

1 Agent Orange, there was an orange barrel that was used in
2 Vietnam to dispense certain matters.

3 Is 2,4-D a component part of Agent Orange?

4 MR. ORTEGO: A type of 2,4-D was a component
5 part of Agent Orange. However, the 2,4-D which was a
6 component part of Agent Orange is a different chemical
7 than the chemical that is in Tordon 101.

8 THE COURT: Are there two different types of
9 2,4-D?

10 MR. ORTEGO: There are many types of 2,4-D, and
11 very different types, distinctly different.

12 THE COURT: And this is a 2,4-D case?

13 MR. ORTEGO: Yes, it is, Your Honor. And what I
14 would like to also let the Court know is that in the Agent
15 Orange litigation, on the stipulation of plaintiff's counsel,
16 all evidence regarding 2,4-D was dismissed voluntarily by
17 the plaintiffs in Agent Orange, and 2,4,5-T and dioxin was
18 the bad actor; and that it was a stipulation by plaintiff's
19 counsel, which Mr. Baldwin was, that 2,4-D was not in the
20 Agent Orange case because it wasn't the bad actor.

21 But what I have to emphasize, Your Honor, is
22 that the 2,4-D in the Tordon 101 is very different
23 chemically and its effects than any formulation of 2,4-D
24 which went in the Agent Orange. It's ten years older,
25 it's a different process, and it is a different chemical.

1 2,4-D that is in Agent Orange is very different than the
2 2,4-D that's in the Tordon 101.

3 MR. BALDWIN, SR.: Your Honor, if I may say that
4 there will be an awful lot of literature in this case,
5 medical literature, about 2,4-D. Incidentally it will
6 talk about 2,4,5-T. In fact, I don't know hardly a study
7 about 2,4-D that doesn't also involve 2,4,5-T, and
8 incidentally it may mention Agent Orange. And certainly
9 the literature doesn't make the distinctions that Mr.
10 Ortego is making to the Court today. Now if there is such
11 a distinction, then of course I think that would go to the
12 weight. And certainly it is not my intention to get up here
13 and start hollering "Agent Orange" and waving a flag and
14 trying to get a verdict on Agent Orange when really this is
15 2,4-D. I understand my burden is to show that the 2,4-D
16 was the cause of this man's death, and I expect to discharge
17 that burden, but I don't feel like I should be hampered
18 by when a legitimate study comes in that refers to either
19 Agent Orange, or 2,4,5-T, or dioxin in some form, that I not
20 be able to show that in order for the Jury to get the
21 complete picture.

22 MR. ORTEGO: If I can just add one thing, Your
23 Honor. The 2,4-D that's in the Tordon 101 was put on the
24 market in 1947, regulated by the EPA -- was studied all
25 those years. Agent Orange was on a limited time. The 2,4-D

1 which is in the Tordon 101, is still manufactured and
2 regulated by the EPA -- totally different. As you know,
3 there is no Agent Orange anymore, but the EPA and the
4 government still allows the special 2,4-D that we make
5 in the Tordon 101 to be manufactured. It pre-existed
6 Agent Orange; it survived Agent Orange; it's different.
7 And there are thousands of studies on 2,4-D alone --
8 thousands of studies of 2,4-D alone. It has nothing to
9 do with 2,4,5-T because it is a chemical that existed
10 before 2,4,5-T; it exists now, it's all over. You can go
11 to your store and buy it. It's a totally different
12 chemical.

13 And what I am concerned, Your Honor, is that his
14 experts say it's the 2,4-D. One of his own experts, Dr.
15 Hay, says he doesn't think there is any dioxin in 2,4-D.
16 That is the bad actor. And I think if we open the door
17 at this point for Agent Orange and 2,4,5-T, which is a
18 chemical totally unrelated, my client will not be able to
19 get a fair trial.

20 I don't have to talk about the Vietnam War, but
21 everyone knows Agent Orange and Vietnam go synonymously,
22 and the prejudice that will go to my client with regard to
23 that -- and there is no relevance, and if there is no
24 relevance whatsoever -- if there is a particular study
25 that you come up with that you think is so relevant, we

1 can redact those portions that talk about Agent Orange.
2 This chemical, Tordon 101, has nothing to do with Agent
3 Orange chemically nor commercially.

4 THE COURT: I am going to adhere to my prior
5 ruling. Any other matters to be brought up at this time
6 before we bring the Jury in?

7 MR. ORTEGO: One other matter, Your Honor.

8 THE COURT: All right.

9 MR. ORTEGO: And I will be quick. It's a matter,
10 a little personal, with me. The Court ordered attorney's
11 fees against me on a matter, and I think there was some
12 miscommunication, and for my own reputation, with regard
13 to this \$750, I'd like to talk to the Court about that.

14 THE COURT: Have you attorneys worked all the
15 problems out that called for that sanction?

16 MR. ORTEGO: Yes, Your Honor, we have.

17 MR. BALDWIN, SR.: Yes, Your Honor.

18 THE COURT: All right, I will go ahead and do
19 away with that attorney's fees sanction.

20 MR. ORTEGO: I appreciate that. Thank you, sir.

21 THE COURT: All right. Yes, sir?

22 MR. BALDWIN, SR.: Well, he was to give us the
23 file of Dr. Newton.

24 MR. ORTEGO: I have that. I will give that to
25 you. That is not a problem.

1 THE COURT: Well, do you want it now?

2 MR. BALDWIN, SR.: Yes, sir.

3 MR. ORTEGO: It is being shipped. It should be
4 in the hotel now. I can get it to you within ten minutes.
5 If you want I can get that right now for you. I just did
6 not bring it with me, but I have got it. It is an expert's
7 deposition that was taken, Your Honor, and I had the file
8 shipped to me here in Marshall.

9 THE COURT: Have that to Mr. Baldwin before noon.

10 MR. ORTEGO: I will do that now, sir.

11 THE COURT: All right.

12 MR. ORTEGO: There is just one other matter.

13 I think, Mr. Baldwin, you are going to play the tape, I
14 assume, of Mr. Greenhill?

15 MR. BALDWIN, SR.: (Nodding affirmatively)

16 MR. ORTEGO: Have you redacted it pursuant to
17 the Court's Order?

18 MR. BALDWIN, SR.: Yes, Your Honor, we have taken
19 out the portion of the tape in accordance with the Court
20 Order eliminating the references to marijuana and eliminated
21 the matters that you were objecting to.

22 MR. ORTEGO: Okay, because there were just
23 certain lines -- not many, so it shouldn't have hurt the
24 tape, which the Court said had to come out. As long as
25 those are out. I didn't want to interrupt when you played

1 the tape.

