can measure it by using any device that
19 you want. Do you have a piece of paper there that you could
20 put on, sir? And let me help you with this little square,
21 sir. Do you see, sir, that this little square would cover
22 two times this little square at about one-half the size of
23 the combined zones, sir? Would you see that, sir?

24 A. I do, sir.

1 Q. And, Doctor, you would see the outside area if we
2 start here, that is one, is it not, sir?

3 A. It might be, yes.

4 Q. No, Doctor. Is it -- is this outside area, is my
5 square completely within the outside area that is above the
6 polluted area? Is it completely within it, sir?

7 A. It is completely within it.

8 Q. And, Doctor, over here it is also completely within
9 it, is it not, sir?

10 A. It is.

11 Q. And, Doctor, here it would be at least covering
12 half the square, would it not, sir?

13 A. Approximately.

14 Q. That is two and a half then, sir. And down here it
15 would be again another square, wouldn't it, sir?

16 A. Yes.

17 Q. That is three and a half, sir, correct, sir?

18 A. Yes.

19 Q. And over here we could get another half of a
20 square, could we not?

21 A. If that is the way you want it.

22 Q. Doctor, that is not the way I want it. That is the
23 way it is. That would be another half. That would make
24 four, would it not?

1 A. Why don't you move it up so they don't overlap?

2 Q. Surely, Doctor. Why don't you do it?

3 A. You have already started it and I think --

4 Q. That would be four, wouldn't it, Doctor?

5 A. That would be four.

6 Q. And here we have another one would be four and a

7 half or five?

8 A. Why don't you move it up further so it really

9 doesn't overlap with the others.

10 Q. Doctor, when we were over to here, that is one,

11 two, three and a half, four or four and a half, is it not,

12 sir, at this point?

13 A. Uh-huh.

14 Q. And then we will put it here, Doctor, and we will

15 get another half, would we not, sir?

16 A. Uh-huh.

17 Q. That is four, sir?

18 A. Uh-huh.

19 Q. And then, Doctor, we will put it here and we will

20 get another half, sir?

21 A. Uh-huh.

22 Q. That is four and a half?

23 A. Uh-huh.

24 Q. And over here, sir, we will put on the whole one,

1 would we not, sir? So we have got approximately five, five
2 and a half or six, have we not, sir?

3 A. I thought you said five, sir.

4 Q. Well, Doctor, let's take five. So we have a total
5 of seven then, do we not, sir? Seven all together? Two here
6 and five outside?

7 A. May I look at this, sir? Two there and five
8 outside, sir.

9 Q. And, Doctor, so the polluted area is less than
10 one-third of the outside area, is it not, sir, or less than
11 one-third of the total area?

12 A. The polluted area is more than one-third. If it is
13 two out of --

14 Q. Doctor, we have two as compared with five?

15 A. Two as compared to five.

16 Q. The total area, sir.

17 A. Okay.

18 Q. The outside area is at least --

19 A. If you are figuring it that way, yes, sir.

20 Q. The outside area is at least, is it not, sir, two
21 and a half times larger than the inside area?

22 A. Yes.

23 Q. And, Doctor, the outside area had 80 deaths, 80
24 animal farms that were affected?

1 A. That is what I counted, sir.

2 Q. And the inside area had 180, you said, sir,
3 something like that?

4 A. I thought there were 180, sir.

5 Q. Now, Doctor, there are significantly more animal
6 farms with deaths within the polluted area than there are
7 without the polluted area, is there not, sir?

8 A. I believe that is what the author of this paper
9 intended to show, sir.

10 Q. All right. Now, Doctor, turn to the page, if you
11 will, 243 of the exhibit.

12 A. I believe you have my exhibit, sir.

13 Q. Doctor, 1806B is an accurate blowup of the drawing
14 that is on that particular page, is it not, sir, that I
15 directed you to?

16 A. What page?

17 Q. I think it was 243.

18 A. I have it, yes.

19 Q. Is it, sir?

20 A. It appears to be.

21 MR. CARR: I offer 1806B into evidence, if it please
22 the Court. I thought I showed it to you, counsel.

23 MR. HEINEMAN: I am sorry, I didn't see it. If the
24 Court would incorporate the objections to the original.

1 THE COURT: I will incorporate all argument. It is
2 admitted over the objection.

3 Q. Doctor, this is a figure that is captioned or has
4 the legend beneath it of time trends of spontaneous abortion
5 rates by quarters and by polluted zones, is it not, sir?

6 A. That is what the title reads, sir.

7 Q. And, Doctor, there is a dashed line there that has,
8 that rises up much higher than any other lines. Do you see
9 that, sir? That dashed line represents Zones A plus B, does
10 it not, sir?

11 A. Yes.

12 Q. And Zone A, Zones A plus B would be this area that
13 is designated A here and the area that is designated B here
14 that we previously described, isn't that correct, sir?

15 A. That is correct, sir.

16 Q. And the heavy black line is Zone R, is it not, sir?

17 A. Yes, sir, I believe so.

18 Q. So, the dashed line is Zones A and B as I am
19 tracing with my finger, is that not correct, sir?

20 A. That would be Zone A plus B, sir.

21 Q. Yes. And the heavy black line is the Zone R, is it
22 not, sir?

23 A. That is correct, sir.

24 Q. And the lighter line, the lightest line is the

1 outer area, is it not, sir?

2 A. It is, sir.

3 Q. So that this drawing as compared to 1806A, the
4 lighter line represents the area that I am circumscribing
5 with my hand that is outside of Zones A, B and R, correct,
6 sir?

7 A. Yes, sir.

8 Q. And, Zone R is circumscribed by my finger, this
9 line here, is it not, sir? Excluding Zone A and B which
10 would be within that outline as well?

11 A. That is correct.

12 Q. So, Zone R is this part that surrounds Zones A and
13 B, correct, sir? Would be the lesser polluted area?

14 A. I think we have already established that.

15 Q. And Zone A is the zone they evacuated?

16 A. I believe they did.

17 Q. They did not evacuate either Zones B or R, did
18 they, sir?

19 A. I believe that is correct, sir.

20 Q. Now, Doctor, the spontaneous abortion rates
21 according to the author in Zones A and B was found to be a
22 statistically significant increase in the spontaneous
23 abortion rate, isn't that correct, sir, in these areas where
24 the higher levels of TCDD were found?

1 A. Which author are you talking about, sir?

2 Q. The author of this document, sir, Franco Merlo,

3 Exhibit 1806 that we are discussing, sir?

4 A. No.

5 Q. Does he not say, sir, a statistically significant

6 increase in the spontaneous abortion rate has been detected

7 in those areas in which higher levels of TCDD were found,

8 areas A and B. Doesn't he say that, sir, on page 243?

9 A. He doesn't say that, sir. No. Strigini says

10 that. He is quoting from --

11 Q. Doctor Merlo is also saying it. He is putting

12 it --

13 A. He is quoting, sir.

14 Q. Doctor, does he put any quotes there? Do you see

15 any quotes?

16 A. He doesn't have to, sir, in order to be quoted,

17 sir.

18 Q. Did he write this document?

19 A. He wrote the document.

20 Q. Are these his words? Is this his interpretation of

21 others, of other works?

22 A. Doctor Strigini's words, sir, and if you would

23 quote correctly, you will see it.

24 Q. Excuse me, Doctor. Does he say there, does he

1 quote Doctor Strigini?

2 A. He is quoting Doctor Strigini, sir.

3 THE COURT: Doctor, please, let him finish the
4 question.

5 Q. Doctor, does he say in this document that he is
6 quoting Strigini? If so, show me?

7 A. He refers to Strigini, sir.

8 Q. Indeed he does, Doctor. Does he say that he is
9 quoting Strigini?

10 A. Sir, I think you are argumentative, sir, and it
11 doesn't matter what he is saying is that --

12 MR. CARR: Your Honor --

13 THE COURT: Doctor, please. I have to determine
14 those questions. You don't. If I do not stop the
15 questioning or I do not uphold an objection to it, then you
16 have to answer the question. Those matters that you have
17 expressed an opinion on, you are not entitled to express them
18 and you are not entitled to refuse to answer a question on
19 the basis of your opinion of the question. If I rule that
20 the question is proper, you have to answer it. Please answer
21 it.

22 MR. CARR: Would you read my question to him
23 please.

24 A. Yes, sir.

1 Q. Would you show me the quote marks please, sir?

2 A. The data collected --

3 Q. Would you show it to me, sir, where he quotes him?

4 A. It is right here and this is what he is quoting.

5 Q. Doctor, is there quote marks there?

6 A. Doesn't have to be, sir.

7 Q. My question is, are there quote marks there?

8 A. No, there are no quote marks, sir.

9 Q. Doctor, does he not say, sir, the data collected

10 during a five year followup by the obstetric and

11 gynecological teams have been analyzed parenthesis Strigini,

12 et al, 1982?

13 A. That is what he says, sir.

14 Q. And this is now Doctor Merlo saying this, isn't he,

15 sir? Doctor Merlo said that, didn't he, sir?

16 A. Yeah. Can we read further, sir.

17 Q. Excuse me, Doctor --

18 MR. CARR: Your Honor, would you direct the

19 witness --

20 THE COURT: Doctor, you don't determine what

21 questions are asked of you. Just answer the questions that

22 are asked of you and don't make any suggestions to either

23 counsel as to what else they may ask of you. It is their

24 determination and their professional judgment. They are the

1 attorneys, you are not. You may continue, Mr. Carr.

2 Q. Doctor Merlo says, does he not, sir, quote the data
3 collected during a five year followup by the obstetric and
4 gynecological teams have been analyzed parenthesis Strigini
5 et al, 1982, end of quote. Doesn't he say that?

6 A. He does.

7 Q. Doctor Merlo also goes on to say, does he not, sir,
8 "Due to the lack of abortion base-line values prior to the
9 accident, only a backward analysis of the embryo toxic
10 effects in different areas has been possible." Doesn't he
11 say that also, sir?

12 A. He says that, sir.

13 Q. Doesn't he also say, sir, "Statistically
14 significant increase in the spontaneous abortion rate has
15 been detected in those areas in which higher levels of TCDD
16 were found parenthesis areas A and B," close parenthesis.
17 Doesn't he say that also, sir?

18 A. That is what this report reads, sir.

19 Q. Isn't that what Doctor Merlo says, sir?

20 A. That is what his paper reads, sir. Yes.

21 Q. It is a yes, that is what Doctor Merlo said, isn't
22 that right, sir?

23 A. Again you are arguing with me and you know.

24 MR. CARR: Your Honor, would you direct the

1 witness --

2 THE COURT: Doctor, I asked you not to make that
3 kind of answer. It is not responsive to the question and it
4 is not your province to determine that. Please answer the
5 question that is asked of you.

6 A. Doctor Merlo states that in his paper, sir.

7 Q. Yes. Now, Doctor Merlo's statements in this paper
8 are based upon studies made by Strigini and others, are they
9 not, sir?

10 A. They were based upon --

11 Q. Could you answer that question?

12 A. A finding made by the obstetric and gynecologic
13 team, analyzed by Strigini, yes.

14 Q. Is that a yes to my question, Doctor?

15 A. Yes.

16 Q. And, Doctor, he also, in figure two, he also
17 attributes to Strigini, et al, does he not, sir? That is
18 this Exhibit 1806B?

19 A. I believe he uses Strigini's figures there, sir,
20 yes.

21 Q. And, Doctor, Doctor Merlo goes on to say, does he
22 not, sir, "This temporary rise in spontaneous abortions as
23 shown in figure two", and that is the Exhibit 1806B, "reached
24 a peak in the second half of 1977 about one year after the

1 accident." He says that as well, does he not, sir?

2 A. Yes, sir.

3 Q. And that is what, according to this document,
4 according to these tables, the study shows, isn't that
5 correct, sir?

6 A. Would you repeat the question please?

7 (Court Reporter read back the last question.)

8 A. No, sir.

9 Q. Doctor, does this table show a statistical increase
10 in the spontaneous abortion rate and does this document say
11 that such a rate was detected in those areas?

12 A. I would say no, sir.

13 Q. Doctor, does this say, "A statistically significant
14 increase in the spontaneous abortion rate has been detected
15 in those areas in which higher levels of TCDD were found,
16 areas A and B." Does it say that, sir?

17 A. It says that, sir.

18 Q. It does say that?

19 A. That is what this report says.

20 Q. That is what I am talking about. This report. Did
21 you think I was talking about some other report? Doctor, did
22 you understand my question to be relating to this report?

23 A. Yes, I did.

24 Q. Did you understood that? That I am talking about

1 this report?

2 A. You are asking me about this report --

3 Q. Excuse me. You understood from the beginning --

4 A. -- and my version of it.

5 MR. CARR: Would you ask the witness to not
6 interrupt me.

7 THE COURT: Doctor, please. You can't answer a
8 question unless you hear the whole question.

9 Q. You have understood from the beginning that I was
10 talking about Doctor Merlo's Chapter 18 in this book that you
11 were a party to, isn't that right?

12 A. Doctor Merlo happens to be my graduate student and
13 I am his adviser.

14 MR. CARR: Would you direct the witness to answer my
15 question.

16 THE COURT: That was not responsive.

17 MR. CARR: And direct the jury to disregard.

18 THE COURT: The jury is so instructed. It was not
19 responsive to the question that was asked of him.

20 Q. Doctor --

21 THE COURT: Doctor, please respond to the questions
22 that are asked of you.

23 Q. Doctor, you understand my questions have been
24 referring to this document, Exhibit 1806? You understand

1 that, don't you, sir?

2 A. I do indeed, sir.

3 Q. And according to this document, sir, a
4 statistically significant increase in spontaneous rates were
5 detected in areas A and B, isn't that correct, sir?

6 A. No, sir.

7 MR. HEINEMAN: Objection, Your Honor, asked and
8 answered.

9 THE COURT: Objection is overruled.

10 Q. Well, would you read that sentence to me, sir?
11 Read that sentence to me beginning with the words a
12 statistically significant. Would you read that outloud, sir?

13 A. "A statistically significant increase in the
14 spontaneous abortion rate has been detected in those areas in
15 which higher levels of TCDD were found, bracket areas A and
16 B, bracket."

17 Q. Now, did that sentence say that they detected
18 significant increase?

19 A. That sentence says it, yes.

20 Q. Does it say that statistically significant increase
21 was in spontaneous abortion rates?

22 A. It does, sir.

23 Q. Then it does say that statistically significant
24 increase in spontaneous abortion rates was detected, doesn't

1 it, sir?

2 A. No, sir.

3 Q. It doesn't say that?

4 A. No, sir.

5 Q. Let's start over again.

6 A. Let's start over again.

7 Q. Does it say that they detected a significant
8 increase in the spontaneous abortion rate?

9 A. That is what this report says, sir, in those
10 sentences.

11 Q. Now, this report then goes on to say, does it not,
12 sir, that this was a temporary rise and it reached a peak
13 about one year after the accident. Do you see that sentence,
14 sir, just following the one that you read? Doctor Suskind,
15 you are not looking at the sentence.

16 A. I am looking at the table, sir, in order to answer
17 your question.

18 Q. My question was referring to the sentence,
19 however. Did you understand I was talking about the
20 sentence, Doctor? Did you think I was talking about the
21 table?

22 A. The sentence interprets the table, sir.

23 Q. I am not asking for an interpretation of the
24 table. I am simply asking you, sir, this sentence appears

1 there, sir, does it not?

2 A. That is what the sentence reads.

3 Q. And it goes on to say this rise in the abortion
4 rate. Now, what rise in the abortion rate are they talking
5 about according to this document, sir? This next sentence
6 when they talk about this rise in the abortion rate, what are
7 they talking about?

8 A. They are talking about a study.

9 Q. No, Doctor, what is the abortion rate they are
10 talking about?

11 A. No. I am answering your question, sir.

12 Q. Doctor, my question is what is the abortion rate
13 that they are talking about in this sentence, sir?

14 A. They are talking about an abortion rate which was
15 obtained without a sufficient prior embryologic basis which
16 is in here, too, sir, so they have no basis of comparison.
17 They have no basis of comparison.

18 MR. CARR: Your Honor, would you direct the witness
19 that he is not answering my question?

20 A. I am, sir.

21 THE COURT: Doctor, your answer was not responsive
22 to the question. Not at all responsive to the question.
23 The jury is ordered to disregard the non responsive answer
24 that the witness just made.

