

1 A. Four years and two to three months. I stepped  
2 off the committee in March, 1969.

3 Q. Who appointed you?

4 A. I was appointed by President Johnson.

5 (Brief interruption.)

6 Q. Did you also spend some time as an  
7 employee, officer or participating member of the  
8 Institute for Defense Analysis?

9 A. I did.

10 Q. For what period of time, sir?

11 A. I was appointed Vice-President for Research of  
12 the Institute for Defense Analysis in 1966,  
13 September of 1966. Served between 1967 and '68 as  
14 Executive Vice-President, leaving the Institute of  
15 Defense Analysis in August of 1968. I also served  
16 as a member of the Board of Trustees of the  
17 Institute of Defense Analysis in the period 1965  
18 through 1970, March 1970.

19 Q. For any part of that time was work at the  
20 Institute for Defense Analysis your principal  
21 occupation?

22 A. During the period 1965 through 1968, work at  
23 the Institute of Defense Analysis was my principal  
24 occupation.

25 Q. Did there come a time, Dr. MacDonald,

1 when you became aware that herbicides or defoliants  
2 were being used in Vietnam?

3 A. Yes.

4 Q. When did you first become aware of that?

5 A. To the best of my recollection, some time in  
6 the March through April time period in association  
7 with my work for the President's Science Advisory  
8 Committee.

9 Q. What year?

10 A. 1965.

11 Q. Did there come a time when you became  
12 aware that one of the constituents of the herbicides  
13 being used in Vietnam or defoliants being used in  
14 Vietnam was a chemical called  
15 2,4,5-trichlorophenoxyacetic acid?

16 A. Yes.

17 Q. Or 2,4,5-T?

18 A. Yes.

19 Q. Would you understand the term 2,4,5-T if  
20 I used that term?

21 A. Yes.

22 Q. May I use the term PSAC --

23 A. Yes.

24 Q. To describe the President's Science  
25 Advisory Committee.

1           Would you describe the circumstances in  
2           which you became aware that 2,4,5-T was a  
3           constituent of herbicides or defoliants being used  
4           in Vietnam?

5           A.    To the best of my recollection, there was a  
6           subgroup of PSAC concerned with biological chemical  
7           warfare. In the deliberations of that group, the  
8           issue of the use of herbicides and the presence of  
9           dioxin in the herbicides was discussed. It was  
10          brought before the full committee for informal  
11          discussion during the period April, 1965 through, I  
12          would say, June or July. I do not recall the exact  
13          date, nor do I have the record.

14                MS. WHEELER: Could I have that answer  
15          read back, please.

16                (The answer is read by the reporter.)

17                MR. ADAMS: I move to strike the answer  
18          as not being responsive, subject to the Doctor's  
19          connecting his first contact or his first knowledge  
20          with his original answer.

21                Q.    I guess I didn't say that at the  
22          beginning, but lawyers can say anything they want.  
23          Your job is you are supposed to answer the questions,  
24          unless the government tells you that the answer  
25          would involve -- that's up to the government to

1 explain. And by government I mean Ms. Wheeler.

2 Was the subject of the presence of dioxin  
3 in 2,4,5-T discussed by the subgroup on biochemical  
4 warfare of the President's Science Advisory  
5 Committee in your presence?

6 A. Yes.

7 Q. Who were the members of that subgroup  
8 that were present when the presence of dioxin was  
9 discussed?

10 A. To the best of my recollection, Philip Handler,  
11 Melvin Calvin, and I believe, I'm unclear in my  
12 recollection, but I believe Frank Westheimer, and  
13 William McElroy.

14 Q. Were any staff members of the Office of  
15 Science and Technology present during those  
16 discussions?

17 A. To the best of my recollection, Vincent McRae.

18 MR. ADAMS: What's the name, Doctor?

19 THE WITNESS: Vincent McRae, M-c-R-a-e.

20 Q. When did those discussions, that is to  
21 say those in the subgroup as distinguished from  
22 those of the full committee, take place?

23 A. In the period March through July, 1965.

24 Q. To the best of your recollection, Dr.  
25 MacDonald, what was said in the course of those

1 discussions and who said it?

2 MR. ADAMS: I'll object to it initially,  
3 but you can answer, Doctor.

4 A. The discussions related to, first, the use of  
5 herbicides, their military effectiveness, and the  
6 issue of potential toxicity was raised. To the best  
7 of my recollection, Dr. Handler and Dr. Calvin were  
8 involved in these discussions.

9 MR. GROSS: Is that Calvin?

10 THE WITNESS: Calvin, C-a-l-v-i-n.

11 MR. GROSS: Thank you.

12 Q. To the best of your recollection, Dr.  
13 MacDonald, what was said in these discussions, and  
14 by whom, about the subject of the potential toxicity  
15 of 2,4,5-T?

16 MR. ADAMS: Objection for the record.  
17 You can answer it.

18 A. The question of whether the material was  
19 potentially toxic was discussed, and the evidence  
20 relating to the potential toxicity was discussed.

21 Q. To the best of your recollection, Doctor,  
22 what was said in these discussions, and by whom,  
23 about the presence of dioxin in 2,4,5-T?

24 MR. ADAMS: Objection.

25  
26 discussion between Dr.

1 Handler and Dr. Calvin about dioxin, what was known  
2 about the chemical, the chemistry of dioxin and its  
3 potential toxicity.

4 Q. Was the dioxin discussed identified as  
5 2,3,7,8-tetrachlorodibenzo-p-dioxin?

6 A. To the best of my recollection, yes.

7 Q. What was said by Dr. Handler and Dr.  
8 Calvin about the potential toxicity of dioxin?

9 MR. ADAMS: Objection.

10 Q. And by that term I mean that long  
11 chemical name I just gave you.

12 A. Yes, sir.

13 There was a discussion about the evidence,  
14 as I recall. Both felt that the evidence was  
15 fragmentary and inconclusive, but that it was a  
16 subject that deserved continuing attention.

17 Q. What was said in the course of those  
18 discussions about specific indications of the  
19 toxicity of dioxin?

20 MR. ADAMS: Objection.

21 A. I do not recollect.

22 Q. Do you recall anything being said in  
23 those discussions about a skin ailment known as  
24 chloracne?