2 MR. BALDWIN, SR.: That has been done, Your Honor.

3 THE COURT: All right.

4 MR. BALDWIN, SR.: Thank you.

5 THE COURT: Anything else before we bring the
6 Jury in?

7 MR. BALDWIN, SR.: On this motion, on this Order
8 of the Court, I intended to go through documents with my
9 expert, and just about every document I have got refers
10 to 2,4,5-T as one of the family of the phenoxys. I
11 certainly wish the Court would relax his order to let us
12 refer to those other chemical compounds. I would certainly
13 be willing not to refer to Agent Orange in any form, or
14 to Vietnam or to napalm, but --

15 THE COURT: Now let me ask you this, and I am not
16 trying to cut anybody off from their legitimate proof --

17 MR. BALDWIN, SR.: I don't see how I can prove
18 my case if I can't mention those.

19 MR. ORTEGO: What I would be willing to do, I
20 can come up --

21 THE COURT: Just a minute.

22 MR. ORTEGO: I am sorry, Judge.

23 THE COURT: I am not trying to cut anybody off
24 from proving their case, but I can see very readily why if
25 we interject Agent Orange in this case, when I understand

1 that it is not part of 2,4-D, that it is going to prejudice
2 the rights of this Defendant. I don't think there is any
3 question about that.

4 MR. BALDWIN, SR.: First of all, I don't intend
5 to inject Agent Orange, as such.

6 THE COURT: Well, if you mention and start talking
7 about Agent Orange, the mere mention of it, Mr. Baldwin,
8 is an inflammatory thing.

9 MR. BALDWIN, SR.: Well, can we show documents
10 that refer to 2,4,5-T? You see, one of our claims is that--
11 there is this document that we fought over--that the 2,4,5-D
12 process has impurities in the form of dioxins. Now, I am
13 not talking about Agent Orange now. I am talking about
14 another phase of the Court's ruling on those impurities.
15 Certainly we ought to be able to show that to the Jury.

16 THE COURT: Show the 2,4,5-T?

17 MR. BALDWIN, SR.: 2,4,5-D.

18 THE COURT: "D."

19 MR. ORTEGO: 2,4-D.

20 THE COURT: 2,4,5-T is the way it's mentioned.

21 MR. ORTEGO: It is a different chemical.

22 MR. BALDWIN, SR.: 2,4-D.

23 THE COURT: Is 2,4,5-D a dioxin that is a part of
24 2,4-D?

25 MR. BALDWIN, SR.: No, Your Honor. Let me back up.

1 It's 2,4-D is a chemical substance referred to as phenoxy
2 acid, and there is 2,4,5-T which is another phenoxy acid.
3 I don't say that that's what caused this man's problem,
4 but in a lot of these documents -- I just don't see how --
5 the studies go together, they refer to 2,4,5-T, they refer
6 to 2,4,5-D. There is literature that says that 2,4,5-D will
7 do one thing, and 2,4,5-T may do something else. I think,
8 you know, that's what I want to show.

9 Now there are dioxins that we say are chemical
10 compounds that are inherent in the process of 2,4-D, and
11 certainly -- you know the Jury may not believe us. They
12 may come and run over us with a truck and prove we are
13 wrong, but certainly if our expert claims that and thinks
14 that, he ought to be able to tell it to the Jury and show
15 the documentary evidence to support it.

16 MR. ORTEGO: I guess I can -- if I can help out,
17 Judge, I think I have a solution to the problem.

18 MR. BALDWIN, SR.: I don't care about mentioning
19 Agent Orange, as such.

20 THE COURT: I am not going to allow you to mention
21 Agent Orange, Vietnam, or napalm.

22 MR. BALDWIN, SR.: All right.

23 MR. ORTEGO: The only other thing, Judge, is
24 that --

25 MR. BALDWIN, SR.: I think I can try my case with

1 that.

2 MR. ORTEGO: No, I think I could find a compromise
3 that will work, and that's why I didn't mean to interrupt.
4 There is no 2,4,5-T in Tordon 101. That was in Agent
5 Orange. That is the bad actor. I mean --

6 MR. BALDWIN, SR.: 2,4-D was also in Agent Orange.

7 MR. ORTEGO: Okay. But what I am willing to do
8 is I read your expert's deposition. I don't know your case
9 better than I do (sic). It's your expert's contention that
10 there are contaminants in 2,4-D and there are xanthenes,
11 which are not dioxins. I did not put that in my Motion in
12 Limine in fairness because I knew that would not be appro-
13 priate at that point, because that is what they are going to
14 rely on. If your expert talks about impurities, such as
15 xanthenes, that should be allowed. I have no problem, if
16 you can prove relevancy. But there is no evidence about
17 that. The impurities you should be able to talk about.
18 I have no problem with that, and I will gladly sit down
19 with the documents with you after court to work it out.
20 But dioxin has been associated, according to some papers,
21 with 2,4,5-T, not with 2,4-D, not with Tordon 101. It's
22 the xanthenes that Dr. Teitelbaum wants to talk about, and
23 I think that's fair. And when we get to the impurities,
24 if the documents -- I will sit down with you, I will work
25 it out, but I don't think he should be talking about the

1 2,4,5-T which has nothing to do with this case. It's really
2 guilt by association, the Agent Orange, napalm, or Vietnam.
3 But if you want to talk about 2,4-D, the chemical which we
4 have here, and the impurities that can be in 2,4-D, I don't
5 have a problem with that. I think that's fair.

6 MR. BALDWIN, SR.: You know, the only way I am
7 going to refer to 2,4,5-T is where it is incidentally
8 mentioned in a study I use.

9 MR. ORTEGO: But if it is not in the product,
10 what relevance does it have?

11 THE COURT: Are you trying to prove that 2,4,5-T
12 had anything to do with the death of Mr. Peteet?

13 MR. BALDWIN, SR.: No, sir.

14 THE COURT: Well, why do you want to mention it?

15 MR. BALDWIN, SR.: Well, because they are so
16 intermixed in the documents that I have, I don't see how --
17 I don't see how we could take every reference to 2,4-T out
18 of the documents, and if we did it wouldn't make any sense.
19 I think you can cure that with an instruction, Your Honor.
20 There is nothing inflammatory about the word "2,4,5-T."

21 THE COURT: No, I understand that. But what I
22 am trying to get through my head is if 2,4,5 -- and I am
23 asking for information from both of you gentlemen -- if
24 2,4,5-T, which is the designation of all of this other
25 stuff here that's mentioned --

1 MR. ORTEGO: Yes.

2 THE COURT: -- if 2,4,5-T has nothing to do with
3 this case with reference to the death of Mr. Peteet
4 why interject it, number one? Number two now, I direct this
5 to Mr. Ortega, I think you will admit that the mere mention
6 of 2,4,5-T has no inflammatory side effects?

7 MR. ORTEGO: It does a little, Judge, because
8 2,4,5-T was taken off the market by the Environmental
9 Protection Agency.

10 THE COURT: I understand, but there is not any-
11 body on this jury who knows that --

12 MR. ORTEGO: Okay.

13 THE COURT: -- and who is going to attach, I don't
14 believe, any inflammatory belief to the mere mention of
15 2,4,5-T.