1 Q. Doctor, did you even remotely believe that I was
2 asking you whether or not they had a basis for comparison?

3 A. That is the only way you can make a judgment.

4 Q. Doctor, that may be, Doctor. You may be absolutely
5 right. You may show that this study -- excuse me, Doctor.
6 You may show this study is no good compared to others, it
7 just stinks, that it is not worth a darn but, Doctor, I
8 didn't ask you that question. Do you understand what I
9 asked you about was this document, this study, Doctor? Do
10 you understand that? You do understanding, don't you?

11 A. That is what I am referring to.

12 Q. No, Doctor, you said you are referring to some
13 other study.

14 A. It is right in here.

15 THE COURT: Doctor, please let the counsel finish
16 his question.

17 Q. Doctor, the abortion rate they are talking about a
18 rise in refers to the sentence preceding it, doesn't it,
19 sir? This rise in the abortion rate? What is this rise in
20 the abortion rate they are talking about, Doctor, in this
21 sentence? What is Doctor Merlo talking about, sir?

22 A. He is talking about the apparent rise in the
23 abortion rate when you compare it to the --

24 Q. Thank you, Doctor.

1 A. Let me finish, sir.

2 Q. He is talking about, is he not, sir, the
3 spontaneous abortion rate that is in this study that he is
4 talking about?

5 MR. HEINEMAN: Objection. He interrupted the
6 witness.

7 THE COURT: Objection is overruled?

8 A. You have to compare it with something, sir.

9 THE COURT: The objection is overruled.

10 Q. Doctor Suskind, this sentence, "This rise in the
11 abortion rate among exposed pregnant women was observed
12 despite the fact that more than 90 pregnant women from those
13 areas obtained a clinical abortion." It says that, doesn't
14 it, sir?

15 A. That is what this report says, sir.

16 Q. What is a clinical abortion?

17 A. A clinical abortion is an abortion performed by a
18 physician for a specific reason.

19 Q. And, Doctor, what is a spontaneous abortion?

20 A. Self evident. It is spontaneous. It occurs of its
21 own.

22 Q. Without any clinical or other kind of interference,
23 isn't that correct, sir?

24 A. Well, I would assume that this is an accurate

1 statement, sir.

2 Q. I am not even talking about that now, Doctor. I am
3 asking you a spontaneous abortion is, is it not, an abortion
4 that occurs without any clinical interference?

5 A. Well, you know, sometimes it does happen.

6 Q. As opposed to clinical abortion and a spontaneous
7 abortion, a spontaneous abortion is not a clinical abortion,
8 is it, sir?

9 A. Not the way it is described here, sir.

10 Q. And, Doctor, according to this document, the
11 spontaneous abortion rate was a statistically significant
12 increase notwithstanding that more than 90 pregnant women had
13 obtained a clinical abortion, isn't that correct, sir?

14 A. That is what this report states, sir.

15 Q. Doctor, if this report is correct, if your student
16 accurately reported the studies in question and if the
17 studies in question were properly performed, the spontaneous
18 abortion would be a clinical effect, would it not, sir?

19 MR. HEINEMAN: Objection. Counsel approach the
20 bench?

21 THE COURT: Yes, you may.

22 (Bench conference had out of the hearing of the
23 jury.)

24 MR. HEINEMAN: Objection, Your Honor. He is asking

1 the witness to assume things as to which there is no evidence
2 whatsoever in the record. He is not permitted to do that.
3 No fact has been established as to whether or not these
4 studies were properly performed or anything of the sort and,
5 therefore, there is absolutely no basis in the evidence for
6 that assumption and I object to it.

7 MR. CARR: The basis is this document is self
8 evident. They have used and relied upon the study.
9 Obviously an authority like Merlo is would not rely on
10 something that he didn't think was properly done.

11 MR. HEINEMAN: Well, that would be fine if Doctor
12 Merlo were here to testify but he is not. It is a hearsay
13 document in the first place and, therefore, there is no basis
14 established for that assumption in the evidence and I object
15 to it.

16 THE COURT: Objection is overruled. I will take it
17 as a continuing objection to the line of questioning.

18 MR. HEINEMAN: Thank you.

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

21 Q. Would you answer that question, please, Doctor?

22 A. Would you repeat the question.

23 COURT REPORTER: "Doctor, if this report is
24 correct, if your student accurately reported the studies in

1 question and if the studies in question were properly
2 performed, the spontaneous abortion would be a clinical
3 effect, would it not, sir?"

4 A. Sir, there are two parts to that question. One,
5 is spontaneous abortion a clinical effect. Yes, sir.
6 Spontaneous abortion is a clinical effect but that is
7 one-half the question. The other half of the question my
8 answer is no.

9 MR. CARR: Your Honor --

10 THE COURT: Doctor, that last part was not
11 responsive to the question. Ladies and gentlemen, I am
12 ordering you to disregard that non responsive part of the
13 witness's answer. Mr. Carr, is this a good point to break
14 for lunch?

15 MR. CARR: Your Honor, I don't think I have an
16 answer from the witness yet to my question because he has --

17 THE COURT: You may restate it.

18 MR. CARR: He divided the question in two parts and
19 I would like to get that answer. Would you answer that
20 question, Doctor?

21 A. My answer is no, sir.

22 Q. Doctor, is spontaneous abortion a clinical effect?

23 A. It is a clinical effect.

24 Q. And, Doctor, can spontaneous abortions be caused by

1 exposure to toxic substances and absorption of the toxic
2 substances?

3 A. I don't know, sir.

4 Q. Well, Doctor, you testified with regard to the
5 Alsea study, the study just preceding this, sir, that
6 spontaneous abortion there could be caused by exposure to
7 toxic substances?

8 A. Not there, sir. I did not say that.

9 Q. Doctor, my question is --

10 A. I did not say that. You said that. I did not.

11 Q. Doctor, can spontaneous abortions be caused by
12 toxic substances?

13 A. My answer to that is no, sir.

14 Q. Spontaneous abortions cannot be caused by drugs?

15 A. Not in this instance, sir.

16 Q. I am not talking about this instance. I am talking
17 about in general, sir, can spontaneous abortions be caused by
18 exposure and absorption of toxic substances?

19 A. Certain types of drugs, sir.

20 Q. All right. Doctor, certain types of toxic
21 substances, drugs being among them?

22 A. Certain types of drugs.

23 Q. Isn't a drug a chemical, sir?

24 A. I want to differentiate between --

1 Q. Excuse me. Isn't a drug a chemical, sir?

2 A. A drug is a chemical, yes, sir.

3 Q. And can it not be a toxic substance if taken?

4 A. A drug can be a toxic substance.

5 Q. It can be very toxic, can't it, sir?

6 A. It might be.

7 Q. Therefore, toxic substances can cause spontaneous

8 abortions, can they not, Doctor?

9 A. Again --

10 Q. Spontaneous abortions --

11 A. You are attempting to confuse --

12 THE COURT: Doctor, that is not responsive to the

13 question that was asked of you. Answer the question, please.

14 A. My answer is no, sir.

15 Q. And, therefore, you cannot cause spontaneous

16 abortions by drugs?

17 A. You can.

18 Q. Yes, Doctor, and drugs are toxic substances, are

19 they not?

20 A. They are, indeed.

21 Q. And, therefore, toxic substances can cause

22 spontaneous abortions?

23 A. Not all.

24 Q. I didn't say all toxic substances. Did I say all?

1 A. Yes. You are confusing the part with the whole,
2 sir, as you have in the past.

3 Q. Doctor, some toxic substances can cause spontaneous
4 abortions and some toxic substances can cause death and some
5 toxic substances can cause paralysis and some toxic
6 substances can cause immune deficiencies and some toxic
7 substances can cause other things, but some toxic substances
8 can cause spontaneous abortions, can they not, sir?

9 A. Some drug toxic substances.

10 Q. And only drugs can cause spontaneous abortions?

11 A. I don't know of any other that can.

12 Q. Is it only drugs there can cause spontaneous
13 abortions?

14 A. I don't know of any others.

15 Q. Doctor, are you saying that only drugs can cause
16 spontaneous abortions?

17 MR. HEINEMAN: Objection. Asked and answered.

18 A. I am not -- in my experience, I don't know of any
19 other.

20 Q. Doctor, you may not know of any others in your
21 experience as a dermatologist --

22 A. Never mind dermatology, sir, I am a physician.

23 THE COURT: Doctor, don't interrupt the question.

24 Q. Doctor, are you saying that no spontaneous

1 abortions can be caused by toxic substances unless it is a
2 drug?

3 A. In my experience and the experience of the medical
4 profession, that has been drugs have been the major source.

5 Q. Well, Doctor, I am not quarreling with the major
6 source and I didn't ask you that. My question to you, sir,
7 is are you saying that spontaneous abortions cannot be caused
8 by toxic substances unless it happens to be a drug? Is that
9 what you are saying?

10 A. I am saying that, sir.

11 Q. All right, Doctor. Then no toxic substance unless
12 it is a drug in your judgment can cause a spontaneous
13 abortion, is that right, sir?

14 A. In humans.

15 Q. Is that right, sir?

16 A. In my recollection, sir, yes, sir.

17 Q. Then, if these spontaneous abortions occurred, it
18 would appear, then, that all of these ladies and all of these
19 mothers to be in Zones A and B took drugs, is that right?

20 A. No, sir.

21 Q. Doctor, did they have spontaneous abortions
22 according to this document?

23 A. Yes, but other substances, other experiences can
24 cause spontaneous abortions like stress, fear, over exercise.

1 Q. Doctor, is there any indication here that these
2 ladies over exercised?

3 A. No, but there is an indication that they were
4 terribly fearful of outcome.

5 Q. They were fearful. They were so fearful, Doctor,
6 that 90 of them went in and had this clinical abortion,
7 didn't they?

8 A. That is right because of the fear.

9 Q. And, Doctor, they would fear that their babies
10 would be deformed or malformed, wouldn't they, sir? That is
11 their fear, wasn't it, sir?

12 A. I do not know, sir.

13 Q. What were they afraid of, Doctor, if they were not
14 afraid that their babies were going to be deformed?

15 A. Because they were erroneously informed of that
16 fact, sir.

17 Q. What were they afraid of if they weren't afraid
18 that their babies weren't going to be deformed?

19 A. I don't know, sir. They were afraid of outcome.

20 Q. They were afraid of what outcome, Doctor?

21 A. They were afraid of health outcome.

22 Q. What health outcome, Doctor?

23 A. They had been told a lot of things.

24 Q. What health outcome were they afraid of, Doctor?

1 A. They were told a lot of --
2 Q. Excuse me. What health outcome were they afraid
3 of?
4 MR. HEINEMAN: Objection. He interrupted the
5 answer.
6 A. They were afraid they would become sick like other
7 people who had been exposed to TCDD.
8 Q. And, Doctor, what were they afraid of as far as
9 their babies were concerned?
10 A. I do not know.
11 Q. You have no idea?
12 A. No, I don't.
13 Q. They were just fearful for their own health so they
14 went in and got these abortions?
15 A. They may have been told, they may have been told.
16 Q. Do you know whether they were told or not, Doctor?
17 A. I do not know.
18 Q. All right, Doctor. Then I am not asking you to
19 speculate. I am asking what you know caused these ladies to
20 go in and have clinical abortions?
21 A. I said they may have been told.
22 Q. Doctor, you don't know of anything, do you, sir?
23 A. Well, as a matter of fact, I do, sir.
24 Q. Then they were fearful, weren't they, sir?

1 A. They were fearful because they had heard.

2 Q. Yes, Doctor. Indeed they had heard.

3 A. Yes.

4 Q. And it made them afraid what they heard, did it
5 not, Doctor?

6 A. I think they may have --

7 Q. And it made them so afraid that 90 of them went in
8 and got abortions, isn't that right, sir?

9 A. It may have been at the --

10 Q. Excuse me, Doctor.

11 A. No. It may have been at the suggestion of a
12 doctor.

13 Q. Then some medical doctor said you better get an
14 abortion because of the possible toxic effect of this TCDD
15 upon your unborn child?

16 A. That is a possibility, sir.

17 Q. And it is indeed a possibility, isn't it, Doctor?

18 A. That is a possibility.

19 Q. Yes.

20 MR. CARR: Your Honor, I have encroached upon the
21 Court's time.

22 THE COURT: We will break until 1:15. The
23 admonishments that I gave you earlier will apply during this
24 lunch break also. Court is in recess.

1 COURT RECESSED:

2 (The following proceedings were had in the hearing
3 and presence of the jury)

4 RAYMOND SUSKIND

5 having resumed the witness stand, being previously sworn,
6 testified further as follows:

7 CROSS EXAMINATION

8 By

9 MR. REX CARR.

10 Q. Doctor, we were discussing Doctor Merlo's chapter
11 in the book. If you could turn to page 243 again. In the
12 paragraph that deals with populations at risk, it points out
13 that there in Zone A there were 735 people. In Zone B there
14 were 4300 people and in Zone R there were 40,000 people,
15 correct, sir?

16 A. Yes, sir.

17 Q. And of those people, 44 children were diagnosed in
18 a period of September to December of '76 as having chloracne,
19 is that correct, sir?

20 A. That is true, sir.

21 Q. And to the date of this article which is 19 -- when
22 was that conference, Doctor? 1983? To the date of this
23 article, do you recall the date, sir?

24 A. I believe it was presented in 1983 but the final

1 manuscript was some time in '84, sir.

2 Q. At least to that date, the number of cases of
3 chloracne amounted to a total of 193, according to this
4 report, is that correct, sir?

5 A. Yes, I believe so.

6 Q. And of those cases of chloracne, the very large
7 majority of those cases were chloracne in children, isn't
8 that correct, Doctor?

9 A. Yes, I believe so.

10 Q. And, Doctor, as far as chloracne in the workers are
11 concerned, no cases of chloracne were observed among the
12 workers at the plant even though they continued to work for a
13 week following the accident, isn't that correct, sir?

14 A. That --

15 Q. According to this document?

16 A. According to this document, sir.

17 Q. Doctor, Doctor Merlo also talks about on the next
18 page about birth defects also, does he not, sir?

19 A. Yes.

20 Q. And he states there "That the data from the birth
21 defects registry established in '78 don't show an association
22 between malformations and exposure to TCDD except in the case
23 of two particular kinds of defects, that is hemangiomas, sir,
24 and benign neoplasms", is that correct, sir, according to

1 this document? Isn't that what it says there, Doctor?

2 A. Yeah, that is what it says.

3 Q. And, Doctor, it goes on to say, does it not, "That
4 this association becomes statistically significant when the
5 data are analyzed considering the distribution of chloracne
6 rates as risk markers for potential TCDD exposure instead of
7 the sample analytical defects on TCDD on the soil." Isn't
8 that correct, sir?

9 A. That is what this report states, sir, yes.

10 Q. And, Doctor, on page 246, Doctor Merlo discusses
11 the fact that of these ICMESA workers, none of whom had
12 chloracne, 5 out of 23 were hospitalized, 5 out of 23 that
13 were hospitalized from '76 to May of '81, a diagnosis of
14 liver disease suspected to be of toxic origin was made, isn't
15 that correct, sir?

16 A. That is what Doctor Merlo's table so indicates,
17 sir.

18 Q. And that is what he states as well, doesn't he,
19 sir?

20 A. He is just quoting from --

21 Q. That is what he states as well?

22 A. He is quoting from some other paper, sir.

23 Q. Doctor, that may be. He may have pulled it out of
24 the sky. He may have dug it up. It may be from another

1 paper. That is what he states in this document, isn't that
2 correct, sir?

3 A. There is no doubt about that, sir.

4 Q. Yes. And, Doctor, on the next page, he discusses
5 the abnormal laboratory values in the ICMESSA workers, none of
6 whom have chloracne, doesn't he, sir?

7 A. Yes.

8 Q. And, Doctor, the study according to Doctor Merlo,
9 "The study that was done indicated that there were four cases
10 of slight neuropathy in the lower limbs, with clinical and
11 electrophysiological alterations, three showed a reduction of
12 the motor and/or sensory nerve conduction velocity, 16
13 presented subclinical signs of neuropathy of the distal
14 muscles of the limbs", correct, sir? Is that what it states
15 here, sir?

16 A. That is what this report states, sir.

17 Q. Now, Doctor, these are laboratory findings in a
18 group of workers who do not have chloracne according to this
19 statement, isn't this correct, sir?

