

1 MR. TAYLOR: I object to that.

2 MS. BERNOTT: I object too.

3 MR. TAYLOR: It's already been testified.

4 SPECIAL MASTER SCHREIBER: Read the
5 question back, Ms. Reporter.

6 (The question is read by the reporter.)

7 MS. BERNOTT: Your Honor, may I clarify
8 my objection. I don't think it's appropriate
9 questioning for the witness for Mr. Rivkin to repeat
10 the question 5 times, because the last 4 times he
11 did not get an answer he is happy with.

12 SPECIAL MASTER SCHREIBER: The question
13 is objected to as to form. It will be rephrased.
14 The lawyer has the right to ask the witness
15 questions even on the subject that's been covered,
16 if the answers are not entirely clear or if the
17 witness is unable to give a complete answer for
18 whatever the reasons be. All right.

19 Q. Sir, is it a fact that commercial grade --
20 the commercial formulation of 2,4,5-T, as you knew
21 it, was different from the formulation of 2,4,5-T as
22 used in Agent Orange?

23 MR. TAYLOR: I object.

24 MR. TAYLOR: That was not a re
25 formulation of the objection.

1 SPECIAL MASTER SCHREIBER: The objection
2 is overruled. The witness will answer it if he can?

3 A. When you say the commercial formulation, do you
4 mean the patented trademark name item put on the
5 shelf by the various manufacturers?

6 Q. I'll accept that as your understanding, if
7 that's what you understand, sir.

8 A. Yes, it different from the Agent Orange
9 formulation.

10 Q. Could you tell me how, sir.

11 A. Agent Orange had no diluents. It was composed
12 of approximately 50 percent 2,4-D butyl ester and
13 2,4,5-T butyl ester, commercial formulations had
14 diluents and surfactants, and whatever else.

15 MR. SILBERMAN: Excuse me, what is that
16 one word you keep using? I didn't get it.

17 MR. DEAN: Diluents

18 SPECIAL MASTER SCHREIBER: A diluent is a
19 dilution to the formula?

20 A. Yes.

21 SPECIAL MASTER SCHREIBER: I was waiting,
22 after a day and a half, to see if somebody would
23 ask what the witness meant by diluent?

24 MR. RIVKIN: Did we get an answer?

25 Q. What do you mean by diluent.

1 SPECIAL MASTER SCHREIBER: All right.
2 You may answer it again, doctor, if you can.

3 MR. RIVKIN: I'm sorry, sir?

4 A. Diluent is generally an inert material that's
5 added to the active ingredient.

6 Q. Do you know --

7 SPECIAL MASTER SCHREIBER: For what
8 purposes? Why is it added?

9 SPECIAL MASTER SCHREIBER: I mean --

10 MR. RIVKIN: Stay with it. That's
11 beautiful.

12 SPECIAL MASTER SCHREIBER: I mean what
13 purpose is there to putting it into something? Why
14 would someone use a diluent? Does it have something
15 to do to lessen its powerful effect or something
16 like that.

17 A. Well, generally the material is used diluted,
18 the individual who is going to spray it on his fence
19 row or his mesquite or something like that dilutes
20 it with something or other, either water or diesel
21 fuel and so on. The active ingredient may not be
22 compatible with the solvent or the diluent, and
23 therefore some emulsifiers or a surfactant, which
24 would get it to spread out on the leaves in a better
25 fashion is added, and the purpose of the diluent, in

1 addition to these other inert materials.

2 Q. Was an additional purpose of the diluent
3 to make the product less potent?

4 MR. TAYLOR: Objection.

5 SPECIAL MASTER SCHREIBER: Objection
6 overruled. The witness may answer it?

7 A. It can't make it less potent. All it means is
8 you have got fewer grams or pounds of the active
9 material per gallon. The potency is the same. In
10 other words, a pound of 2,4-D, whether it's diluted
11 or undiluted is going to kill the same number of
12 trees and so on.

13 SPECIAL MASTER SCHREIBER: Why weren't,
14 in your judgment, why did you not recommend
15 dilutants in Agent Orange?

16 A. Logistical factors, military logistical factors.
17 You wouldn't want to, the military did not want to
18 carry around a lot of inert material.

19 Q. Did you recommend its addition, the
20 addition of inert material in the field?

21 MR. DEAN: Judge, here's my objection.
22 We went over this material yesterday. This matter
23 was covered yesterday, I represent to your Honor,
24 and we were all here.

25 SPECIAL MASTER SCHREIBER: Mr. Dean if it

1 answered, and in my judgment if it will not clarify
2 an issue or will not extend the probative approach
3 of the questioning, then it will be sustained.

4 MR. RIVKIN: Okay. Thank you, sir.

5 Q. I think there is an open question. If
6 you would like it repeated.

7 SPECIAL MASTER SCHREIBER: No, I think
8 maybe if you.

9 Q. I'll be glad to repeat it again. Could
10 you tell me, sir, whether you recommended the
11 addition of dilutants in the field?

12 A. Yes, I did. After the first tests in Vietnam,
13 the evaluation showed that there was insufficient
14 volume to cover the area, and we, the evaluation
15 team at that time recommended that the one gallon of
16 then Purple be diluted with two gallons of diesel
17 fuel oil in order to give the larger volume for more
18 effective coverage.

19 Q. Were you part of that evaluation team,
20 sir?

21 A. Yes I was.

22 Q. What year are we talking about
23 approximately?

24 A. 62.

25 Q. Could you tell me with regards to Orange,

1 sir, did you recommend a dilutant in the field?

2 A. No, I did not.

3 Q. Was there a -- I'm sorry.

4 A. It had already been established by Air Force
5 and others that there should be two -- I mean no
6 diluents, that they should spray as straight
7 material.

8 Q. Did you agree with that?

9 A. So when the transfer from Purple to Orange went
10 on, that wasn't a subject for discussion.

11 Q. Did you say that the recommendation was
12 that there were no diluents to be added in the field?

13 A. That's --

14 Q. I just didn't hear you. I am not
15 questioning that's what you said. Is that what he
16 said? Okay?

17 A. Now they never -- well, the people in the field
18 sprayed what was sent to them. There was never any
19 thought that they would do anything with it after
20 they had it in the field or whether they should
21 dilute it--er concentrate it or do anything else with
22 it. They sprayed what was given to them.

23 Q. Were you consulted with regards to
24 whether Agent Orange should -- a dilutant should be
25 added to Agent Orange before being utilized in