16 MR. ORTEGO: I agree with you, the mere mention
17 of the word 2,4,5-T, but I don't think Mr. Baldwin is going
18 to stop there. What he is going to say is that there have
19 been studies with 2,4,5-T, there have been some dioxin, and
20 these are all the same. He is going to try to lump that
21 chemical --

22 THE COURT: Well, he has already stated to the
23 Court that he is not trying to prove that 2,4,5-T had
24 anything to do with the death of Mr. Peteet.

25 MR. BALDWIN, SR.: That's right.

1 THE COURT: Now if it calls for an instruction
2 to the Jury that they are instructed that 2,4,5-T will not
3 be considered in any way as having anything to do with the
4 death of Mr. Peteet, I think you are protected. I think the
5 Defendant is protected.

6 MR. ORTEGO: I am not going to sit here and argue
7 on every point. I guess --

8 THE COURT: And from what Mr. Baldwin says, he is
9 not contending that that is a part of any causation on his
10 death, but it is merely a part of a formula or something
11 that you want to introduce?

12 MR. BALDWIN, SR.: Well, Your Honor, here is --

13 THE COURT: Give me an example of how you wish
14 to use 2,4,5-T.

15 MR. BALDWIN, SR.: Here is a document that I
16 intend to offer into evidence, and I have literally maybe
17 40 or 50 medical articles that I want to offer into evidence.
18 And this one says: it is an evaluation of the carcinogenic
19 risk of chemicals to humans; some fumigants, the Herbicides
20 2,4-D and 2,4,5-T, chlorinated dibenzodioxins and miscel-
21 laneous industrial chemicals. Now that is referring to
22 2,4-D, 2,4,5-T; it refers to a lot of other chemicals,
23 and it states whether or not they think they are carcinogens.
24 But that's one article that I want to offer.

25 Now, I don't see how I can take this study and use

1 it and have the jury make any sense out of it and not refer
2 to anything in there but 2,4-D.

3 Here is another example, one of the Hardell
4 studies which is going to be important in this case.
5 "Relation of soft-tissue sarcoma, malignant lymphoma and
6 colon cancer to phenoxy acids." 2,4,5-T is a phenoxy acid,
7 chlorophenols and other agents." And there it refers to --
8 it may or may not refer to 2,4,5-T. I don't remember, but
9 I am sure it probably does. But it explains it.

10 I am just saying that it would cripple me to where
11 my case wouldn't make any sense if I couldn't read these
12 documents in context.

13 THE COURT: Well, you are still not contending
14 that 2,4,5-T had anything to do with the death of Mr.
15 Peteet?

16 MR. BALDWIN, SR.: That is right, Your Honor.

17 THE COURT: I am going to allow you to mention
18 2,4,5-T, with the understanding that the Court will, if
19 it's used, instruct the Jury, by agreement of counsel here,
20 that that has nothing to do with the death of Mr. Peteet.

21 MR. ORTEGO: Okay, Your Honor.

22 THE COURT: All right.

23 MR. BALDWIN, SR.: And the only thing left is
24 reference to dioxins, if we get into that.

25 MR. ORTEGO: Well see, this is where it starts,

1 Judge. That's why I get frustrated.

2 THE COURT: Well now --

3 MR. ORTEGO: There is no dioxin in 2 --

4 THE COURT: There are many dioxins.

5 MR. BALDWIN, SR.: That's right, there are many.

6 THE COURT: There are many dioxins, but you are
7 only claiming and 2,4-D is one of them?

8 MR. BALDWIN, SR.: No, 2,4-D is not a dioxin.

9 THE COURT: It is not a dioxin?

10 MR. BALDWIN, SR.: No, sir.

11 THE COURT: Well, I am getting educated along
12 with how this jury is going to look at all of this business.

13 MR. ORTEGO: They are going to get confused, and
14 that is why I am concerned if we start bringing in other
15 chemicals --

16 MR. BALDWIN, SR.: That is my job.

17 MR. ORTEGO: I know that's your job, and I don't
18 think that is fair.

19 THE COURT: I am going to allow 2,4,5-T to be used
20 in the perspective that I just indicated, with the under-
21 standing that the Court will instruct at the proper time
22 that 2,4,5-T will not be considered by the jury in any way
23 as causing any illness or death of Mr. Allen Peteet.

24 MR. BALDWIN, SR.: And let me -- may I make a
25 suggestion on dioxins? Let me go into it, and if the Court

1 feels I am going into it in an improper way --

2 MR. ORTEGO: No.

3 MR. BALDWIN, SR.: -- then instruct the jury and
4 tell me what I can and can't do.

5 THE COURT: Well, just don't get into it until you
6 approach the bench.

7 MR. BALDWIN, SR.: All right.

8 MR. ORTEGO: I think so, because I don't think,
9 Judge, if dioxins are mentioned, unless there is some
10 connection.

11 THE COURT: I am not going to try this case on
12 some theory that is not here.

13 MR. ORTEGO: That is what I am afraid of.

14 MR. BALDWIN, SR.: Well, I don't have any
15 intention of doing that, Judge.

16 MR. ORTEGO: So we will approach on dioxins.

17 THE COURT: I understand. But I am just not
18 going to get into the record anything that's not --

19 MR. ORTEGO: Fine, that's fair, Your Honor.

20 THE COURT: -- substantive to the trial of this
21 case.

22 MR. ORTEGO: Thank you, Your Honor.

23 THE COURT: Anything else before we --

24 (Mr. Baldwin, Jr. standing)

25 THE COURT: All right, sir.

1 MR. BALDWIN, JR.: I know it's by accident, but
2 you keep referring to this case as Peteet and it's Ms.
3 Greenhill.

4 THE COURT: I understand, but it started
5 out that way but it is Mrs. Greenhill now.

6 MR. BALDWIN, JR.: Yes, sir.

7 THE COURT: All right.

8 MR. ORTEGO: Judge, I would like to invoke the
9 Rule with regard to witnesses who are going to testify
10 about sitting in the courtroom.

11 MR. BALDWIN, SR.: Is Mr. Pierce going to
12 participate in the trial or is he going to be a witness?

13 MR. ORTEGO: Mr. Pierce is a lawyer. He is my
14 partner, so he is not going to be a witness. He is with
15 my law firm.

16 MR. BALDWIN, SR.: I understand. I just didn't
17 know if he was going to participate. He told the Jury
18 Monday he was not.

19 MR. ORTEGO: Oh, no, Dr. Pierce is not an expert
20 witness, even though it would be economical, I guess.

21 THE COURT: All right, do you want to invoke
22 the Rule before we select the jury?

23 MR. ORTEGO: Before we open, yes, please, Your
24 Honor.

25 THE COURT: All right. Those who are to testify

1 in this case that are not parties to this suit, please stand
2 and be sworn as a witness.