20 A. These are laboratory findings in the ICMESSA workers
21 one year after the clinical examination.

22 Q. Now, would you answer my question, Doctor Suskind.
23 Now that you have said that --

24 A. I assume that he is talking about the same group

1 that doesn't have chloracne.

2 Q. Is that a yes, then, to my --

3 A. I don't know, sir. I really can't answer that
4 question.

5 Q. He states, does he not, sir, that chloracne wasn't
6 found in the workers. Didn't we just read that a little
7 earlier, Doctor Suskind? Page 243. Didn't we read that,
8 sir, quote no cases of chloracne were observed among the
9 ICMESSA workers?

10 A. Yes, that is what it reads, sir, on page 243, sir.

11 Q. And then, Doctor, these are findings that were --
12 if that is true, sir, these were laboratory findings that
13 were, or effects found in a group of workers who did not have
14 chloracne, isn't that correct, sir?

15 A. These were laboratory findings in the --

16 MR. CARR: Your Honor, I believe that question can
17 be answered yes, it is true or no, it is not true. Might I
18 have a direct response to it, please, Doctor?

19 A. These are laboratory findings in the ICMESSA workers
20 one year after -- I am sorry.

21 THE COURT: Doctor, please respond to the question
22 directly.

23 A. I am trying to do that, sir.

24 Q. Would you read the question to him again, please.

1 A. Yes, sir. These are laboratory findings following
2 the accident among the ICMESSA workers.

3 Q. Now, would you answer my question, Doctor?

4 THE COURT: Wait a second. Please read it back to
5 him.

6 COURT REPORTER: "And then, Doctor, these are
7 findings that were -- if that is true, sir, these were
8 laboratory findings that were, or effects found in a group of
9 workers who did not have chloracne, isn't that correct, sir?"

10 A. No, sir.

11 Q. Doctor, does this article report that these workers
12 did not have chloracne?

13 A. That is quite true, sir.

14 Q. And does this article report that these are
15 laboratory effects found in the group of workers, in that
16 group of workers?

17 A. No, these are laboratory findings, sir, not
18 effects. You have to ask effects of what.

19 Q. Doctor --

20 A. And if you are insinuating that they are speaking
21 of the exposure, I would disagree with you, sir.

22 MR. CARR: I did not ask for this outburst from the
23 witness.

24 THE COURT: The jury is ordered to disregard the

1 remarks of the witness. They were not responsive to any
2 question that was asked of him. Doctor, please this
3 afternoon try to confine your remarks to answers to the
4 questions that are asked of you and not anything else.

5 A. Thank you. I cannot --

6 THE COURT: You haven't been asked another
7 question. Just wait.

8 Q. Doctor, these tests that were conducted revealed
9 abnormalities in the nervous system, did they not, sir?

10 MR. HEINEMAN: Objection, Your Honor. May counsel
11 approach the bench?

12 THE COURT: Yes, you may.

13 (Bench conference had out of the hearing of the
14 jury.)

15 MR. HEINEMAN: Your Honor, I object to that
16 question as being misleading. The last sentence in this
17 paragraph specifically says "Interpretation of these findings
18 is not possible because of the lack of control group and
19 because alcohol consumption and/or history of diabetes was
20 not determined."

21 THE COURT: What does this have to do with whether
22 it involves the nervous system or not?

23 MR. HEINEMAN: What it says is is that the article
24 -- He is asking what the article is showing with respect to

1 these neurological results.

2 THE COURT: That is not what he asked.

3 MR. HEINEMAN: Of course it is, sir, and the
4 article itself says that the findings cannot be interpreted,
5 therefore, you can't according to what is in the article say
6 that these are neurological effects because the article says
7 you can't interpret them.

8 THE COURT: That is not what he asked. That is not
9 what he asked. Your objection is totally irrelevant to the
10 question that was asked and it is overruled. You may
11 proceed.

12 (The following proceedings were had in the hearing
13 and presence of the jury).

14 MR. CARR: Would you read the last question to the
15 witness again.

16 COURT REPORTER: "Doctor, these tests that were
17 conducted revealed abnormalities in the nervous system, did
18 they not, sir?"

19 A. I cannot give a yes or no answer without being
20 inaccurate, sir.

21 Q. Doctor, what do you conceive that I am asking you?
22 Do you consider polyneuopathy an abnormality? Polyneuopathy
23 is an abnormality, is it not, sir?

24 A. A polyneuopathy is a clinical symptom or clinical

1 complaint, yes, sir.

2 Q. Is the answer to my question, yes, it is an
3 abnormality?

4 A. No, it is a clinical complaint, sir.

5 Q. Is the answer to my question that it is an
6 abnormality, sir? You throw those yeses in but then you say
7 something else. Is a neuropathy an abnormality, sir?

8 A. I do not know in this instance, sir.

9 Q. I am not talking about in this particular
10 instance. These men may all have abnormal nervous systems.
11 It may be normal for them. They may all be drunks. They may
12 all have liver trouble. They may all have all kinds of
13 problems involved other than TCDD exposure. My question to
14 you is a neuropathy an abnormality?

15 A. It could be, sir.

16 Q. Thank you.

17 A. It could be.

18 Q. And, Doctor, these tests here, the clinical and
19 electrophysiological alterations, that is considering the
20 system is altered, is it not, sir?

21 A. Not necessarily, sir.

22 Q. Well, Doctor, may it, sir?

23 A. No. In this instance, no. There were no controls
24 in this instance, sir.

1 MR. CARR: Your Honor, would you direct the jury to
2 disregard what the witness is saying?

3 THE COURT: The jury is so ordered. Doctor, that
4 answer was not responsive to the question. Please keep your
5 answers to responses to the questions that are asked of you.

6 MR. HEINEMAN: Your Honor, may counsel approach the
7 bench?

8 THE COURT: Yes, you may.

9 (Bench conference had out of the hearing of the
10 jury.)

11 MR. HEINEMAN: Your Honor, that is exactly the
12 objection that I made before with respect to this witness
13 being asked to interpret what these results are or what they
14 mean. It is because of that last sentence in that paragraph
15 that I pointed out to the court that the interpretation of
16 these findings is not possible and I object to the
17 instruction of the Court to this witness, and I object to
18 this continuing questioning along this line because the
19 witness is trying to tell the jury why you can't reach an
20 interpretation of the findings.

21 MR. CARR: When it becomes time for that to get to
22 the jury, if I haven't done it, you have the right to do it.
23 That is what redirect is for. I have the right now to
24 conduct my cross examination in the way that I want to and

1 believe me, I am going to get to that sentence, counsel. But
2 not before I have established whether or not these are
3 considered abnormalities and this witness hasn't the right
4 nor have you the right to require me to change my cross
5 examination in order to accommodate what he wants to say.
6 What he needs to do, counsel, is to respond to my questions.
7 Now, if I distort something, then you have got the great
8 opportunity to show them on redirect examination. I have the
9 right to have this witness respond to my questions.

10 MR. HEINEMAN: But he has no right to distort. He
11 has no right to mislead. He has no right to do the things
12 which he now has just admitted that he is doing.

13 THE COURT: He wasn't admitting he is doing
14 anything. Number two, the question that was asked talked
15 about resupporting of alterations. It was explained as
16 reporting in the third line of that paragraph. You keep
17 insisting that he has to refer to the last line, to the last
18 sentence of the paragraph and again, your objection is
19 irrelevant and it is just as irrelevant, perhaps more so than
20 the non responsive answer that the witness just made. Your
21 objection is overruled.

22 MR. HEINEMAN: May my objection be continuing to
23 this line of questioning?

24 THE COURT: Sure.

1 MR. HEINEMAN: Thank you.

2 (The following proceedings were had in the hearing
3 and presence of the jury).

4 Q. Doctor, this report discusses, does it not,
5 polyneuropathy found in the lower limbs with clinical and
6 electrophysiologic alterations. Doesn't it say that, Doctor?

7 A. It discusses it, sir, yes.

8 Q. And, Doctor, these are laboratory effects. Now,
9 Doctor, it may be laboratory effects as I have suggested to
10 you of diabetes, of alcohol consumption, of falling down, of
11 accidents, of all kinds of things. It may be something that
12 if you had a control group, it would show that everybody on
13 earth had these kind of abnormalities, sir. My question is,
14 sir, this is a report, is it not, sir, of these
15 polyneuropathies which are abnormal?

16 A. No.

17 Q. Doctor, doesn't it say is polyneuropathy a normal
18 condition that we as a healthy person has, Doctor?

19 A. It says slight, sir.

20 Q. Excuse me, is polyneuropathy a normal condition for
21 human beings to have?

22 A. It depends upon the other physical conditions of
23 the individual, sir.

24 Q. Doctor, polyneuropathy -- a neuropathy means pain of

1 the nerves, disease of the nerves, doesn't it, sir?

2 A. It doesn't mean pain in the nerves.

3 Q. It means disease of the nerve, doesn't it, sir?

4 A. Not necessarily.

5 Q. Doctor, the word pathology means disease, doesn't

6 it, sir?

7 A. It means some abnormal state, sir.

8 Q. An abnormal state of the nerves and that is exactly

9 what I asked you, Doctor?

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

11 Q. Doctor, they report an abnormal state of the nerve,

12 do they not, sir?

13 A. They report a slight abnormal state.

14 Q. I don't care whether it is slight or great or in

15 between or small or gigantic or very little. They report, do

16 they not, sir, an abnormal condition of the nerve?

17 A. I have answered the question, sir.

18 Q. Doctor, didn't you say that neuropathy is an

19 abnormal --

20 A. I said I have answered the question, sir. Yes.

21 Q. Sir?

22 A. Yes.

23 Q. The answer is yes?

24 A. Yes, but it is slight, sir.

1 Q. As I have indicated. Well, it doesn't do any good
2 so I suppose -- Doctor Suskind, they also report, do they
3 not, sir, that three subjects had a laboratory finding, that
4 is a reduction of the motor and/or sensory nerve conduction
5 velocity. That is a laboratory finding, is it not, sir?

6 A. That is what this report states.

7 Q. And, Doctor, findings are indications of effects.
8 Now, it can be an effect caused by any number of things,
9 Doctor, can it not, sir?

10 A. Absolutely.

11 Q. But it is a clinical effect, is it not, sir?

12 A. It is a clinical finding of clinical effect.

13 Q. Yes.

14 A. In this instance it would be a laboratory or
15 diagnostic effect.

16 Q. Yes. It is a clinical effect, isn't it, sir?

17 A. A clinical laboratory effect, sir.

18 Q. A clinical laboratory effect just as you pointed
19 out in your table -- or we went through your table, sir, you
20 had other laboratory findings, did you not, sir? I see
21 somebody has moved that one exhibit, Your Honor, the other
22 table. Doctor, there are other laboratory findings shown in
23 your various tables, are there not, sir? The myelin
24 degeneration was a laboratory finding or laboratory effect,

1 wasn't it, sir?

2 A. It was.

3 Q. Now, Doctor, the report also says another 16 showed
4 some clinical signs of neuropathy as well, isn't that
5 correct, sir?

6 A. I don't know what that means, sir.

7 Q. Doctor, I am not asking you to tell us. I am not
8 asking you to tell us what it means, sir. I am asking you to
9 acknowledge that this is what it says, sir?

10 A. It says so in this report, sir.

11 Q. Thank you, Doctor. Now, Doctor, Doctor Merlo also
12 says, does he not, sir, insofar as these findings are
13 concerned, that he cannot interpret the findings or that
14 nobody, for that matter, he doesn't say he cannot, he says
15 interpretation cannot take place, doesn't he, sir?

16 A. He says that.

17 Q. He says that because there is not a control group,
18 because alcohol consumption and history of diabetes is not
19 determined, isn't that correct, sir?

20 A. That is correct, sir.

21 Q. Doctor, they also on page 251, sir, if you would
22 turn to that, sir, that is a page headed Mortality Study and
23 Cancer Registry, is it not, sir?

24 A. That is what the title reads, sir.

1 Q. And, Doctor, they discuss the registry, the
2 availability of the data and then says, does it not, sir,
3 "With regard to those long-term health effects correlated
4 with TCDD exposure based on observation in animals and in
5 humans, it is obvious that no conclusion can be reached five
6 years after the ICMSA incidents due to this long latency
7 period. It says that, does it not, sir?

8 A. That is what it says.

9 Q. But it goes on to say, however, "An increasing
10 trend has been detected in 1979, 1980," does it not, sir, and
11 I will finish the sentence in a moment, Doctor.

12 A. Yes, that is what it says.

13 Q. It says that, does it not, sir?

14 A. Yes.

15 Q. And it says, "In the age adjusted mortality rates
16 for cancer of the larynx, the trachea, the bronchus and the
17 lung," does it not, sir?

18 A. That is what it states, sir.

19 Q. And, Doctor, insofar as this trend for cancer of
20 the larynx, the trachea, the bronchus and the lungs, the
21 author also says "That a statistically significant difference
22 was also observed in the time trend for 11 municipalities and
23 mortality rates for hypertension as well," does he not?

24 A. That is what this report says, sir.

1 Q. And, Doctor, it goes on to say that "More suggested
2 data comes from the Seveso Cancer Registry established in
3 January of 1981," does it not, sir?

4 A. Correct.

5 Q. And it says there that "A statistically significant
6 excess has been found in the incidence of soft tissue
7 sarcomas in the population living in Zone R," does it not,
8 sir?

9 A. That is what this says.

10 Q. It states that "Eight histologically confirmed
11 cases have been observed from 1977 to '80 with the expected
12 number being 3.23," isn't that correct, sir?

13 A. That is what this says, yes.

14 Q. Yes, Doctor. Now, Doctor, in regard to the cancer,
15 certainly cancer is a clinical effect, isn't it, sir?

16 A. A long-term clinical effect, sir.

17 Q. All right. Now, Doctor, is it or is it not a
18 clinical effect?

19 A. It is a health effect, yes.

20 Q. Doctor, the study of soft tissue sarcomas have been
21 taking place in many places other than just Seveso, have they
22 not, sir?

23 A. That is quite true, sir.

24 Q. And, Doctor, with regard to the works of Hardell,

1 Eriksson and his group, you, of course, are familiar with
2 those studies, are you not, sir?

3 A. I am, sir.

4 Q. And, Doctor, those studies, these are Defendant's
5 Exhibits 70, 71 and 72, report an approximately six times
6 increase in the risk of soft tissue sarcomas in workers
7 exposed to these phenoxy acetic acids, do they not, sir?

8 A. No, not really, sir.

9 Q. Doctor, I don't have the Monsanto exhibits here,
10 Doctor, but just to show you briefly, sir, the abstract in
11 Exhibit 71 written by Hardell, it says it shows an
12 approximately six fold increase, does it not, sir?

13 A. That is what Hardell attempts to show, sir.

14 Q. Yes, Doctor, that is what I am asking you is about
15 Hardell's reports. Hardell reports a six time increase in
16 the soft tissue sarcoma for those workers exposed to these
17 chlorophenols, does he not, sir?

18 A. That is what Hardell has alleged, sir.

19 Q. Doctor, Hardell has reported it, has he not, sir?

20 A. Yes.

21 Q. And, Doctor, in addition to Hardell, there have
22 been studies conducted in New Zealand as well. Would you
23 give him Plaintiffs' Exhibit 1523. Now, Doctor, 1523 is a
24 report talking about or headed Malignant Lymphoma and

1 Multiple Myeloma Linked With Agricultural Occupations in a
2 New Zealand Cancer Registry-Based Study, isn't that correct,
3 sir?

4 A. That is what it is, sir, yes.

5 Q. And this was published by Johns Hopkins in the
6 American Journal of Epidemiology in 1985, was it not, sir?

7 A. Yes, I believe so, sir.

8 Q. And, Doctor, if you turn to page 231 in which the
9 findings are discussed, the very first sentence says, does it
10 not, sir, "The New Zealand findings add to the growing body
11 of evidence that agricultural workers are at increased risk
12 of developing non Hogkin's lymphoma and multiple myeloma,"
13 does it not, sir?

14 A. That is what one sentence of the abstract reads,
15 sir.

16 Q. And it goes on to say, Doctor, "That the true risk
17 to agricultural workers is likely of anything to be larger
18 than the data suggests," does it not, sir? The sentence
19 beginning at the bottom of that column, sir, that we were
20 just looking at.