3 THE COURT: Well, evidently we have no one here.
4 If anyone comes in the courtroom, I just leave that
5 responsibility with the attorneys to advise the Court that
6 a witness is in the courtroom. At that time we will invoke
7 the Rule.

8 MR. ORTEGO: Yes, Your Honor.

9 THE COURT: Bring the Jury in, please. I am going
10 to give each side fifteen minutes to voir dire the jury at
11 the proper time.

12 MR. BALDWIN, SR.: You mean to make opening
13 statements?

14 THE COURT: Make the opening statements.

15 (Jury in at 9:23 a.m.; open court, all parties present)

16 THE COURT: The Court calls the case of Ann
17 Greenhill, et al, versus Dow Chemical Company. What says
18 the Plaintiff?

19 MR. BALDWIN, SR.: The Plaintiff is ready, Your
20 Honor.

21 THE COURT: The Defendant?

22 MR. ORTEGO: The Defendant is ready, Your Honor.

23 THE COURT: All right. Ladies and gentlemen,
24 we have had some matters that we had to take up out of the
25 presence of the jury, so that is the reason for this slight

1 delay this morning.

2 Ladies and gentlemen, let me take a few minutes
3 to discuss your role in this case, my role and the role
4 that will be played by the lawyers and participants. We
5 start, when we don't have prior motions and things to take
6 care of, at nine o'clock. We will go until about ten or
7 ten fifteen and take a ten to fifteen minute break, and
8 we will come back and go until noon, and then recess until
9 one thirty, come back and go until about two fifteen or two
10 thirty; we will take a break then, and then come back and
11 go until five o'clock. Now we are not going to go until
12 five today because the Court has a matter that he has got
13 to take up. We are going to adjourn today at four o'clock.

14 You and I share a similar role but one that has
15 some basic differences. We both will serve as judges of
16 this case -- you will judge the facts and I will judge the
17 law. It will be my responsibility to generally manage the
18 trial, make any legal rulings that may be necessary during
19 the course of the trial. I will rule on questions of
20 evidence, and then I will give you some instructions at
21 the conclusion of this trial. It will be my responsibility
22 to generally manage the trial, as I say, and make any
23 legal rulings that might be necessary.

24 Keep in mind that you are the sole and exclusive
25 judges of the facts of this case. You are to determine

1 from the evidence admitted in this record what really
2 happened. Now there are some restrictions on the manner
3 in which you have to make that judgement. First, you must
4 restrict your judgement to the evidence that is admitted
5 in the record of this case. What you have seen or heard
6 outside the courtroom or may see or hear outside the
7 courtroom during the course of trial is not evidence.

8 Now evidence will come to you basically in two
9 forms. First, direct and indirect evidence. Direct
10 evidence is usually an account of an occurrence by an
11 eyewitness who might testify: "I was at a certain place
12 at a certain time and saw a certain thing happen."

13 Indirect evidence is many times referred to as
14 "circumstantial evidence." Circumstantial evidence, or
15 indirect evidence, is proof of a chain of circumstances
16 that points either to the existence or non-existence of
17 a fact or facts in controversy.

18 For organizational purposes, if there are exhibits
19 introduced into evidence, the Court will require that they
20 are numbered Plaintiff's Exhibit 1, 2, 3, 4 -- whatever;
21 Defendant's Exhibits 1, 2, 3, 4, 5. They may be of tangible
22 items, such as pieces of property, pieces of equipment,
23 medical reports, medical bills, or some sort of engineering
24 report, or whatever. If they are received in evidence,
25 then they will be available for you to examine during your

1 deliberation process. Now, I will probably restrict your
2 access to the exhibits during the course of the trial
3 because it is difficult for you to examine an exhibit
4 there in the jury box and listen to someone testify here
5 at the same time. Now it may be at some point in the case,
6 and I will say this to the attorneys, you may find it
7 necessary to have some bit of evidence given to the jury
8 to examine, so bring it to my attention and we can work
9 something out in that regard.

10 As you perform your role as a judge of the facts,
11 it is appropriate for you to consider any matter in evidence
12 that tends to indicate to you whether a particular witness
13 or a particular piece of evidence is credible and worthy of
14 your belief. You may and should consider a witness's manner
15 and demeanor on the stand, the witness's age, educational
16 experience, the witness's background, what opportunity the
17 witness might have had to observe what he or she may be
18 testifying about. Consider whether the testimony of a
19 witness is supported or contradicted by other evidence in
20 this case. These are all factors that you can use in your
21 subjective evaluation of the evidence to determine whether
22 it makes sense, whether it is believable and credible and
23 worthy of you basing a judgement on that testimony. This
24 is where your common sense enters into the picture.

25 The first thing you will hear during this trial

1 will be the opening statements of the lawyers. The
2 attorneys will not argue the case at this point. The
3 proper role for counsel during their opening statement
4 is to apprise the jury of his contentions, what he expects
5 to prove, who the witnesses may be, and how the evidence
6 in this case fits with the legal rules that govern this
7 type of case.

8 When the opening statements are concluded, we
9 will then move into the evidence phase of the trial. When
10 the evidence is over, then you will hear arguments of the
11 lawyers and receive instructions from the Court. Now that
12 is the appropriate time for the lawyers to argue the case
13 to you. That is when they try to persuade you how you should
14 view the evidence and what your verdict should be. Then
15 you will begin your decision-making process, that is your
16 deliberations of this case.

17 Now keep in mind that during the course of this
18 trial it would be inappropriate for you to discuss this
19 case with anyone or permit anyone to discuss it with you
20 or in your presence. It also, in my opinion, is inappro-
21 priate for you to begin discussing the merits of this case
22 even with one another until you have heard all the evidence
23 and received the Court's instructions. Therefore, I ask
24 you to wait until the case is over and have your joint
25 discussions of the evidence during the deliberation phase.

1 You should not read or listen to anything touching
2 on this case in any way. If anyone should try to talk to
3 you about it, and I am sure they will not, but if they do
4 bring it to my attention immediately.

5 Now, don't try to do any research or make any
6 investigation about this case on your own. Do not form any
7 opinion until all the evidence has been presented. Now
8 remember that the Plaintiff in this case has the burden of
9 proof and must prove her case to your satisfaction by a
10 preponderance of the evidence. Preponderance of the evidence
11 means that the facts in controversy are more likely true
12 than not true. It means the greater weight and degree of
13 credible testimony.

14 Now certain things are not evidence and must not
15 be considered by you, and I am going to list them for you
16 now. First, statements, arguments and questions by the
17 lawyers does not constitute evidence. It is not evidence.
18 Objections to questions that are asked are not evidence.
19 Now lawyers have an obligation to their client to make
20 an objection when they believe that the evidence that is
21 being offered is improper under the Rules of Evidence. You
22 should not be influenced in any way by the Court's ruling.
23 If the objection is sustained by me, ignore the question.
24 If the objection is overruled by me, treat the answer like
25 any other. If you are instructed that some item of

1 evidence is received for a limited purpose only, you must
2 follow that instruction.

3 Third, testimony the Court has excluded, or told
4 you to disregard, is not evidence and must not be considered
5 in any way. Four, anything you may have seen or heard out-
6 side the courtroom is not evidence and must be disregarded.

7 Now after these opening statements have been
8 given, which will follow this, the trial begins. The
9 Plaintiff will present his witnesses and the opposing
10 party or parties may cross-examine those witnesses. The
11 Defendant will present his witnesses, and the Plaintiff has
12 the opportunity to cross-examine those witnesses.

13 After that portion of the trial has been com-
14 pleted, the attorneys will then make their closing arguments
15 and will summarize and interpret the evidence, and try to
16 interpret that evidence for you. The Court will at this
17 point give you instructions on the law after which time you
18 will then retire to deliberate on your verdict.

19 Now this concludes the preliminary remarks and
20 instructions, and I assume we are now ready to proceed?

21 MR. BALDWIN, SR.: Yes, Your Honor.

22 THE COURT: Have any witnesses or persons come
23 into the courtroom since the reading of the charge that
24 would probably be witnesses in the case?

25 MR. ORTEGO: No, Your Honor.

1 THE COURT: All right, the Plaintiff has
2 fifteen minutes to make the opening statement.
3
4

5 MR. BALDWIN, SR.: May it please the Court and
6 ladies and gentlemen of the Jury. As you recall, I
7 am Scott Baldwin, and I represent Ms. Greenhill. And
8 this case involves the sad story of the death of her
9 husband, James Greenhill, who prematurely met his death
10 as a result of dying of cancer.

11 Mr. Greenhill worked in the National Forest
12 because he wanted to be outside. He was what is commonly
13 referred to as a "hacker and a squirter." He worked
14 with various herbicides, predominately 2,4-D and Tordon
15 101. Tordon 101 is a mixture of 2,4-D and picloram. All
16 of these chemicals were made by Dow Chemical Company.

17 Now, Mr. Greenhill was heavily exposed to these
18 chemicals that I have mentioned. At the end of the day he
19 would come home his pants leg would be literally soaked and
20 sticking to his skin. His job required him to hack a tree
21 and then to carry a jug around and squirt where they hacked
22 in order to kill the big trees in the forest.

23 He had a red rash that came about almost immed-
24 iately and didn't go away. He contacted lymphoma, which is
25 cancer, cancer of the lymph system, and he died a very

1 lymphoma. Lymphoma is simply a cancer of the lymph system.
2 The lymph system is a system in your body that carries
3 fluids, kind of almost like your blood system; and there
4 are various kinds of cancers of the lymph system, one of
5 which is Hodgkin's disease, which is a disease that is very
6 little understood. Some people have described it as bizarre,
7 and it is very difficult to diagnose. There are highly
8 qualified doctors who will disagree about the diagnosis of
9 Hodgkin's disease. It's like you hear the old story about
10 the monks used to sit around in years of old and argue
11 about how many angels can dance on the head of a pin, for
12 endless hours. That's almost the way it is about diagnosing
13 Hodgkin's disease.

14 But this Defendant says, "No, it's Hodgkin's
15 disease. It's that; it's nothing else." They have
16 assembled a veritable team of doctors from around the
17 country to come and tell you their story; and you will hear
18 them. I say that I don't think it's Hodgkin's disease, but
19 that it doesn't matter. It's lymphoma, cancer of the lymph
20 system, and it's our burden to show to you that it was caused
21 by his exposure to 2,4-D. And I submit that I don't think at
22 the end when you have to answer questions for the Court,
23 he's going to ask you one question about Hodgkin's disease.
24 The question you are going to have to determine is did the
25 Defendant make a product that was dangerous? ^① Did they fail

1 to warn the Plaintiff of its dangers? And ^③was that a
2 proximate cause of his death? And I submit to you that
3 we will bring to you a highly qualified toxicologist who
4 will say that the answer to that question is yes, that 2,4-D
5 in his opinion, contributed to the death of Mr. Greenhill.

6 And I submit to you further that we will bring
7 overwhelming evidence that they failed to make any kind of
8 warning about the serious nature of 2,4-D. They had a little
9 warning about skin irritants, or something like that.

10 So then that turns us to the question of damages.
11 Mr. Greenhill was 38 years of age, a young man. He was
12 married. He loved the outdoors. He was happy. He was
13 kind of laid-back type person. Suddenly he was stricken.
14 He was working with 2,4-D. He was hacking in the forests,
15 as I told you. He didn't know that 2,4-D, Tordon 101, was
16 dangerous. He didn't know it would cause serious neurological
17 problems. He didn't know that it might cause cancer. He
18 didn't know that it would kill you. Nobody told him.

19 His illness was diagnosed in 1979, and it progressed
20 till 1986. You will hear how he suffered, how he became
21 deathly ill from the radiation treatments, the chemical
22 therapy he had to take. He vomited hours on end. You will
23 hear how that his suffering was so intense that he talked
24 seriously about taking his own life. You will hear about
25 how they had to stop the chemotherapy because his body

1 couldn't take it any longer. So it will be your duty to
2 award damages in this case, and it is not my purpose now
3 to talk in great detail about the damages, except to say
4 there are certain elements that His Honor will tell you you
5 should consider.

6 First of all, the medical bills are in the range of
7 \$100,000. You will consider what he would have earned had
8 he worked over his life expectancy and contributed to his
9 family. You will consider his care, nurture and guidance
10 to his family, and how they have lost it. You will consider
11 the loss of society, the loss of household services. What
12 is it worth to be a husband or to lose a husband? And,
13 finally, you will consider the tremendous suffering he went
14 through.

15 I submit to you that you can't return Mr. Greenhill;
16 you can only return a verdict for money damages, and that
17 damages in the range of \$3 million would not be inappropriate
18 in this case for the loss of a father and for the loss of a
19 husband. Thank you very much.

20 MR. ORTEGO: May it please the Court, Mr. Baldwin,
21 ladies and gentlemen of the Jury. The last time I spoke to
22 you was about two weeks ago during voir dire. I would like
23 to thank you all for your patience during that time, which
24 some of you thought probably got very tedious; but that was
25 a very important stage for Mr. Baldwin and myself, because

1 we feel we have now selected seven intelligent people who
2 have agreed to judge the facts on this case without con-
3 sideration of sympathy or prejudice.

4 Now, His Honor will instruct you that the burden
5 of proof is on Mr. Baldwin, and you all promised that you
6 would not hold that against me. I need not prove anything.
7 Mr. Baldwin must prove that we are responsible for his
8 client's death. But it won't be that difficult for you in
9 some ways. I anticipate you will see evidence.

10 Now, Mr. Baldwin just told you his story, and he
11 told it very well. He told you about a man who lived and
12 worked in Oregon, and a man who suffered and lived with his
13 family and died in Arkansas.