21 A. I am sorry. I don't see that particular sentence,
22 sir. Is it in the abstract?

23 Q. No, Doctor. I have directed your attention to page
24 231.

1 A. Oh, I am sorry. I thought you were still reading
2 from the abstract.

3 Q. I haven't read from the abstract at all. I read
4 from page 231 in the discussion section. The first sentence
5 says, does it not, sir, "The New Zealand findings add to the
6 growing body of evidence that agricultural workers are at
7 increased risk of developing non Hogkin's lymphoma and
8 multiple myeloma"?

9 A. That is what this particular paper reads, sir.

10 Q. Yes, Doctor. And it goes on to say that while the
11 observed odds ratio were not large, that the information
12 tends to bias the observed access risk toward the null value
13 and, therefore, or hence the true risk to agricultural
14 workers is likely, if anything, to be larger than the data
15 suggests." It says that also, does it not, sir?

16 A. That is what this particular report reads, sir.

17 Q. And, Doctor, on page 232, this particular report
18 also reads that the New Zealand pattern was particularly
19 clear for multiple myeloma for which the odds ratio was 2.22
20 for agricultural workers age 20 to 64 years and for which
21 mortality increased significantly during the period 1955 to
22 1979," does it not, sir?

23 A. That is what this report reads, sir.

24 Q. And, Doctor, on that same page, it then refers to

1 the Swedish studies that we have just mentioned by Hardell
2 and others, does it not, sir? The same page at the bottom of
3 the column where it starts a series of Swedish studies. Do
4 you see that, sir, on page 232, Doctor Suskind?

5 A. No.

6 Q. Page 232, the last sentence beginning on that page?

7 A. If I said yes, sir or no, sir, it would be
8 inaccurate because this statement is inaccurate.

9 MR. CARR: Your Honor, would you direct the jury to
10 disregard what the witness has stated?

11 THE COURT: The jury is so ordered. It was not
12 responsive to the question that was asked. The jury is
13 ordered to disregard it. Doctor, please keep your remarks
14 responsive to the questions that are asked of you. You may
15 proceed, Mr. Carr.

16 Q. Doctor, this investigation that we are discussing
17 here was written by members of the Clinical School of
18 Medicine at the Wellington Hospital by the Department of
19 Biomedical and Environmental Health Sciences and North
20 California Occupational Health Center and supported by the
21 Medical Research Council in New Zealand, was it not, sir, and
22 the New Zealand War Pensions Medical Research Trust?

23 A. No, sir. Those are only the associations of the
24 authors.

1 Q. Doctor --

2 A. And not supported by the University of California,
3 for example. No association with it.

4 Q. Doctor, I didn't ask you whether or not it was
5 supported by the University of California. It was supported
6 by grants from the Medical Research Council of New Zealand
7 and the New Zealand War Pensions Medical Research Trust, was
8 it not, sir?

9 A. That is what this reads, sir.

10 Q. And the authors of this document, Doctor, are from
11 the Department of Community Health of the Clinical School of
12 Medicine at Wellington, New Zealand, and from the Department
13 of Biomedical Health and Environmental Health Services, from
14 the School of Public Health, University of California at
15 Berkley, isn't that correct, also, sir?

16 A. Not exactly, sir, but it is almost correct.

17 Q. Doctor, what I read to you is correct, is it not,
18 sir? He has other qualifications as well but he is from the
19 Department of Biomedical and Environmental Health Sciences
20 which is part of the School of Public Health, the University
21 of California, isn't that correct?

22 A. That is correct now, sir, yes.

23 Q. And, Doctor, these gentlemen have reported in this
24 document that was published in the American Journal of

1 Epidemiology that a series of Swedish studies found relative
2 risks of approximately five times for soft tissue sarcoma and
3 malignant lymphoma from exposure to chlorophenols and phenoxy
4 herbicides. On page 232 and 234, sir.

5 A. I would have to say no, sir.

6 Q. Doctor, did I misread the statement, sir, or did I
7 read it exactly as it is stated in this document?

8 A. It is stated in this document.

9 Q. Doctor, did I misread the statement or did I read
10 it exactly as this sentence appears in that document?

11 A. You read it but it is an inaccurate statement, sir.

12 MR. CARR: Your Honor, the witness has been
13 instructed once on that very same statement and the jury has
14 been told to disregard that very same statement and the
15 witness insists in it.

16 THE COURT: Doctor, that is the second time that I
17 have told you that that is a non responsive answer and not to
18 do it and ask the jury to disregard it. I am ordering you
19 not to make that statement again when the question does not
20 call for your opinion as to its accuracy. It calls for
21 whether the statement in fact exists. The jury is ordered to
22 disregard that statement again. It was not responsive to the
23 question. It was improperly made. Mr. Carr, you may
24 proceed.

1 Q. Doctor, the statement is made by these authors in
2 this document, is it not, sir, and I read it to you?

3 A. Yes, but you asked me another question, sir.

4 THE COURT: Doctor, you don't have the right to go
5 over, rehash and disagree with any ruling I have made on a
6 question that has been asked of you. That is not your
7 province.

8 A. Sorry.

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

10 Q. And, Doctor, this is a 1985 report, is it not,
11 sir?

12 A. It was published in 1985.

13 MR. CARR: Would you hand the witness Plaintiffs'
14 1456. Doctor, by the way, before we get to that, Doctor,
15 there is no chloracne mentioned in the Pearce, Smith and
16 Fisher article associated with these cases of lymphoma or
17 myeloma, is there, sir?

18 A. I really can't answer that question with a yes or
19 no because if I did, it would be inaccurate.

20 Q. Doctor, my question to you, is there chloracne
21 mentioned in this report, sir? Do you understand that is
22 what I am asking you whether or not chloracne is mentioned in
23 this document?

24 A. Yes, sir.

1 Q. Now, would you look at that document, sir, and tell
2 me whether or not chloracne is mentioned in it as being
3 associated with these findings of excess malignant lymphoma
4 and multiple myeloma?

5 A. No other thing is either.

6 Q. I can't hear your answer, Doctor.

7 A. I said no other clinical problem is either. They
8 were just looking at multiple myeloma.

9 Q. I am not asking that question, am I, Doctor? My
10 question, is chloracne mentioned as being associated in these
11 workers in whom was found these cases of cancer?

12 A. As I said, I cannot answer it accurately because if
13 I answered yes, it would be inaccurate and if I answered no
14 it would be inaccurate.

15 Q. Doctor, if you answer yes, you would then have to
16 point out to me where chloracne is mentioned in
17 association --

18 A. Well, I wouldn't answer it yes, sir, and I wouldn't
19 answer it no, sir.

20 Q. Doctor, do you understand what I am asking you?

21 A. I am indeed.

22 Q. Do you think that I am asking you whether or not
23 chloracne existed in fact with these workers that had the
24 cancer or do you think that I am asking you whether or not

1 chloracne was reported in this document as being associated
2 with these cases of cancer?

3 A. You are asking me that question and I will try to
4 answer that.

5 Q. Which question do you think I am asking you,
6 Doctor?

7 A. I think what you are asking me is there any
8 association between chloracne and what they have found. You
9 are --

10 Q. Doctor, that is not what I am asking you.

11 A. Well, then, explain what you are asking me.

12 Q. Listen to my question carefully. In this document,
13 Plaintiffs' Exhibit 1523, is there any statement or mention
14 or report that these workers that had this cancer also had
15 chloracne?

16 A. I don't know, sir.

17 Q. Well, read it, sir, and find out.

18 A. My answer to that is, if I answered yes it would be
19 wrong and if I answered no it would be wrong.

20 MR. CARR: Your Honor, would you instruct the
21 witness --

22 THE COURT: Doctor, I am ordering you to answer the
23 question yes or no. I think it is capable of being answered
24 yes or no. Your answer is not responsive. Skim the document

1 and answer whether it is mentioned or not.

2 MR. HEINEMAN: May counsel approach the bench?

3 THE COURT: Yes, you may.

4 (Bench conference had out of the hearing of the
5 jury.)

6 MR. HEINEMAN: Your Honor, the law of this state is
7 that the witness has a right to answer yes, he has a right to
8 answer no and he has a right to answer that he can't answer
9 either yes or no.

10 THE COURT: He has the right to respond to the
11 question. His response was not responsive to the
12 question. It is a very simple declarative question asking
13 whether something is listed in a document that he has, that
14 he is capable of examining, that he refuses to answer. It is
15 a non responsive answer to it. He is as capable of reading
16 that document, more capable of reading that document and
17 saying whether that exists than either of you gentlemen or me
18 and he is not giving a responsive, truthful answer to the
19 question that was asked of him. It is not asking for his
20 opinion. He is asked whether something in fact exists.

21 MR. HEINEMAN: Your Honor, I think that the record
22 is clear that his answer is responsive. I think the record
23 is clear that the law of this state permits him to answer in
24 the way he has done and I think it is an abuse of discretion

1 by this court to order him to answer yes or no when he says
2 that such an answer would be inaccurate and my objection
3 stands.

4 THE COURT: It is not his discretion to evade the
5 proper question asked of him and give a non responsive
6 answer, to give improper answers, and I have no intention of
7 abusing my discretion. Let's proceed.

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

10 Q. Now, Doctor, is chloracne mentioned in this
11 article, Plaintiffs' Exhibit 1523, as being associated with
12 these cases of cancer?

13 A. The word chloracne does not appear in this
14 document, sir.

15 Q. And is it, therefore, sir, that the answer is
16 chloracne is not mentioned as being associated with these
17 cases of chloracne. The cases of cancer are not associated
18 with chloracne. It is not stated in this document, is it,
19 sir?

20 A. Mr. Carr, I honestly can't answer the way -- Why
21 don't you reword it, please?

22 Q. Doctor, you understand exactly what I am asking
23 you, don't you, sir?

24 A. I can answer it --

1 Q. Doctor, you understand exactly what I am asking
2 you?

3 A. I do now.

4 Q. Let me ask it again, Doctor. This article makes no
5 association between chloracne and these cases of cancer, does
6 it, sir?

7 A. I can't answer that question in that way. I can
8 only answer it --

9 Q. Doctor, do you understand that I referred to this
10 article?

11 A. I do, absolutely, and all I can say is that
12 chloracne -- Let me finish. Chloracne is not mentioned.

13 THE COURT: Doctor, I am ordering you not to
14 finish. Your answer is not responsive and when I interrupt
15 you, I expect you to stop. Mr. Carr, you may rephrase your
16 question.

17 Q. Doctor, this article makes no mention, does it,
18 sir? Now, this article, Doctor, you understand I am talking
19 about this article that you have in your hands, Plaintiffs'
20 Exhibit 1523, sir?

21 A. What other article is there? It is this article,
22 sure.

23 Q. Doctor, this article makes no statement that
24 chloracne in any way was found in these workers or in these

1 persons that had this cancer, is it, sir?

2 A. It makes no statement about chloracne, sir. That
3 is what --

4 Q. And is it, therefore, true, Doctor, that this
5 article does not associate chloracne and cancer?

6 A. I don't know because they don't mention chloracne.

7 Q. Doctor, read the article. Does the article make an
8 association between cancer and chloracne?

9 A. I can't say.

10 Q. Read it and then tell me, Doctor, whether or not
11 the article makes --

12 A. It doesn't mention chloracne so how can I answer
13 it?

14 Q. Doctor, that is --

15 A. What do you want me to do?

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

18 THE COURT: Doctor, this is a repeat of the
19 question that I ruled earlier. You can answer. Take a
20 minute, skim the article again and answer the question
21 directly.

22 MR. HEINEMAN: Your Honor, may counsel approach the
23 bench?

24 THE COURT: Yes, you may.

1 (Bench conference had out of the hearing of the
2 jury.)

3 MR. HEINEMAN: Now, Your Honor, you are doing
4 exactly what I objected to before. You are trying to force
5 an answer out of this witness when it is clear from the
6 article that he cannot reach the conclusion that is trying to
7 be forced from him. What he is saying is the word chloracne
8 doesn't appear and, therefore, one can make no conclusion
9 either way as to whether the article makes an association or
10 doesn't make an association because they don't discuss it and
11 that is his point and Mr. Carr is trying to extract from this
12 witness an answer that he cannot give because the document
13 doesn't say so.

14 MR. CARR: Counsel, for you to mouth that argument
15 is ludicrous. My question is simple. If he agrees that
16 chloracne is not mentioned in the article, then he obviously
17 logically must agree that the article makes no association
18 between the chloracne and cancer. One follows the other as
19 sure as night follows day.

20 MR. HEINEMAN: What you are trying to establish,
21 Mr. Carr --

22 MR. CARR: Is this article.

23 MR. HEINEMAN: Is something --

24 MR. CARR: Is this article doesn't say that

1 chloracne and cancer doesn't associate.

2 MR. HEINEMAN: And it also doesn't say they aren't.

3 MR. CARR: I didn't say that, did I, sir? You can
4 bring that out if you like.

5 MR. HEINEMAN: That is the whole point.

6 THE COURT: Well, your objection is an illogical
7 absurdity. It cannot happen that way. I didn't think that
8 it was possible but I think this witness has actually gotten
9 worse. I am ordering you to file with this court tomorrow an
10 affidavit. I am ordering you tonight to explain again to
11 this witness my rules on answering questions and court
12 decorum as we have gone over before and it is my doing before
13 and I am ordering you to file an affidavit tomorrow by noon
14 explaining in detail what you said to him as far as those
15 rules are concerned. I am not going to ask for any more of
16 that, as I hate to go any further. I want an affidavit from
17 you saying what you have told him as far as these rules are
18 concerned because it just, he doesn't understand anything,
19 which I doubt, or he is evading what has been explained to
20 him by you as an officer of the court and I want a record of
21 what has been explained to him this time.

22 MR. HEINEMAN: I understand on the record, Your
23 Honor, you are saying that you don't believe that I have
24 talked to him?

1 THE COURT: No. I do believe that you have. I
2 have stated that on the record. I want a record of what has
3 been said to him so there is a record of what he is on notice
4 of. I do believe that you have explained it to him as you
5 have stated that you have and I want a record of what he is
6 on notice of again.

7 MR. HEINEMAN: Well, Your Honor, I will obviously
8 follow this Court's order but I object to this court invading
9 the communication between me and this witness. I object to
10 it and I want the record to show that I object to it.

11 THE COURT: The record so shows. I want this
12 witness on notice. I want a record that this witness is on
13 notice as to the behavior of this court and that is the way
14 to do it as far as that is concerned. The communication has
15 been multiple communications, obviously. You have explained
16 to the court that you explained it to him before and this
17 time I want a record of it in this form.

18 MR. HEINEMAN: Can I suggest to the court -- never
19 mind. I will follow the Court's instruction.

20 THE COURT: Okay.

21 (The following proceedings were had in the hearing
22 and presence of the jury).

23 Q. Doctor, if this article makes no mention of
24 chloracne, it follows, does it not, sir, that this article,

1 then, makes no mention that chloracne in these cases of
2 cancer are associated?

3 A. I really don't know, sir.

4 Q. You don't know that that follows, Doctor? If it
5 doesn't mention chloracne, how on earth can a statement then
6 be contained in this article that chloracne and cancer are
7 associated, if it doesn't use the word chloracne, Doctor?
8 How can this article make an association between chloracne
9 and cancer if it doesn't use the word chloracne?

10 A. No, but it doesn't make that association, sir.

11 Q. That is exactly what I have asked you, Doctor.

12 A. No.

13 Q. It does not make an association?

14 A. Because it never mentioned chloracne.

15 Q. That is exactly right, isn't that correct, sir?

16 A. It is correct that they don't mention chloracne,
17 yes, sir.

18 Q. And the article makes no association between
19 chloracne and cancer, isn't that also correct?

20 A. I wouldn't expect it to, sir.

21 Q. Doctor, I didn't ask you whether or not you
22 expected it to. My question is, the article makes no
23 association between chloracne and these cases of cancer, does
24 it?

1 A. It doesn't describe it. It doesn't describe a non
2 association.

3 Q. And is it, therefore, affirmative, Doctor, that the
4 article does not make an association between chloracne and
5 cancer?

6 A. No, I wouldn't say that.

7 Q. That is not correct?

8 A. No, I wouldn't say that.

9 Q. Doctor, if you wouldn't say that, then, point out
10 to me in the article where it makes an association between
11 chloracne and cancer?

12 A. Mr. Carr, that is why I am saying --

13 Q. Doctor, my question is for you to point out to me
14 where in this article it makes an association between
15 chloracne and cancer?

16 A. It doesn't.

17 Q. Thank you, Doctor. That is exactly what I asked
18 you. Now, Doctor, would you hand Exhibit 1456 to the
19 witness, please. Oh, Doctor, the Swedish study by Hardell
20 and others, these articles also make no association between
21 chloracne and cancer, isn't that correct, sir?

22 A. It makes no mention either, sir.

23 Q. Is it also correct, sir, that those articles do not
24 make an association between chloracne and cancer?

1 A. They don't state that, sir.

2 Q. Is it affirmative to my question, Doctor, that
3 these articles do not make an association between chloracne
4 and cancer?

5 A. They make no mention of an association, sir.

6 Q. And does it therefore follow, sir, that the article
7 does not make any association between chloracne and cancer?

8 A. No, sir, that is different logic.

9 Q. And would you find out for me in those articles
10 where it does make an association between cancer and
11 chloracne?

12 A. It does not mention anything about positive
13 association or negative association.

14 Q. Thank you, Doctor. And it, therefore, makes no
15 statement about association between cancer and chloracne?

16 A. It makes no mention. It makes no mention.

17 Q. Doctor, my question is, it makes no statement of an
18 association. The Swedish studies makes no mention of an
19 association between chloracne and cancer, isn't that correct,
20 sir?

21 A. I think we are going around the same circle.

22 Q. We are indeed, Doctor, and I want from you that the
23 affirmation that the Swedish studies makes no association
24 between chloracne and cancer?

1 A. I have a difficult time following your logic.
2 Q. You don't have to follow my logic.
3 A. Yes, I do.
4 THE COURT: Just answer the question, please.
5 A. In order to answer a question, I have to be able to
6 follow your logic, sir. Isn't it so?
7 MR. CARR: Your Honor, would you direct the witness
8 again to answer my question?
9 THE COURT: Doctor, just answer the question,
10 please.
11 A. The Swedish group makes no mention of chloracne.
12 Is that what you are asking me to say? And, therefore, they
13 make no mention of an association between chloracne and
14 whatever else they found about soft tissue sarcomas.
15 Q. Thank you, Doctor. Now, on Plaintiffs' Exhibit
16 1456. Do you have that in front of you, Doctor?
17 A. I am familiar with this.
18 Q. Do you have it in front of you, Doctor?
19 A. I do indeed.
20 Q. And, Doctor, this is a letter written to Lancet by
21 Doctor Moses and Doctor Selikoff, is it not, sir?
22 A. It is.
23 Q. And it discusses the cases of the soft tissue
24 sarcomas, does it not, sir?

1 A. Yes, I believe it does.

2 Q. And, Doctor, it discusses a case of a worker for
3 the Monsanto Chemical Company working in a time when
4 trichlorophenol and 2,4,5-T were being manufactured and TCDD
5 is known to have been present as a contaminant, correct, sir?

6 A. That is what this letter reads, sir.

7 Q. And it reports that he died at the age of 58 in
8 1980 of a malignant schwannoma which is a soft tissue
9 sarcoma, isn't that correct, sir?

10 A. I believe it could be regarded as such if this is
11 an accurate pathology report, sir.

12 Q. Now, Doctor, that is true of any pathology report.
13 If they are accurate, they are accurate. Doctor, this soft
14 tissue sarcoma caused the death of a person at age 58 who had
15 been, who had worked for the company for 32 years, correct,
16 sir?

17 A. Correct.

18 Q. And he did not work in the production of
19 trichlorophenol or 2,4,5-T but he had potential exposure as a
20 result of his work as a truck driver, hauler and maintenance
21 worker, correct, sir?

22 A. According to Moses and Selikoff, sir, but not
23 according to the company.

24 MR. CARR: Your Honor, would you direct the witness

1 to answer my questions and not volunteer other statements?

2 THE COURT: Doctor, the last part of what you said
3 was not responsive to the question. You were not asked
4 that. Since it was not responsive, the jury is ordered to
5 disregard it. Mr. Carr, you may proceed.

6 Q. Doctor, Moses and Selikoff also report that this
7 worker never had chloracne, does it not, sir?

8 A. According to this report, sir.

9 Q. And, Doctor, the authors go on to say that this
10 rare tumor found in a non smoker without a history of
11 chloracne with potential exposure to TCDD raises the question
12 of increased risk in workers indirectly exposed in production
13 areas, does it not say that, sir?

14 A. Only according to this report, sir.

15 Q. Doctor, my question is, does it not say that, sir?

16 A. Of course it says that.

17 Q. And, Doctor, it goes on to say, does it not, sir,
18 that this would be a particular concern in maintenance
19 workers and in epidemiological studies, it is important to
20 include in the study population not only workers known to
21 have had chloracne or to have actually worked in production
22 but also those with other potential exposure. Doesn't it say
23 that also?

24 A. I would agree with this 100 percent, Doctor.

1 Q. I am not asking you to agree with it or disagree
2 with it. I am asking you whether or not it says that?

3 A. That is what it says, sir. Absolutely.

4 THE COURT: Are you starting on another area?
5 Could you approach the bench for just a minute.

6 (Bench conference had out of the hearing of the
7 jury.)

8 THE COURT: I am going to take a short break at
9 this time. I want you to talk to him at this break and
10 extensively tonight about these rules. And then about the
11 affidavit, forget about the affidavit, and report to me on
12 the record as you have before that you have explained to him
13 and what you have explained because it is basically what I
14 said in the record before. I would rather you take the time
15 instead of preparing a long affidavit. It might be more
16 productive, so forget about the affidavit but explain to him
17 again these rules because he has not been following them and
18 I think the affidavit is just redundant and we will just
19 waste time on that.

20 MR. HEINEMAN: Very well.

21 (The following proceedings were had in the hearing
22 and presence of the jury).

23 THE COURT: Ladies and gentlemen, we will take a
24 short break at this time and then we will resume testimony.

1 The admonishments that I gave you earlier will apply during
2 this break also. Court is in recess.

3 COURT RECESSED:

4 (The following proceedings were had in the hearing
5 and presence of the jury)

6 RAYMOND SUSKIND

7 having resumed the witness stand, being previously sworn,
8 testified further as follows:

9 CROSS EXAMINATION

10 By

11 MR. REX CARR.

12 MR. CARR: Would you give the witness Plaintiffs'
13 Exhibit 1453. Doctor Suskind, Plaintiffs' Exhibit 1453 is
14 another letter to the Lancet, this time in 1981, and it is
15 written by Honchar and Halperin, is it not, sir?

16 A. Yes, sir.

17 Q. And it reports on soft tissue sarcoma associated
18 with the production of TCP and 2,4,5-T that are both known to
19 be contaminated with toxic dioxin isomer 2,3,7,8 which they
20 say had been found to be carcinogenic to laboratory animals,
21 does it not, sir?

22 A. Yes, sir.

23 Q. And, Doctor, they describe three cases of soft
24 tissue sarcoma that came, two from Monsanto and one from Dow

1 Chemical Company. Do you see that, sir?

2 A. Yes, according to this statement, sir.

3 Q. And according to this statement, you and Doctor

4 Zack are said to have described a male who did have chloracne

5 following the accident but died of a fibrous histiosarcoma of

6 soft tissue origin. Doctors Honchar and Halperin say that he

7 quoted it as ICD 173.9 but that when they presented this

8 diagnosis to their nosologist, they find the ICD 171 was the

9 classification of choice, did they not, sir?

10 A. Yes.

11 Q. The code of choice?

12 A. Yes.

13 Q. And 171 is the classification for soft tissue

14 sarcoma, is it not, sir?

15 A. Yes, sir.

16 Q. Do you agree that your paper, your paper and Doctor

17 Zack's paper misclassified this sarcoma?

18 A. No, not really. It would be essentially an

19 equivalent classification, sir.

20 Q. In your judgment?

21 A. Yes. It is an equivalent classification.

22 Q. And, Doctor, they reported a male who was working

23 at Dow that had no diagnosis of chloracne, correct, sir? He

24 died of fibrosarcoma at the age of 53?

1 A. According to this report, sir.

2 Q. And another report of Doctor Zack from Monsanto was
3 a worker that died in '72 at the age of 49 of generalized
4 fibrosarcoma and again no history of chloracne was reported,
5 is that correct, sir?

6 A. That is what this report reads, sir.

7 Q. So, of the three soft tissue sarcomas reported in
8 this document, two were in people that had been working,
9 exposed to the 2,4,5-T or TCP that did not have chloracne and
10 one worker that did have chloracne, is that correct, sir,
11 according to this document?

12 A. No, sir.

13 Q. Doctor, is it correct according to this document
14 one worker had -- was described as having chloracne, that is
15 in the Zack-Suskind study?

16 A. Yes.

17 Q. And is it also correct, does it say as to worker
18 number two, he had facial dermatitis but no diagnosis of
19 chloracne was made?

20 A. No diagnosis but he did have facial dermatitis.

21 Q. Doctor, I recognize that. Facial dermatitis is
22 something different from chloracne, is it not, sir?

23 A. It doesn't have to be, sir.

24 Q. But it is something different than -- dermatitis is

1 not chloracne, is it, sir?

2 A. Well, chloracne is one of the dermatoses and it is
3 often confused.

4 Q. Dermatitis is not chloracne, is it, sir?

5 A. It has been diagnostically confused. In going over
6 records --

7 Q. It may be diagnostically confusing but my question
8 to you is, sir, dermatitis not chloracne, is it, sir?

9 MR. HEINEMAN: Objection. Interrupted the answer.

10 THE COURT: Objection is overruled. Not
11 responsive?

12 A. Dermatitis could be in some diagnostic cases
13 chloracne, sir, and I have seen it.

14 Q. And, Doctor, dermatitis is described something as
15 an inflammation of the skin, is it not, sir?

16 A. That is the correct interpretation.

17 Q. And, Doctor, chloracne is something well, well
18 beyond an inflammation of the skin, is it not, sir?

19 A. It is inflammation of the skin and something else,
20 sir.

21 Q. Well beyond inflammation of the skin, isn't it,
22 sir?

23 A. No, sir.

24 Q. Well, Doctor, you are saying that chloracne is not

1 way beyond dermatitis?

2 A. I don't know what you mean by way beyond, sir.

3 Q. You know exactly what I mean.

4 A. No, I do not, sir.

5 Q. Doctor, you showed the pictures to the jury here of
6 chloracne in your direct examination?

7 A. But I don't know what you mean.

8 Q. That is certainly something that you would not call
9 dermatitis, is it, sir?

10 A. I wouldn't, sir, that is correct, but others might.

11 Q. And, Doctor, others might but we are talking here
12 about dermatitis is not chloracne, is it, sir?

13 A. I can't say in this instance that it is not.

14 Q. Doctor, you can say as a dermatologist that you
15 know that dermatitis is not chloracne and you know that to be
16 the case, don't you, sir?

17 A. As a dermatologist, I do, sir, but in this case --

18 Q. Doctor, would you listen to me, please. I am
19 asking you, sir, as a dermatologist, dermatitis is not
20 chloracne, is it, sir?

21 MR. HEINEMAN: Objection. Asked and answered.

22 THE COURT: Objection is overruled.

23 A. Dermatitis may accompany chloracne, sir.

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

1 A. Yes, you did.

2 Q. Doctor, my question was simple. Dermatitis is not
3 chloracne, is it, sir?

4 A. Dermatitis should be differentiated from chloracne,
5 sir.

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

8 THE COURT: Doctor, listen to the question again
9 and respond to the question only. Could you repeat the
10 question please, Mr. Carr?

11 Q. Dermatitis is not chloracne, is it, sir?

12 A. A dermatologist would not call chloracne
13 dermatitis. That is true.

14 Q. That isn't what I asked you, Doctor. Would you
15 read the question to him again, please?

16 (Court Reporter read back last question.)

17 A. If you are referring to this particular case,
18 sir --

19 MR. CARR: Your Honor, would you direct the witness
20 to answer my question.

21 THE COURT: Doctor, it is not responsive. Listen
22 to the question again and answer only the question that is
23 asked of you. No more. Could you read the question back to
24 him one more time?

1 A. Dermatitis can be chloracne too, sir. Yes.

2 Q. Dermatitis can be chloracne?

3 A. Yes, sir.

4 Q. So, when you describe -- when we had some
5 plaintiffs here that just had dermatitis, you are saying that
6 they could have chloracne?

7 A. They might have had chloracne and it was called --

8 Q. Doctor, I am not asking might have had. I am
9 talking about the present condition. Does a person who has
10 dermatitis, does he have chloracne?

11 A. He might, sir. He very well might and please, Mr.
12 Carr, let me finish my answer to your question, sir.

13 MR. CARR: Your Honor, would you direct the witness
14 that it isn't appropriate for him to quarrel with me. If he
15 has a quarrel, it should be with you. That these are the
16 rules that you have made that I am using that he is bound by
17 as well.

18 MR. HEINEMAN: Objection, Your Honor. May counsel
19 approach the bench?

20 THE COURT: Yes, you may.

21 (Bench conference had out of the hearing of the
22 jury.)

23 MR. HEINEMAN: Mr. Carr has made another speech
24 which I request -- I object to. I request that it be

1 stricken. I ask that the jury be instructed to disregard it.

2 THE COURT: Do you have anything?

3 MR. CARR: No, Your Honor, nothing to say.

4 THE COURT: Again, the witness is not accurate. In
5 the satisfaction of discretion of the court rules, I can have
6 either one of you gentlemen as officers of the court enforce
7 the court rules. I can allow Mr. Carr to make the statement
8 as I have at times due to the witness. I can request that
9 you have conferences with this witness outside the presence
10 of the jury as I have at various times as officers of the
11 court and was made by enforcement of the Court's rules. I
12 have done so and apparently with this witness I will have to
13 continue to do so in the exercise of my discretion and your
14 objection is overruled.

15 MR. HEINEMAN: You know, I object further to the
16 question of Mr. Carr because the witness has responded to the
17 question. The witness has tried to differentiate between the
18 two situations. Mr. Carr has posed and I object to this as
19 just harassing and haranguing this witness, arguing with him
20 and baiting him and I object to it. It is a continuous
21 dragging out process.

22 THE COURT: I am afraid the only thing that has
23 dragged this out is this witness's refusal to answer the
24 questions. When he is asked a question and he gives a non

1 responsive answer. And he is allowed to ask it again. Even
2 though it has been asked, that part of your objection is
3 correct. It has not been answered and that part of your
4 objection is not correct. So under the circumstances, I
5 would be denying that objection and again in these
6 circumstances also your objection is overruled. You may
7 continue with your questioning.

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

10 Q. Doctor, in view of the fact that dermatitis can be
11 chloracne as you have stated, the dermatologist at Dow or the
12 doctors at Dow said that that particular dermatitis, called
13 that situation simply facial dermatitis, did he not, sir?

14 A. Yes, sir.

15 Q. And while it could be chloracne as you have stated,
16 he didn't call it that as such, did he, sir?

17 A. That is correct, sir.

18 Q. And, Doctor, the dermatitis that is chloracne, can
19 that be distinguished -- strike that. When doctors use the
20 word dermatitis then, they may be describing a case of
21 chloracne as well, is that correct, Doctor?

22 A. They could very well be, sir. Yeah.

23 Q. And, of course, the real diagnosis of chloracne,
24 since it is not a common thing, many, many doctors are not

1 dermatologists, could well be calling something dermatitis
2 when a dermatologist who has experience with chloracne would
3 say why that indeed is dermatitis but that is also chloracne?

4 A. That is correct, sir. That is correct.

5 Q. So, and there is not very many dermatologists
6 around the country who really are capable of distinguishing
7 between chloracne that is simply dermatitis and chloracne
8 that is not dermatitis, would that be correct, sir?

9 A. That is probably so, sir. Yes.

10 Q. Then, in this situation in any event, according to
11 this document, if the doctor made the right diagnosis, this
12 was a case of cancer without chloracne being present, wasn't
13 it, sir?

14 A. If that diagnosis is accurate, sir.

15 Q. Yes. So, if the diagnoses mentioned in this
16 document are accurate, we have got two cases of soft tissue
17 sarcoma without chloracne and one case with chloracne, do we
18 not, sir?

19 A. That is so, sir.

20 Q. And, Doctor, in addition, Doctors Honchar and
21 Halperin -- By the way, they are at NIOSH, aren't they, sir?

22 A. No. Doctor Halperin is still with NIOSH. Pat
23 Honchar is associated with the Health Department of the State
24 of Texas, I believe.