14 As we talked about in jury selection, there are
15 two sides to every story. Mr. Baldwin just told you his
16 side, and if it were as simple as he just made it out to be,
17 there would be no need for any of us to be here. I am going
18 to tell you our side of the story, and I submit to you Mr.
19 Baldwin's side was not completely correct and it was incom-
20 plete.

21 I would now like to discuss with you our side of
22 the story. But before I do that, I think it is very
23 important that we talk about one thing. I don't want you
24 to get frightened by this case. We will talk about the
25 sympathy a little later. I don't want you to sit there and

1 say, "Oh, this is a science case. I can't deal with this.
2 This is above me." You are sitting here as jurors because
3 you can deal with this. Don't get frightened away by this
4 case. Keep in mind that the same common sense that you are
5 going to use in your home when you make an important decision
6 is what you are going to do here. Don't get fooled. Stick
7 to the hard, cold facts -- not suggestions, not innuendos,
8 not emotion -- facts. Look at the evidence, and it will be
9 a case that you can decide without any difficulty.

10 To briefly summarize what the Plaintiff contends,
11 Mr. Greenhill was a seasonal employee for the United States
12 Forest Service for 1977 and 1978, or a couple of years in
13 there. What I mean by seasonal is that there are times
14 throughout the year in which the Forest Service would hire
15 people for eight or nine months to work in the forest; and
16 what they primarily did was fight forest fires in Oregon;
17 and they planted trees and they did other work in the Forest
18 Service.

19 There was a time, just like in agriculture, that
20 you can use weed killers, and for a short time Mr. Greenhill
21 did use a weed killer, and he says it was ours, Tordon 101.
22 And that was his exposure for those two years when he was
23 working in the Forest Service, and his exposure will come
24 out later. He was a seasonal, part-time employee, and part
25 of that part-time work in that year he did use weed killers,

1 according to him.

2 Now, he did something, hack and squirt. There is
3 nothing mysterious about that. What you will see is that
4 hack and squirt involves an ax and a Windex bottle, and
5 I think you might hear testimony on that. There is nothing
6 mysterious about this. And Plaintiff contends, rightfully
7 so, Mr. Baldwin (sic) suffered and died. His Hodgkin's
8 disease was diagnosed in 1979.

9 THE COURT: Mr. Baldwin suffered, or Mr. Green-
10 hill suffered?

11 MR. ORTEGO: No, I am sorry, Mr. Baldwin. Mr.
12 Greenhill suffered. I am glad you are listening, Judge.
13 I am sorry, Mr. Baldwin, I apologize, sir.

14 We can't be sure what the witnesses are going to
15 testify to, but we have some idea. And one of the witnesses,
16 I think Mr. Baldwin is going to call, is a Dr. Daniel
17 Teitelbaum. He is the toxicologist he talked about, and you
18 are going to have to evaluate his testimony. And while you
19 evaluate his testimony, keep in mind that Mr. Baldwin is
20 going to have to bring testimony in to you here that our
21 product, which is going to be the 2,4-D caused Mr. Green-
22 hill's Hodgkin's disease. He is going to have to call
23 medical witnesses to do that. I am going to comment on
24 these medical witnesses, but I want you to keep one thing
25 in mind in your daily life -- just because someone says it

1 might be so, it's not necessarily so. And that's what you
2 are here for. You have got to evaluate the witnesses.

3 If Dr. Teitelbaum testifies, I want you to keep
4 a couple of things in mind. When he comes on the witness
5 stand, evaluate his credentials and experience. Ask what
6 his credentials and experience are. Ask yourself when he
7 testifies whether is he believable, or is he really just an
8 advocate for a particular cause? Ask yourself what he
9 relied upon when he gave his opinion? Listen carefully to
10 him when he admits to you that Hodgkin's disease is
11 idiopathic, meaning nobody knows really what causes Hodgkin's
12 disease. The science world doesn't know. Listen carefully
13 when he admits to you that Hodgkin's disease is as old as
14 man. It's been around forever. Listen carefully when he
15 admits to you that Hodgkin's disease inflicted people long
16 before we ever marketed our product that contains 2,4-D.
17 Listen carefully when he tells you that the Environmental
18 Protection Agency of the United States regulates this product
19 and tells where it can go, who can use it, and where you can
20 use it.

21 Now let's keep one thing in mind, that this is
22 going to be an emotional case. There are a lot of diseases
23 out there that the best scientists in the world don't know
24 what causes them. Keep that in mind. And when Dr. Teitel-
25 baum comes and points the finger at us, ask yourself: "Is

1 Dr. Teitelbaum speculating and doing something that no one
2 else really can do?" Keep that in mind when he testifies.

3 Now I told you the burden of proof is not on me.
4 I anticipate we will call witnesses. When our witnesses
5 testify, I want you to use the same standards I have asked
6 you to use on the Plaintiff's witnesses, no favoritism. I
7 want you to test their credentials, ask yourself whether
8 they are believable, and evaluate them. Test them the same
9 way.

10 When you hear from our witnesses that Hodgkin's
11 disease is as old as people, I want you to listen to that.
12 I want you to also listen when you hear "Hodgkin's disease
13 existed long before man did, and long before our product
14 was around." I want you to listen carefully when you hear
15 that Hodgkin's disease inflicts certain age groups. And
16 this was sort of frightening to me, and it might be
17 frightening to some of you on the jury panel -- it likes
18 men in the ages between the twenties and the thirties. It
19 inflicts young men. There is an age group that it generally
20 gets. Listen carefully when you hear that.

21 Listen carefully also when you hear that Hodgkin's
22 disease is a silent disease. And what do I mean that it is
23 a silent disease? You could have it in your body for years,
24 sometimes ten years, fifteen years, and nobody knows you
25 have it. And listen carefully when you hear the witnesses

1 testify that no one can say whether or not that Hodgkin's
2 disease was in Mr. Greenhill's body for ten years, twenty
3 years, or how many years before he even worked for the
4 Forest Service or used our product. Nobody can tell you
5 that.

6 Now, this is very important, and never in this
7 trial will I play down the seriousness of this case. There
8 is one thing that Mr. Baldwin and I agree on -- Mr. Green-
9 hill suffered; Mr. Greenhill died -- we agree. But where
10 we strongly disagree is that we did not do it to him. We
11 are not responsible. We are going to see a tape of Mr.
12 Greenhill. It will bother you. It bothered me. It got me
13 very upset seeing someone of my age dying. And everyone
14 doesn't think it is going to be them. They always get
15 nervous, it can't be me, but it can happen. And there are
16 a lot of diseases we don't know the cause of. I am not
17 playing down the seriousness of this case ever, and you,
18 as good jurors, will have to put your emotions aside. Put
19 them aside and judge the facts, and say, yes, a man suffered,
20 a man died, but we are not responsible.