1 Q. Well, at the time this article was written, they
2 were both employed by NIOSH, were they not, sir?

3 A. Yes, sir.

4 Q. And at that time they said, "That while none of the
5 four groups individually resulted in reported excess risk for
6 soft tissue sarcoma, when you combined the three cases from
7 these four groups, a common pattern is suggested," do they
8 not, sir?

9 A. They report that, sir.

10 MR. CARR: Would you give the witness Plaintiffs'
11 Exhibit 1457, please.

12 THE COURT: What number was that?

13 MR. CARR: 1457.

14 Q. Doctor, this is a letter to the American Medical
15 Association Journal, is it not, sir?

16 A. Yes.

17 Q. And it is written by Doctor Fingerhut?

18 A. Yes, sir.

19 Q. And Doctor Halperin, is it not, sir, from NIOSH?

20 A. Yes.

21 Q. And this is a 1983 letter referring to the Swedish
22 soft tissue sarcoma being reported in these Swedish
23 lumberjacks initially, does it not, sir, in 1977? Again,
24 those are the ones by Doctor Hardell and others that we have

1 discussed earlier?

2 A. They were exposed to a variety of herbicides.

3 Q. Doctor, my question is, is that Doctors Fingerhut
4 and Halperin in this letter discuss, do they not, the soft
5 tissue sarcomas that were reported among the Swedish
6 lumberjacks?

7 A. Yes, they do, sir.

8 Q. And, Doctor, they also refer to the so-called AMA
9 report on Agent Orange and dioxin contaminants, don't they,
10 sir? The very first paragraph there refers to it?

11 A. Yes. I see that. I think they were referring to a
12 summary report in the Journal of the AMA rather than the
13 dioxin report itself, sir. They were reporting a summary
14 statement which appeared in the Journal of the AMA, not this,
15 sir.

16 Q. Just a summary of it?

17 A. Yes. And I think that is why --

18 Q. And it is a summary of that document that you were
19 a part of the group that wrote it, is that right?

20 A. Right.

21 Q. And, Doctor, they take issue with the statement
22 contained in that summary, do they not, sir, where they say,
23 "The recent report does not present evidence linking dioxin
24 exposure to soft tissue sarcoma in workers"?

1 A. In that short report, she is correct, but in the
2 1981 report, sir --

3 Q. Doctor, my question is --

4 A. It is in here.

5 Q. I do not want to get into a side issue, Doctor, and
6 I know you understand that because I see you smiling.

7 Doctor, my question refers to this document, do you
8 understand that, Doctor? My question refers to Exhibit 1457?

9 A. Correct.

10 Q. And the document to which it refers. Now, will you
11 confine your answers to this document, please, sir?

12 A. Yes, sir.

13 Q. And, Doctor, they point out that they want to
14 present their research relating to that statement, do they
15 not, sir?

16 A. Correct, sir.

17 Q. And, they go on to say that "The studies that were
18 made in Sweden found that persons with occupational exposure
19 to phenoxy acetic acids or chlorophenols had a five fold
20 increased risk of a soft tissue sarcoma developing," do they
21 not, sir?

22 A. Yes, they did, sir.

23 Q. And they go on to point out that these studies that
24 were conducted, yours among others, were in the United

1 States, don't they, sir?

2 A. Yes, I believe they do.

3 Q. And they point out there that each cohort was small
4 and had a little chance to detect their causes of death,
5 don't they, sir?

6 A. Correct.

7 Q. And they also refer to the Honchar and Halperin
8 report that we just referred to, that is Plaintiffs' Exhibit
9 1453, don't they, sir?

10 A. Yes, sir.

11 Q. And they say there that by, that their review of
12 the deaths and they added results from, they reviewed the
13 three cohorts and added the results from the four unpublished
14 study and they pointed out that three of the total deaths
15 were caused by soft tissue sarcoma and only .07 percent of
16 deaths were expected to be caused, is that correct, sir?

17 A. That is what they say here, yes, sir.

18 Q. And that is indeed what they say here, isn't it,
19 Doctor?

20 A. That is only what they say here.

21 Q. That is what they say here that we are reading
22 from?

23 A. That is what they say.

24 Q. And that 2.9 percent is 30, better than 30 times,

1 no, I am sorry, 300 times greater than the .07 percent
2 expected, isn't it, sir? Yes, 300 times greater, isn't that
3 correct, sir?

4 A. No, sir, it is not correct.

5 Q. What is the correct mathematics there?

6 A. Well, I really can't answer that question.

7 Q. You can divide .07 into 2.9, can't you, Doctor?

8 A. But that wouldn't give us our answer either, sir.

9 Q. Doctor, it would give you a mathematic number,
10 wouldn't it, sir?

11 A. But it wouldn't give you your answer.

12 Q. It would give you a number whether it is 300 times
13 greater or smaller, would it not, sir?

14 A. No, sir.

15 Q. Doctor, is 2.9 300 times larger than .07?

16 A. I don't know, sir.

17 Q. Well, would you want to divide it and see, sir?

18 A. I don't believe you can calculate it that way, sir.

19 Q. Doctor, you can divide this?

20 A. That is not the way to calculate risk. You can do
21 it that way but that doesn't give you the answer for risk,
22 sir.

23 Q. It may not, Doctor.

24 A. It sure does not, sir. That gives you an answer of

1 38, sir, does it not?

2 Q. I will accept that, Doctor. This calculator
3 doesn't work very well and it is fine with me, Doctor. 38 is
4 just fine.

5 A. But honestly, that is not the way to calculate
6 risk.

7 Q. I am not asking you about honestly or anything
8 else. All I am asking you is 2.9 is in this case then 38
9 times larger than .07, is it not, sir?

10 A. If that is the way you want to calculate it.

11 Q. That is what I am asking you to do. Do you
12 understand that?

13 A. You are asking me to do it.

14 Q. That may be fallacious, it may be crazy, it may
15 not be statistically significant, it may not be logical but
16 that is what I am asking you to do, Doctor.

17 A. Okay. I gave you the answer of 38.

18 Q. And Fingerhut and Halperin also point out that a
19 fourth living person was recognized in one of these groups as
20 having a soft tissue sarcoma, correct, sir?

21 A. That was the --

22 Q. Is that correct, sir?

23 A. That is correct.

24 Q. And three additional persons who worked with these

1 facilities also have been reported to have soft tissue
2 sarcoma, is that correct, sir, although their exposures have
3 not been confirmed? Does it say that, sir?

4 A. It says that, yes.

5 MR. CARR: Would you now hand the witness
6 Plaintiffs' Exhibit 209.

7 Q. Now, Doctor, before we get to that, as far as any
8 history of chloracne, the only chloracne that would be
9 mentioned -- well, there is no chloracne mentioned in this
10 report but we do know that two of the three referred to have
11 chloracne from the earlier report, do we not, sir?

12 A. At least two, sir. Yes.

13 Q. Now, do you recognize Plaintiffs' Exhibit 209 as
14 part of the book Chemical Porphyria In Man?

15 A. I see the exhibit, sir.

16 Q. My question is, do you recognize it, Doctor?

17 A. I haven't read this one, no. I do not, sir.

18 Q. I am sorry?

19 A. I have not read it.

20 Q. And you are not familiar with it, Doctor?

21 A. I am familiar with Doctor Strik but I haven't read
22 this particular document, sir.

23 Q. Doctor, would you turn to page 75 of that document?

24 MR. HEINEMAN: Your Honor, could counsel approach

1 the bench?

2 THE COURT: Sure.

3 (Bench conference had out of the hearing of the
4 jury.)

5 MR. HEINEMAN: Your Honor, this document goes back
6 so far that I don't have a record as to whether it was ever
7 admitted as a Plaintiffs' Exhibit and I would object to.

8 THE COURT: The clerk would have the record. I
9 don't have mine with me either.

10 MR. CARR: It was admitted on the 10th of April of
11 1984.

12 THE COURT: It is almost two years anniversary.

13 MR. HEINEMAN: It has been admitted. All right,
14 Your Honor. The witness has never seen it before and he is
15 not familiar with it and I would object to his being
16 questioned about it since he has never seen the document
17 before.

18 THE COURT: The objection is overruled. We can
19 determine it on the basis of each question.

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

22 Q. Doctor, the part of this exhibit that I have
23 referred you to is entitled Coproporphyrinuria and Chronic
24 Hepatic Porphyrria Type A Found In People From seveso Exposed

1 To 2,3,7,8 TCDD, is it not, sir? Are you on page 75, Doctor?

2 A. Yes.

3 Q. And it is so entitled, is it not, Doctor?

4 A. That is what the title reads, sir. Yes.

5 Q. And, Doctor, it is written by Doctor Centen, Strik
6 and Columbi, is it not, sir?

7 A. Those are the authors listed, sir.

8 Q. And, Doctor, it also discusses that they in the
9 summary portion that they found out that the urinary
10 porphyrin pattern appears to be more, a more sensitive
11 indicator for chronic exposure to TCDD than total porphyrin
12 excretion, do they not, sir?

13 A. That is what these authors claim, sir.

14 MR. CARR: Your Honor, would you direct the witness
15 to answer my question as I have asked it?

16 THE COURT: Doctor, please respond to the question
17 that is asked of you. Do not editorialize. Just answer the
18 question. If it asks for your opinion, you may give it.
19 That question did not and it was not responsive. Could you
20 reask the question, please.

21 Q. Doctor, this summary states, does it not, sir, that
22 "urinary porphyrin pattern appears to be a more sensitive
23 indicator for chronic exposure to TCDD than total porphyrin
24 excretion"?

1 A. That is what is reported by these authors, sir,
2 yes.

3 Q. And, Doctor, the porphyrin pattern is a pattern
4 that is shown by laboratory test, is it not, sir?

5 A. A set of laboratory tests, sir.

6 Q. And if those tests make findings of porphyrins
7 being disturbed, that is a laboratory effect, is it not, sir?

8 A. It could be regarded as a laboratory effect, sir.

9 Q. And, Doctor, this study of the ICMESA workers, the
10 people living in the quarters Fanfani, Barruccana as well as
11 the people evacuated from Zone A who are now living in Zone B
12 and the quarter Casina Savina, is that not correct, sir, as
13 shown on page 77?

14 A. Those are among the groups that were.

15 Q. Doctor, table two also shows on page 77 shows the
16 extent of TCDD contamination of these groups, doesn't it,
17 sir?

18 A. I believe these were the criteria by which the
19 zones were defined, sir. Yes.

20 Q. And it shows the pollution in Zone A to be the most
21 polluted, Zone B is the next most polluted, Zone R would be
22 under five micrograms per square meter of TCDD but where
23 animals died and people had symptoms and we have gone through
24 Zone R, have we not, sir? We have discussed A, B and R

1 already, have we not, sir?

2 A. I believe we have, sir.

3 Q. And also, then, the next group is ICMESA workers
4 who were living scattered in Zones B and R, correct, sir? Is
5 that correct, sir? Do you see that last --

6 A. I would assume, sir, from this chart that the group
7 number are ICMESA workers who lived in Zones B and R, yes.

8 Q. And, Doctor, the authors state on page 79 that "the
9 urinary total porphyrin levels of the groups are not
10 different in comparison with the Dutch controls. There is a
11 slightly higher value. Controls from Wisconsin are higher
12 than the exposed people in Seveso. Table three shows that 48
13 percent of the people examined had chronic hepatic porphyria
14 Type A2", does it not so state, sir? The very bottom of page
15 79, Doctor Suskind.

16 A. Yeah, I see that but I am trying to --

17 Q. Doctor --

18 A. I am trying to determine --

19 Q. I would like you to answer me if you see that
20 there.

21 A. Yes, I do, but I am not sure I understand it, sir.

22 Q. I am not asking you to understand it at this point
23 in time. I am simply asking for acknowledgment that it is
24 there, sir.

1 A. It is there, sir.

2 Q. And, Doctor, on the next page it discusses Jirasek
3 who had analyzed 24 hour urine from factory workers exposed
4 to TCDD found and that he found a total porphyrin level of
5 172 to 2,230 micrograms per liter, correct, sir?

6 A. Yes.

7 Q. And, Doctor, the 24 hour urine sample is something
8 different than a spot void sample, isn't it, sir?

9 A. It is indeed, sir. Yes.

10 Q. And there is no question but what that is the kind
11 of examination made if you want to discover whether or not
12 one's porphyrins had been affected, don't you, sir?

13 A. Right.

14 Q. You need a 24 hour sample, don't you, sir?

15 A. I believe so.

16 Q. And you have known that for a number of years,
17 haven't you, Doctor Suskind?

18 A. Yes, sir.

19 Q. Yes. How many years have you known that, Doctor?

20 A. I would say about since 1950.

21 Q. You knew it in 1979, didn't you, sir?

22 A. Yes, we did.

23 Q. Yes. And, Doctor, were you aware in 1979 that some
24 scientists throughout the world, Strik and Doss, had made

1 conclusions such as are contained on page 80 insofar as
2 porphyrin patterns are concerned?

3 A. Are you reading from the conclusion, sir?

4 Q. I am sorry?

5 A. Are you referring to the conclusion statement?

6 Q. Would you read my question to him again, please.

7 COURT REPORTER: "Yes. And, Doctor, were you aware
8 in 1979 that some scientists throughout the world, Strik and
9 Doss, had made conclusions such as are contained on page 80
10 insofar as porphyrin patterns are concerned"?

11 A. I was aware of it, yes.

12 Q. And, Doctor, these statements with reference to the
13 porphyrin pattern being associated with TCDD exposure was
14 contained at least as early as 1971 by Doctor Doss, was he
15 not, as you see from the reference below, sir?

16 A. I don't believe that refers to patterns. I believe
17 it refers to enzymatic defects and that is different, sir.

18 Q. Well, it refers to patterns in --

19 A. Sir, I don't believe it refers to the same kind of
20 patterns that this man, Doctor Strik and his group, referred
21 to and it is a laboratory finding, sir.

22 Q. Doctor, the porphyrin pattern is a laboratory
23 finding, isn't it, sir?

24 A. Correct. As described here, sir.

1 Q. And, you knew that these scientists have made these
2 statements with reference to the porphyrin patterns and the
3 association with TCDD exposure for how many years, Doctor?

4 A. Well, I really became aware of it after we had
5 already done our study, sir, because this came out in late
6 '79 and we did our study in early '79.

7 Q. Well, regardless of your study, you knew that
8 porphyrins had to be tested on a 24 hour basis?

9 A. Yes, we did, sir. Yes.

10 Q. And, Doctor, did you also -- did you also believe
11 that a void urine sample would be useless insofar as telling
12 whether or not the porphyrin has been affected or did you
13 believe there would be some use to it, sir?

14 A. No. This is after the fact, sir. After we found
15 that it would not be possible to do 24 hour urines on 436
16 people. That is quite an undertaking.

17 Q. Doctor, why isn't it possible to do 24 hour
18 urines? All you do is tell the people to bring in a urinary
19 sample. You give instructions, don't you, sir?

20 A. Some of these people --

21 Q. Excuse me. You give them instructions, don't you,
22 sir?

23 A. I am trying to answer your question, sir.

24 Q. Doctor, you give them instructions, do you not,

1 sir?

2 A. We give them instructions but if they are in on the
3 previous day, they don't have the bottle, sir.

4 Q. Well, you can tell those people from that not to
5 bring in a 24 hour sample, can't you, sir?

6 A. No. You have to have a chemically clean bottle,
7 sir.

8 Q. Doctor, what if all the people that you are
9 studying are right here in St. Clair and Madison County?

10 A. Then if it is a small group, it is possible to do.
11 If it is 436, it is strategically very difficult to do, sir.

12 Q. But, you can do it with the bulk of the 436, can't
13 you, sir?

14 A. No. We were not able to do that, sir.

15 Q. Did you try to do it? Did you instruct anybody at
16 Nitro to bring in a 24 hour urine sample?

17 A. We found that it was not possible to do.

18 Q. My question is, did you instruct anybody to bring
19 in a 24 hour urine sample at Nitro?

20 A. My answer to your question, sir, if you will allow
21 me to finish is no we did not, sir.

22 Q. All right. Sir, thank you. Now, Doctor, with
23 regard to the porphyrin pattern, Doctors Doss or Centen,
24 Strik and Columbi here state, do they not, sir, at the time

1 of the observation -- Strike that. "The data from table four
2 indicates that a dose effect relationship exists as the
3 porphyrin patterns are in accordance with the degree of
4 environmental contamination. See the map of the completed
5 area." Do they make that statement, sir, on the top of page
6 80, Doctor Suskind?

7 A. I am referring to page 78 where the map is.

8 Q. Did you look at page 80, Doctor Suskind? That is
9 where I am asking to you look, sir. The sentence appears
10 there, does it not, sir? "The data from table four indicates
11 that a dose effect relationship exists as the porphyrin
12 patterns are in accordance with the degree of environmental
13 pollution. See the map of the polluted area." Doctor, did
14 you hear my question?

15 A. I did and I am trying to refer to the map, sir.

16 Q. Doctor, did you understand my question? My question
17 was does this statement appear on page 80 as I read it to
18 you, sir?

19 A. That statement appears, sir, on page 80.

20 Q. Thank you, Doctor. Now, it also appears on page
21 80, doesn't it, Doctor Suskind, in the conclusion, "At the
22 time the observations were made, the people exposed to TCDD
23 did not excrete increased amounts of porphyrins but the
24 porphyrin pattern was abnormal in many cases. According to

1 Doss, people examined suffer from chronic hepatic porphyria
2 Type A." Doesn't it say that, sir?

3 A. That is what the author states, sir.

4 Q. And it goes on to say, "The effects found in the
5 different groups could be related to the degree of
6 contamination of the part of the environment involved." Does
7 it not say that, sir?

8 A. That is what these authors state, sir.

9 Q. It also states, does it, "It again appears that the
10 urinary porphyrin pattern is a more sensitive indicator for
11 porphyria than total porphyrin excretion"?

12 A. That is what the author states, sir.

13 Q. And, Doctor, they are here talking about laboratory
14 effects from TCDD exposure, are they not, sir?

15 A. They are talking about a type of laboratory effect,
16 sir.

17 Q. From TCDD exposure, are they not, sir?

18 A. I cannot say that, sir.

19 Q. Doctor, aren't they talking about TCDD exposure
20 here, sir, in this paragraph I just read to you?

21 A. These are the authors' conclusions, sir, yes.

22 Q. That is what I have asked you, Doctor. They are
23 talking about laboratory effects from TCDD exposure, aren't
24 they, sir?

1 A. They are -- they make those conclusions, sir. Yes.

2 Q. And, Doctor, there is no connection or association

3 with chloracne in these laboratory effects stated here, is

4 there, sir?

5 A. I don't know.

6 Q. Well, would you want to look at it and see, sir?

7 A. Here again, sir, they do not mention chloracne.

8 Q. Doctor, would you look at it, please, and see, sir?

9 A. Shall I answer the question, sir?

10 Q. Please.

11 A. They make no mention of chloracne, sir.

12 Q. And, Doctor, they in no way associate the

13 laboratory effect with chloracne, do they, sir?

14 A. I don't know whether they look for chloracne, sir.

15 Q. Would you answer my question, Doctor?

16 A. They did not mention chloracne and, therefore, they

17 couldn't possibly associate chloracne with porphyria.

18 Q. Now, would you answer my question, Doctor?

19 A. I have answered it, sir.

20 Q. No, Doctor, you said they couldn't possibly do it

21 just because they didn't mention it.

22 A. They didn't look for it.

23 Q. That doesn't follow at all, sir.

24 A. They did not look for it.

1 THE COURT: Doctor, let him finish the question,
2 please.

3 Q. Doctor, this study looks for laboratory effects
4 called chronic hepatic porphyria, does it not, sir?

5 A. Their version of chronic hepatic porphyria.

6 Q. Would you answer my question please, Doctor
7 Suskind?

8 A. That is what they look for, yes.

9 Q. And, Doctor, they, of course, were fully aware that
10 some children were, had chloracne. They knew that, did they
11 not, sir?

12 A. Would you repeat the question, please?

13 (Court Reporter read back the last question.)

14 A. I don't know, sir.

15 Q. Doctor, as responsible scientists studying Seveso,
16 they should know, should they not, sir?

17 A. You are asking me if they did know and I said I do
18 not know, sir.

19 Q. Doctor, I asked you another question, sir. You
20 answered that question. I am now asking you a followup
21 question.

22 Q. Okay. Should they know it? I hope they would,
23 yes.

24 Q. Doctor, I am not really asking you whether or not

1 you hope they would. I am asking you as responsible
2 scientists they should know it, shouldn't they, sir?

3 A. If they are responsible scientists, sir.

4 Q. Yes.

5 A. If they are.

6 Q. And, Doctor, they also should know that TCDD can
7 cause chloracne, shouldn't they, sir?

8 A. I believe they state so here.

9 Q. Indeed they do, don't they?

10 A. Yes, they do.

11 Q. On page 76, they state quote, it is well known that
12 TCDD may cause porphyria, in parenthesis, and chloracne,
13 close parenthesis, in workers involved in the manufacture of
14 2,4,5-T. TCDD may also cause a number of other toxic effects
15 in man and laboratory animals. They state that as well,
16 don't they, sir?

17 A. That is what they claim, sir.

18 Q. Doctor, that is what they state, don't they, sir?

19 A. That is what they claim, sir.

20 MR. CARR: Your Honor, would you direct the witness
21 to answer the question as I asked it?

22 THE COURT: Doctor, respond to the question and not
23 a different question.

24 A. If I give a yes or no answer, sir, I am

1 inaccurate. I really am, sir.

2 THE COURT: Doctor, I am ordering you to respond to
3 the question as it has been stated. Could you read the
4 question?

5 MR. HEINEMAN: Objection, Your Honor. May counsel
6 approach the bench?

7 THE COURT: Yes, you may.

8 (Bench conference had out of the hearing of the
9 jury.)

10 MR. HEINEMAN: I object as I have before, Your
11 Honor, to the Court ordering this man to answer yes or no.
12 You are trying to extract an answer from him which he says he
13 is unable to give and I object to it. I think it is an abuse
14 of discretion and I am making my record.

15 MR. CARR: He can state accurately whether or not it
16 appears in this document as I stated it. Whether or not it
17 is true is another question; that I am not asking him that
18 these are other toxic effects of TCDD in man. I am not asking
19 him for that. The witness knows I am not asking him that. I
20 am asking whether or not it is stated here as I posed it to
21 him. He can say yes, it is stated that way and that is all
22 that he can say or he can say no, you haven't read it
23 correctly. You didn't read the statement accurately because
24 I am not asking for the accuracy. Or his comment on the

1 accuracy or falseness of the statement. I am not asking him
2 for the accuracy. Was the statement made? He knows it and
3 you know it.

4 THE COURT: If he can read English, the answer to
5 that question is right. Your objection is overruled. You
6 may proceed.

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

9 Q. Doctor, is the statement made in this exhibit by
10 these authors quote it is well known that TCDD may cause
11 porphyria and chloracne in workers involved in the
12 manufacture of 2,4,5-T. TCDD may also cause a number of
13 other toxic effects in man and laboratory animals end of
14 quote?

15 A. These authors say that, sir.

16 Q. Thank you, Doctor. Now, Doctor, the laboratory
17 finding of chronic hepatic porphyria is indeed an effect, is
18 it not, sir?

19 A. No, sir.

20 Q. It is not, sir?

21 A. No, sir. Not in this instance.

22 Q. Do these authors say that it is, sir?

23 A. They claim that it is, sir.

24 Q. My question to you, Doctor, do these authors say

1 that, sir? You characterize it as a claim, Doctor. They, in
2 fact, say it, do they not, sir, whether it is a claim,
3 whether it is a lie, whether it is made out of a hole cloth,
4 whether they made it up, whether it is completely wrong,
5 whether there is no data to support it. This is what they
6 say, isn't that correct, sir?

7 A. They say that a type of chronic hepatic porphyria
8 characterized only by laboratory findings.

9 Q. That is what I am talking, Doctor. That is exactly
10 what I am talking about is the laboratory finding. You can
11 see that I am talking about laboratory findings?

12 A. No, I am not, sir. Chronic hepatic porphyria has
13 other manifestations.

14 MR. CARR: Your Honor, would you ask the witness to
15 wait until I finish the question.

16 THE COURT: I have asked you many times today.
17 Don't interrupt the question. Listen to it and then you can
18 respond to the question since you know what the entire
19 question is.

20 Q. Doctor, my questions to you have been about the
21 laboratory effect, the laboratory findings. These porphyrin
22 patterns that they have referred to is a laboratory effect,
23 is it not, sir?

24 A. A laboratory finding, sir.

1 Q. And that is a finding that they associate with
2 people who are exposed to TCDD, do they not, sir?

3 A. They claim so, yes, sir, and they say so, yes, sir.

4 MR. CARR: Your Honor, would you ask the jury to
5 disregard the statement of the Doctor about they claim. The
6 Doctor knows that is improper.

7 THE COURT: The jury is so instructed. It was not
8 responsive to the question. You should disregard it.

9 Q. And, Doctor, as far as the chloracne is concerned,
10 they knowledge and they knew that chloracne was one of the
11 things that can be caused by TCDD, do they not, sir? On page
12 76, Doctor, that we have just referred to?

13 A. They have reference to it, yes, sir.

14 Q. And, Doctor, there were 196 or so cases of
15 chloracne in the entire exposed population of thousands of
16 people, weren't there, sir?

17 A. I am not sure that that is an accurate number.

18 Q. Doctor, we have gone through an exhibit earlier
19 that said there were 4500 people in Zone R, 735 in Zone A
20 and some other figure, I forget, in Zone B. Do you recall
21 that, sir, when we are talking about Merlo's paper, his 1983
22 report, sir?

23 A. I have it before me, sir, but I don't see the 196
24 with chloracne.

1 Q. 193 is with chloracne on page 243, sir. Total
2 number of cases to date of chloracne amounts to a total of
3 193, on page 243, Doctor?

4 A. Yes, sir.

5 Q. And I was way off on my figures. There is 735
6 people in Zone A, 4300 people in Zone B and 40,000 in Zone R,
7 correct, sir?

8 A. Yes, sir.

9 Q. And of these, there were 193 that had chloracne,
10 isn't that correct, sir?

11 A. That is what Doctor Merlo states.

12 Q. And Doctors Columbi, Strik and Centen were
13 certainly aware of the fact that chloracne was found in this
14 population, did they not, sir?

15 A. I don't know, sir.

16 Q. Is it a fair assumption to make that they knew it,
17 Doctor, or do you not?

18 A. No, it is not a fair assumption.

19 Q. All right, Doctor.

20 A. Not a fair assumption at all.

21 Q. All right. We will pass on from that, Doctor, if
22 you may not assume that they were aware that people had
23 chloracne. Could you give the witness Monsanto Exhibit 60.
24 Doctor, do you recognize this as another updated study on

1 Swedish railroad workers, do you not, sir, written by Doctor
2 Axelson, Sundell, Anderson, Edling, Hogstedt and Kling, do
3 you not, sir?

4 A. It is updated as of 1980, yes, sir.

5 Q. Is it also a yes that it was written by the people
6 that I mentioned, Doctor?

7 A. Yes.

8 Q. And, Doctor, they are all M.D.s with the exception
9 of one who is a Bachelor of Science?

10 A. Yes, sir.

11 Q. And the lead author is Professor Axelson of the
12 Department of Occupational Medicine at the University, I
13 can't read what that is in Sweden, is it not, sir?

14 A. Yes, sir.

15 Q. And, Doctor, this document refers to herbicide
16 exposure and tumor mortality, does it not, sir?

17 A. That is what the title of the paper is, sir.

18 Q. And on page 77, Doctor, it refers to the fact that
19 there was an over-mortality due to tumors in the sub cohorts
20 with exposure to phenoxy acetic acids, does it not, sir? Six
21 seen with less than three expected. Page 77, Doctor Suskind?

22 A. And what figures are you quoting, sir?

23 Q. The first paragraph under the heading discussion.
24 "The induction latency time, there was still an

1 over-mortality due to tumors in the sub cohorts with exposure
2 to phenoxy acetic acids. Six observed less than three
3 expected." Isn't that correct, sir? Doctor, are you reading
4 the sentence that I am asking you to read?

5 A. That is only part of the sentence.

6 Q. I understand that, Doctor. Does it say as I said
7 it, sir? That is part of a sentence, parts of the paragraph,
8 for that part of the page?

9 A. For that part of the sentence, yes, sir, it is
10 accurate.

11 Q. And it goes on to say, "for a combination of the
12 phenoxy acetic acids and Amtro", that is another chemical, is
13 it not, Doctor?

14 A. It is.

15 Q. "There were five seen with less than two expected,"
16 isn't that correct, sir?

17 A. That is what this author says, sir.

18 Q. And, Doctor, it goes on to say in that second
19 column on that page and the second full paragraph beginning
20 "This updated analysis of the causes of death among railroad
21 workers with exposure to different herbicides, particularly
22 Amtro and phenoxy acetic acids, the observed number of tumor
23 deaths was higher than expected, especially among those with
24 an early exposure to both Amtrol and phenoxy acetic acids,"

1 correct, sir?

2 A. That is what this author says, sir.

3 Q. But they go on to say that "Tumor mortalities
4 exposed to Amtrol was moderate and the earlier slight excess
5 of tumor deaths among people exposed to phenoxy acetic acid
6 had become more pronounced," isn't that correct, sir?

7 A. That is what the authors state, sir.

8 Q. In particular they noted an excess of stomach
9 cancer, didn't they, Doctor? Do you see that, Doctor? Right
10 where I just read to you, Doctor. Doctor, do you see that,
11 sir?

12 THE COURT: Doctor, please answer the question.

13 A. Yes, I am trying to look at the table, sir.

14 Q. Doctor, do you understand when Mr. Heineman asks
15 you questions he can direct your attention to the table if he
16 wants you to look at it or if you tell him you want to look
17 at it to discuss it. I am asking you a particular question,
18 Doctor, that I want to establish in this case on behalf of
19 the plaintiffs, here. Now, Doctor, does it not say, sir,
20 that they found an excess of stomach cancer in those
21 workers? Doctor, are you looking?

22 A. There was a small excess of stomach cancers, sir.

23 Q. Doctor, they found three when they expected less
24 than a half of one?

1 A. Okay.

2 Q. Now, Doctor, that is six times greater, isn't it,
3 sir?

4 A. No, sir.

5 Q. Isn't three-six times larger than .41?

6 A. In epidemiologic studies, the numbers are so small
7 you can't use them.

8 Q. Doctor, would you answer my question, sir? It may
9 be false, you may not be able to use it. It may be the worst
10 thing on earth. I may be making it up out of hole cloth. My
11 question is, Doctor Suskind, three is better than six times
12 larger than .41, is it not, sir?

13 A. No, sir.

14 Q. Doctor, is three-six times larger than .5?

15 A. Are you asking me in the abstract?

16 Q. Would you answer my question, Doctor?

17 A. Well, I don't know whether you are referring to
18 epidemiology cases.

19 THE COURT: Doctor, answer the question. It is
20 perfectly clear what the question is.

21 A. Would you repeat the question?

22 COURT REPORTER: "Doctor, is three-six times larger
23 than .5?"

24 A. Three considered in the absolute is six times

1 larger than the number .05, yes.

2 Q. Now, Doctor, it is not .05. It is point --

3 A. .5.

4 Q. Three is six times larger than .5, is it not, sir?

5 A. As numbers are considered, yes, sir.

6 Q. And, Doctor, three is more than six times larger
7 than .41, isn't it, sir?

8 A. As numbers, yes.

9 Q. Doctor, Doctor Axelson goes on, and his co-authors
10 go on to say on page 78 that "the excess of tumors among the
11 workers with earlier exposure was quite obvious while those
12 exposed in 1962 or later did not show a clear excess of
13 mortality." Do they not say that, sir?

14 A. This is what Axelson says, sir.

15 Q. And does he not also say that this finding may be
16 interpreted in a different way? Could do with the variety of
17 herbicides, could do with work conditions, could do with
18 careless handling of the herbicides, could do with the fact
19 that the earlier preparation of the 2,4,5-T could have a
20 higher concentration of these contaminants, correct, sir?

21 A. These are some of his theories, sir.

22 Q. And he goes on to say that epidemiologic experience
23 from an increase mortality from lung cancer among pesticide
24 workers have also been reported in Germany, does he not, sir?