21 And listen carefully when you learn that the 2,4-D
22 in this case is a product that you and I can go to the store.
23 That chemical, 2,4-D, we can get that chemical now. And keep
24 in mind when you hear testimony how commonly used that
25 chemical is around the United States.

1 I submit to you there will be no believable
2 evidence, and you will have to evaluate believability,
3 it's very important in this case, to show that our product
4 caused Mr. Greenhill's Hodgkin's disease.

5 Now, that's just in general terms what I think
6 the evidence will turn out. I will have another opportunity
7 to speak to you during summation. And at the conclusion
8 of the case in summation I know I will be here again and
9 I will ask you to, one, follow the Judge's jury instructions;
10 two, keep your promise that you could put sympathy aside,
11 emotion aside, prejudice aside, and evaluate the cold, hard
12 facts and return a verdict for us. Thank you.

13 THE COURT: Would the attorneys approach the
14 bench just for a moment, please?

15 (At the bench, off the record discussion with The
16 Court and all attorneys, out of the hearing presence of
17 the Jury)

18 (OPEN COURT)

19 THE COURT: Call your first witness.

20 MR. BALDWIN, JR.: The Plaintiff would like to
21 read the deposition of Andrew Cooper Kier.

22 MR. ORTEGO: Can we approach on that first,
23 Your Honor, before that deposition is read?

24 THE COURT: All right. Do you want a record on
25 this?

1 MR. ORTEGO: I think we do, Your Honor.

2 THE COURT: All right.

3 MR. ORTEGO: It will be brief, though.

4 (AT THE BENCH, on the record, with Messrs, Baldwin, Sr.,
5 and Junior, Gillam, Ortego, Kardisch, Brown and Makulski,
6 out of the hearing presence of the Jury:)

7 MR. ORTEGO: I am going to object to this
8 deposition testimony being read because it has no relevance
9 to the lawsuit, and I will tell you why. Mr. Kier cannot
10 testify to any facts regarding Mr. Greenhill's lawsuit.

11 THE COURT: Who can't testify?

12 MR. ORTEGO: Mr. Kier, who was a person who worked
13 in the United States --

14 THE COURT: I thought this was the Cooper
15 deposition.

16 MR. BALDWIN, JR.: Andrew Cooper Kier.

17 THE COURT: Oh.

18 MR. ORTEGO: He worked for the United States Forest
19 Service. He never worked with Mr. Greenhill, nor, he has
20 testified at his deposition, he never did the type of work
21 that Mr. Greenhill did in the Forest Service. So, he never
22 saw him do anything nor did he even personally do the type
23 of work that Mr. Greenhill did, and anything else would be
24 speculation. What relevance does it have?

25 MR. BALDWIN, JR.: Your Honor, he is going to

1 testify to the fact that Tordon 101 was used in the hack
2 and squirt method at the Forestry, and he had personal
3 knowledge of that.

4 MR. ORTEGO: Where does it say that? I have the
5 lines here.

6 MR. BALDWIN, JR.: (Reading) "At the time I
7 transferred over that summer, they used Tordon 101 and
8 Formula 40. Now they hack and squirt."

9 MR. ORTEGO: The lines in the deposition said:
10 "I never did hack and squirt . . ."

11 THE COURT: I am going to allow the deposition.
12 I don't think it is so much as to the admissibility; it might
13 be the credibility, but I will allow it.

14 MR. ORTEGO: Are you going to read the whole
15 thing --

16 MR. BALDWIN, JR.: I am going to read the whole
17 thing.

18 MR. ORTEGO: -- so it saves me some time then?

19 MR. BALDWIN, JR.: Yes.

20 MR. ORTEGO: Okay, good. Thank you, Judge.

21 (OPEN COURT)

22 MR. BALDWIN, JR.: This is the deposition of
23 Andrew Cooper Kier. Be it remembered that the deposition
24 of Andrew Cooper Kier was taken in behalf of the Plaintiff
25 before Eldon B. Reed, a registered professional reporter

1 and notary public for Oregon on August the 19th, 1987,
2 beginning at the hour of 2:00 p.m., at the Best Western
3 Medford Inn, 1015 South Riverside Avenue, in Medford,
4 Oregon.

5 Your Honor, is it necessary that I read the
6 stipulations between the parties?

7 THE COURT: Unless y'all think that it should be,
8 I have no --

9 MR. ORTEGO: I stipulate that it is accurate.

10 THE COURT: It makes no difference to me one way
11 or the other. The usual stipulations?

12 MR. ORTEGO: Yes, Your Honor.

13 THE COURT: All right, go ahead.

14 (Reading by Mr. Baldwin, Jr. and Mr. Gillam)

15 DIRECT EXAMINATION OF ANDREW COOPER KIER BY DEPOSITION

16 "Q Would you state your full name for the record?

17 "A Andrew Cooper Kier.

18 "Q Mr. Kier, my name is Scott Baldwin, Jr., and I am an
19 attorney along with the attorneys from Dow to take your
20 deposition here today.

21 "A Yes.

22 "Q If I were to ask you a question which you may not
23 understand or might not be clear to you, would you please
24 ask me to back up, rephrase it, and when we leave here
25 we will have a complete understanding of my questions and

1 your answers?

2 "A Yes.

3 "Q How old a man are you, sir?

4 "A Forty-five -- forty-six.

5 "Q And are you married?

6 "A Forty-six in October. No, I am not.

7 "Q What is your present residence?

8 "A 111 Granite Street, in Ashland, Oregon.

9 "Q For whom are you presently working for?

10 "A I am self-employed at the present time.

11 "Q And what type of work do you do, sir?

12 "A I am an environmental consultant, presently working on
13 an environmental assessment for an hydraulic project.

14 "Q How long have you been self-employed?

15 "A Since November of '85 when I left the Forest Service.

16 "Q That was my next question, and when did you start work
17 for the Forest Service?

18 "A I started in 1972.

19 "Q When did you terminate your relationship with the
20 Forest Service?

21 "A November of '85.

22 "Q Could you tell the Jury what some of your job duties
23 were with the Forestry Service from the time period of

24 1970 through -- through '85, starting with 1972?

25 "A The first five years I was a firefighter, and after that

1 I was a silva culture technician.

2 "Q And what is a silva culture technician?

3 "A Silva culture technician is the growing of forest
4 trees, and my job was to survey and report in on conditions
5 and prescribe treatment for forest plantations.

6 "Q Where were you working for the National Forest?

7 "A I worked on the Siskiyou National Forest in Cave
8 Junction until '77, when I transferred to the Applegate
9 Ranger District out of Jacksonville.

10 "Q If I understand you correctly, are these in the Rogue
11 River National Forest?

12 "A The '77 position was when I transferred to the Rogue.

13 "Q Do you know what the term "hack and squirt" means?

14 "A Yes.

15 "Q What does that mean to you?