1 A. Some pesticides, yes.

2 Q. And, Doctor, this report makes no association
3 between chloracne and these tumor mortalities, does it, sir?

4 A. Here again I don't believe chloracne was mentioned
5 or looked for, sir.

6 MR. CARR: Direct the witness to answer my
7 question?

8 THE COURT: Doctor, respond to the question. That
9 is not what you were asked.

10 A. Again, if I give a yes or no answer, it is very,
11 very inaccurate, sir.

12 Q. Doctor Suskind --

13 THE COURT: Doctor, you are ordered to answer the
14 question as it is stated to you.

15 A. As yes or no, sir?

16 THE COURT: You are ordered to answer the question
17 as it is stated to you, sir.

18 A. Would you repeat the question, please?

19 MR. HEINEMAN: May counsel approach the bench,
20 Judge?

21 THE COURT: Yes, you may.

22 (Bench conference had out of the hearing of the
23 jury.)

24 MR. HEINEMAN: I am going to object to the order of

1 the court as clearly an abuse of discretion. Illinois law
2 does not permit such an order. The witness is entitled to
3 say he can't answer a question yes or no under Illinois law
4 and I object to it.

5 THE COURT: The witness can read the English
6 language. If he can read the English language, he can answer
7 that question. And it is shown that he can read, therefore,
8 the question calls for that. The objection is overruled.

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

11 A. There is no attempt to associate chloracne in any
12 way with these epidemiologic findings, sir.

13 Q. Now, could you answer my question, Doctor Suskind?

14 A. That is the answer, sir.

15 Q. Would you read the question again? I didn't ask
16 you if they attempted to, Doctor. I asked you did they,
17 sir. Does the report make any association between chloracne
18 and cancer, sir?

19 A. I don't know, sir.

20 Q. Read it again then, Doctor.

21 A. They don't mention it so how can I tell you yes or
22 no?

23 Q. Can you read, Doctor?

24 A. Yes, I can. They don't mention chloracne.

1 Q. Have you read the report, Doctor?

2 A. I have it right before me.

3 Q. Can you tell me whether or not it makes any
4 association between chloracne and cancer? If it makes the
5 mention that there is an association or if it makes a mention
6 that there is not an association between chloracne and these
7 cancers, please show it to me, sir?

8 A. They don't make any mention either way, sir.

9 Q. My question is, sir, it makes no association
10 between chloracne and cancer, does it, sir, this report?

11 A. They don't say, sir. How can I say that they have
12 or have not if they don't say there is an association or
13 there is no association?

14 Q. Doctor, do you understand my question?

15 A. I do indeed, sir, and I have to --

16 THE COURT: Doctor, let him finish.

17 Q. My question is not whether or not there is an
18 association between cancer and chloracne. My question is
19 whether or not there is not an association -- My question is,
20 does this report make an association between cancer and
21 chloracne?

22 A. They don't state either way, sir.

23 Q. Is that an answer to my question? Does that say
24 no, they don't make an association between them?

1 A. Not at all because in English --

2 MR. CARR: Would you direct the witness to answer my
3 question?

4 THE COURT: Doctor, again, you are directed to
5 answer the question that was asked of you. Your answers have
6 not been responsive to the question.

7 A. They make no statement, sir, about an association.

8 Q. Between chloracne and cancer?

9 A. That is right. They make no statement.

10 Q. All right, Doctor. Would you give Plaintiffs'
11 Exhibit 917 to the witness. Doctor, do you recognize this
12 exhibit as a mortality study among Vietnam veterans, 1972 to
13 1983, written by the Massachusetts Department of Public
14 Health or by people from that office as well as the Office of
15 Commercial Veterans Services, Agent Orange Program?

16 A. I recognize it as a report but that it is a study,
17 I don't know, sir.

18 Q. Well, it is a report is fine enough for me,
19 Doctor. You do recognize it and you have read it before,
20 have you not, sir?

21 A. Yes, I have.

22 Q. Doctor, there is a table that appears on page 11,
23 table 3, is there not, sir? Is there not such a table, sir?

24 A. Yes. I see table 1-2. You want table 3, sir?

1 Q. My question is referring to table 3 on page 11.

2 Are you there, Doctor?

3 A. I am there.

4 Q. Doctor, that is referring to various causes of
5 deaths comparing Vietnam veterans to non Vietnam veterans, is
6 it not, by specific causes of death?

7 A. Yes.

8 Q. And, Doctor, directing your attention to the soft
9 tissue cancer known as connective tissue, that is the ICD
10 code number 171 we referred to earlier. Do you see that, sir?

11 A. Yes.

12 Q. And, Doctor, there were nine observed deaths and
13 only one was expected from that cause, isn't that correct,
14 sir?

15 A. According to this report, sir.

16 Q. And also according to this report, Doctor, as far
17 as kidney cancer is concerned, there were nine observed and
18 not quite five expected, isn't that correct, sir?

19 A. The statistical significance is not given, sir,
20 and, therefore, not statistically significant.

21 Q. Could you direct your attention to the question
22 that I asked you with regard to kidney cancer? Do they
23 report nine observed and 4.91, that is less than five,
24 expected, sir? Is that reported here, sir? Whether you

1 agree with it, whether you consider it significant, whether
2 it is insignificant, whether it is false, whether it is true,
3 whether what it is. Is that what it says here, Doctor?

4 A. That is what they report, sir.

5 Q. Thank you. Doctor. Now, would you turn to page
6 17, Doctor Suskind. Are you there, Doctor?

7 A. I am going to try to be there soon, sir.

8 Q. Are you on page 17?

9 A. I am now, sir.

10 Q. And, Doctor Suskind, it reports or states on page
11 17, does it not, sir, that "deaths due to stroke and
12 connective tissue cancer were significantly elevated among
13 Vietnam veterans compared to both non Vietnam veterans and
14 non veteran males." Does it say that, sir?

15 A. That is what this report says, sir.

16 Q. And, Doctor, if you would turn to page 23, sir.
17 Are you there, Doctor?

18 A. I am getting there, sir. I am there.

19 Q. Doctor, page 23 discusses again soft tissue
20 sarcomas, does it not, sir?

21 A. There is one sentence about it, yes.

22 Q. Doctor, there is a considerable more than one
23 sentence. The first sentence at the top of the page says,
24 "Previous studies have reported that soft tissue sarcomas

1 were associated with exposure to phenoxy acetic acid such as
2 2,4-D and 2,4,5-T, the components of Agent Orange." It says
3 that, does it not, sir? Did I read that sentence correctly,
4 Doctor Suskind?

5 A. You read it correctly, sir.

6 Q. And, Doctor, it goes on to say that "for all of the
7 cases with the exception of case number nine, occupational
8 exposure is obtained from deaths that did not seem to be
9 significant." It says that also, doesn't it, sir?

10 A. That is what they say.

11 Q. And by occupational exposure, the authors are
12 referring to what these men do for a living?

13 A. Or did.

14 Q. Or did. And it goes on to say that "a more recent
15 study of upstate New York Vietnam veterans reported no excess
16 of soft tissue sarcomas diagnosed through 1980." It says
17 that, does it not, sir?

18 A. It does, sir.

19 Q. And it also goes on to say that the present study,
20 that is the Exhibit 917, was not based on either adequate
21 numbers of deaths or adequate exposure information to help
22 resolve this important issue." It says that, doesn't it,
23 sir?

24 A. It does.

1 Q. "Nevertheless, the highly significant excess of
2 this rare malignancy in Vietnam veterans is important new
3 information. The latency period for soft tissue sarcoma in
4 adults is probably sufficiently long that several more years
5 of observation will be necessary before any conclusive
6 findings can be made." It says that also, does it not, sir?

7 A. That is what the report reads, sir.

8 Q. Doctor, does the report make any association
9 between these sarcomas and chloracne?

10 A. In going through this report, sir, previously I
11 don't believe I have come across the mention of chloracne,
12 sir.

13 Q. Is the answer then to my question that the report
14 makes no association between these sarcomas and chloracne?

15 A. No, it is not, sir.

16 Q. Would you answer that? Does the report make an
17 association between --

18 A. No, it does not, sir.

19 Q. And it does not make an association between
20 chloracne and soft tissue sarcomas?

21 A. It fails to mention chloracne and soft tissue
22 sarcoma.

23 MR. CARR: Your Honor, would you direct the witness
24 to answer my question?

1 THE COURT: Doctor, again, we have been through
2 this a number of times today. Your answer was not responsive
3 to the question and I am ordering you to answer the question
4 as it is asked of you. Could you repeat the question for
5 him, please?

6 Q. I will state it once. The report, Doctor, makes no
7 association between chloracne and these cancers, does it,
8 sir?

9 MR. HEINEMAN: The same objection as previously,
10 Your Honor.

11 THE COURT: Same ruling.

12 A. I will answer that as accurate as I can, sir.

13 Q. Read the report before you answer it, Doctor. The
14 report, now, Doctor, it may not be true, it may be false, it
15 may be made up, it may be making mountains out of mole hills,
16 it may be making mountains into mole hills. My question is,
17 this report, Plaintiffs' Exhibit 917, makes no association
18 between chloracne and cancer, does it, sir?

19 A. It does not associate at all.

20 Q. Thank you, Doctor.

21 A. I am not finished, sir. It does not associate at
22 all soft tissue sarcomas with the mention of chloracne. And
23 that is my answer and it is as accurate as I can be.

24 Q. But, Doctor, I have no quarrel with that answer at

1 all. It makes no association?

2 A. It makes no mention of an association.

3 Q. That is correct, Doctor, and it makes no mention at
4 all of an association between chloracne and cancer, does it,
5 sir?

6 A. That isn't what you asked me in the beginning.

7 Q. That is just what you said. It makes no mention of
8 an association between chloracne and cancer. Didn't you just
9 say that?

10 A. It makes no mention of it because it doesn't
11 mention chloracne at all.

12 Q. Doctor, I didn't ask you because. Didn't you just
13 say that it makes no mention of an association between
14 chloracne and cancer? Didn't you just say that?

15 A. That is right, sir.

16 Q. All right, Doctor. Then, fine. Doctor, I will
17 hand you now what has been marked as Plaintiffs' Exhibit 1807
18 and ask you whether or not that is an article published in
19 the Scandinavian -- what is that, Scandinavian Journal?

20 A. Of Work, Environment and Health published by The
21 Institute of Occupational Health in Helsinki, Finland.

22 Q. Is that a recognized publication in this area of
23 environmental health, Doctor?

24 A. In the Scandinavian countries and Europe, yes.

1 Q. And is it considered authoritative, Doctor?

2 A. Journals are not authoritative. It is what is in
3 the journal.

4 Q. But is it considered to publish things that are
5 authoritative? Not the journal, I agree with you.

6 A. In some cases, yes.

7 Q. And, Doctor, are you familiar with this article by
8 Doctors Filippini, Bordo, Crenna, Massetto -- you are going
9 to have to help me. I have never been to Italy and you
10 have-- Musicco and Boeri?

11 A. Boeri.

12 Q. Do you recognize these doctors?

13 A. No, I don't, sir.

14 Q. Are you familiar with this article?

15 A. Not in detail, sir, no.

16 Q. Well, whether in detail or not, do you recognize it
17 as a publication, an authoritative article published in a
18 recognized journal that scientists rely upon and use in
19 arriving at conclusions, whether they agree with them or
20 disagree with them, in the various areas that they work in?

21 A. No. I would have to recognize it as an article
22 about the subject that I see listed here in a fairly good
23 journal but I can't say that these people are authoritative,
24 sir. I honestly can't.

1 Q. Well, this -- when you say a fairly good journal,
2 by that do you mean that it is peer reviewed?

3 A. I don't know whether this article would be peer
4 reviewed. I have no idea. I would assume, yes.

5 Q. All right. And they are referring here that -- the
6 references made are ones that you are familiar with as well?
7 I see your own 1977 and 1978 Leon study mentioned, is it not,
8 sir?

9 A. It actually refers to the working group, yes.

10 MR. CARR: Your Honor, I will offer this exhibit at
11 this time.

12 MR. HEINEMAN: May counsel approach the bench?

13 THE COURT: Sure.

14 (Bench conference had out of the hearing of the
15 jury.)

16 MR. HEINEMAN: Your Honor, we would object to any
17 questioning of the witness about this article and we would
18 submit the witness has not recognized it is authoritative.
19 It is hearsay. There has been no foundation laid for its
20 admission by either identification or authentication and,
21 therefore, it is clearly inadmissible.

22 MR. CARR: I will concede that he didn't recognize
23 the authors, Your Honor, but he did say that this is a
24 recognized journal and that he believed it had peer reviewed

1 articles and I think that is all the need to establish in
2 order to examine the witness with reference to this.

3 MR. HEINEMAN: Well, first of all, I don't even
4 think it is enough to examine the witness with reference to
5 it but it surely isn't enough to move its admission and have
6 it admitted into evidence.

7 MR. CARR: It is not necessary that I have it in
8 evidence, Your Honor. I just want to examine the witness
9 about it.

10 THE COURT: I think it is sufficient under the
11 cases that were stated before for him to be examined under
12 it. Based on the entirety, it is about the journal and this
13 article, I think this court will recognize it as
14 authoritative and you can question him about it. I gather
15 you are withdrawing your request for admission?

16 MR. CARR: Yes.

17 (The following proceedings were had in the hearing
18 and presence of the jury).

19 Q. Doctor, these authors are identified down at the
20 bottom as part of the Neurological Institute at Milan, Italy?

21 A. That is how they identify themselves, sir.

22 Q. Do you know whether or not from your association in
23 Seveso, do you know whether or not they were involved in
24 studying the Seveso people?

1 A. I do know that there was a study and I know people
2 who have talked about this study including Mr. Merlo, sir.

3 Q. Well, this is a study done by this neurological
4 institute on people at Seveso, is that your knowledge?

5 A. I believe that there was a group from Seveso. I
6 don't see any control group here, sir.

7 Q. Doctor, I am not asking you about details of the
8 study as yet. I am asking you whether or not you recognize
9 this as the study that you suggested Doctor Merlo referred to
10 and that you knew took place?

11 A. Yes, I believe this was at least one of the studies
12 that was done.

13 Q. And this Neurological Institute at Milan, are you
14 familiar with that?

15 A. No, I am not, sir.

16 Q. Doctor, have you had an opportunity to read this
17 report before today?

18 A. No, I have not.

19 Q. I would like to direct -- Have you read enough of
20 it at this point, Doctor, that you can answer questions with
21 regard to it?

22 A. Not really. I would really like to read it a
23 little more thoroughly to answer questions about it, sir.

24 MR. CARR: Well, Your Honor, I acknowledge that the

1 witness has not read it before and there are some relatively
2 complicated conclusions that I want to ask about it. I think
3 in fairness to the witness, he should be allowed to read it
4 and we are close enough to ending that I don't think we would
5 lose much time. We would probably gain more time if the
6 witness has an opportunity to read it tonight than he would
7 be if I try to stumble through it with him.

8 THE COURT: I agree. We will break for the day at
9 this point in time and we will resume again tomorrow morning
10 at 9:30. I would remind you as I do before any other
11 overnight recess is that you are not to read, listen to or
12 watch anything about this case in particular or subject
13 matter in general in any of the media, print or electronic.
14 Thank you for your attention and cooperation. Court is
15 adjourned.

16 Gentlemen, could I see you at the bench for just a
17 minute, please?

18 (Bench conference had out of the hearing of the
19 jury.)

20 THE COURT: You are going to give me that
21 response?

22 MR. HEINEMAN: I am told we were not going to have
23 a written response. Just our argument. We are not going to
24 have a written response.

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THE COURT: Very good.

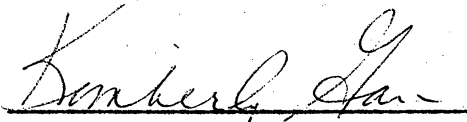
COURT ADJOURNED:

1 STATE OF ILLINOIS)
2 TWENTIETH JUDICIAL CIRCUIT) SS
3 COUNTY OF ST. CLAIR)
4

5 I, Kimberly Ganz, one of the Official Court Reporters, do
6 hereby certify that the foregoing transcript is a true and
7 correct transcript of the proceedings had in the
8 above-entitled cause.

9 Dated this 17th day of April, 1986.

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KIMBERLY GANZ

1 STATE OF ILLINOIS)
2 TWENTIETH JUDICIAL CIRCUIT) SS
3 COUNTY OF ST. CLAIR)
4

5 I, RICHARD P. GOLDENHERSH, one of the Judges in and for
6 the Twentieth Judicial Circuit, do hereby certify that the
7 foregoing transcript is a true and correct transcript of the
8 proceedings had in the above-entitled cause.

9 Dated this 7th day of April, 1986.

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HON. RICHARD P. GOLDENHERSH

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