16 "A Well, there are two different ways, of course. You can
17 use a hatchet that injects the chemical at the time it cuts.
18 But the way we used it in the Applegate was to use a Boy
19 Scout hatchet, and every inch or so around the stem of the
20 weed tree to hack and then take a regular squirt bottle
21 and with a long spout on it, squirt a little bit of
22 approximately one millimeter of chemical into the cut.

23 "Q And what type of chemical was it that the Forest
24 Service used?

25 "A At the time of my -- I transferred over that summer,

1 they used Tordon 101 and Formula 40. Now they hack and
2 squirt.

3 "Q What were they called?

4 "A Well, they were part or one of the silva culture
5 crews, and they were of course some of them I believe
6 were off some of other crews. It was not a crew the
7 next year. We didn't have a real name, just "silva
8 culture crew," or "hack and squirters" is what they were
9 called.

10 "Q Do you know who the manufacturer or manufacturers of
11 the forest products Tordon 101 or Formula 40 were?

12 "A I can't say who all the manufacturers were. I am sure
13 that Dow was involved. I say that because I have seen the
14 names on the labels, but I can't say whether Dow was one or
15 the others.

16 "Q Did you ever have an occasion to see any of these
17 hack and squirters after they came in from the job?

18 "A Yeah. Yeah, we all pretty much see each other out in
19 the parking lot after work.

20 "Q Well, what did they look like to you? What was their
21 appearance?

22 "A Well, we were all pretty scruffy in a day in the field
23 sweating, and I wouldn't say they looked any different from
24 the rest of us after work.

25 "Q All right, sir. Could you tell whether or not any of

1 these chemicals may have gotten on their clothes or --

2 "A Yes, I've been out in the field and seen people with
3 it on their clothes and on their skin, and we used to joke
4 about it quite a bit.

5 "Q So is it your opinion that the hack and squirters were
6 exposed to Tordon 101?

7 "A I am assuming from the activity cards that I monitored
8 and kept up-to-date that they had been exposed to one of the
9 two chemicals that I know they used.

10 "Q What chemicals were those?

11 "A Again, this is Tordon 101 and Formula 40. The stuff
12 kind of vaporizes, so by the time people get it back in
13 from the field, it wouldn't necessarily be visible on
14 their clothes unless it had a dye in it. And I have seen
15 people with dye running down their arms on the unit.

16 "Q Did Dow Chemical or any of the other manufacturers ever
17 send a representative down to the Forest Service to teach
18 you any safety rules or tell you any regulations that you
19 should follow while applying the Tordon 101?

20 "A I can't speak for prior to that season. In subsequent
21 seasons, there were training sessions in Portland for the
22 supervisors and inspectors, but the crew people never were
23 contacted by Dow representatives, no.

24 "Q "When you say "that period of time," what period of
25 time are we talking about?

1 "A Up to '78, which is -- includes the year that I
2 transferred over in late '77. And, you know, after now,
3 in the '80s, I started going to training sessions and at
4 that point we heard from not necessarily Dow people, but
5 other people talking about the upgrading of the labels, and
6 of course there were Dow representatives there with their
7 product and talking about this, their success rate of it
8 and so forth.

9 "Q A time period, what time period are we talking about
10 when the Dow agent showed up?

11 "A The meetings I am talking about are after, let's see,
12 when, after 1982 when I was high enough up on the scale
13 where I started attending the training sessions. But I
14 should say that safety precautions wasn't something
15 emphasized. It was mostly which formulas were applicable
16 and which type of application for which vegetation. So
17 there wasn't, of course, a whole lot of precautionary
18 things, even at that level.

19 "Q All right, sir.

20 "A That's all supposed to be on the label.

21 "Q Now back in 1976 and '77 did you ever see any warnings
22 on any of the containers that contained Tordon 101?

23 "A Yes. We moved a lot of those containers and cans
24 around from one part of the compound to the -- to the other.
25 Finally put it under lock and key after the controversial

1 nature of the program became a problem. And at that point
2 in handling those cans, I read those labels and there was
3 precautionary language that was updated periodically.

4 "Q Do you remember exactly what the language said back
5 in '76 and '77?

6 "A I sure don't.

7 "Q Do you feel that it was an adequate enough warning?

8 "A I can only assume that since the warnings were upgraded
9 through the years with additional information, it was found
10 that the chemical had not sufficient warnings on the label
11 to begin with.

12 "Q Has the Forestry Service stopped using Tordon 101, to
13 your knowledge?

14 "A On the Applegate, we stopped using it after the '77
15 season because of problems of root translocation where it
16 would kill the crop trees that were adjacent to the weed
17 trees.

18 "MR. BALDWIN, JR.: That's all I have."

19 This is the cross-examination by Mr. Ortego:

20 CROSS EXAMINATION

21 "Q Mr. Kier, what was the purpose of using the weed
22 killers in the Forest Service? What were the goals of the
23 Forest Service? Where was it done?

24 "A It was to release the crop trees, mostly Doug fir, from
25 their hardwood competition.

1 "Q What were the benefits to the environment as a result
2 of that? What would be the benefits to the Forest Service
3 itself by doing that?

4 "A None whatsoever, as far as I know.

5 "Q Well, wasn't one of the reasons why you would do that
6 was to get rid of some of the other undesirable foilage?

7 "A Theoretically, that would increase the growth. However,
8 over a long rotation, it hasn't been proven yet.

9 "Q Can defoliation in the forest land with the use of
10 weed killers, can that increase graze lands -- that did
11 increase graze lands, prevent forest fires, wasn't there?

12 "A In this area the target species, hardwood, are preferred
13 graze of our wildlife. So in fact it was negatively
14 impacting our deer herds, for instance.

15 "Q What about with respect to forest control, forest fire
16 controls, did it have an impact there?

17 "A It provided a lot of fuel, that is dead brush, so there
18 again, negative impact.

19 "Q You joined the Forest Service in 1972?

20 "A Yes.

21 "Q What was your job in '72?

22 "A Firefighter.

23 "Q A firefighter does what?

24 "A We travel as an organized crew throughout the United
25 States, and we are involved in fire suppression and going

1 out and putting out, put a line around the fire to put it
2 out.

3 "Q Were you a full-time Forest Service employee during
4 that time?

5 "A I was seasonal until 1972 on.

6 "Q Firefighters in 1977 and '78 were generally seasonal?

7 "A That's correct.

8 "Q How many days a week will you work as a firefighter?
9 How many days of the year would a firefighter work as a
10 seasonal employee?

11 "A Six months.

12 "Q Would it be fair to say that a majority of those six
13 months of work would be dedicated to fire fighting or
14 fire suppression?

15 "A Initially, we were standby, land release. That is
16 mainly removal of competing species to timber species and
17 trail construction and things.

18 "Q During that six months there would be a variety of
19 duties that a firefighter would do?

20 "A Yes.

21 "Q What percentage of that six months would a firefighter
22 do this hack and squirt, if any?

23 "A Hack and squirt was mostly a spring job, spring and
24 early summer before spray evaporation became a problem,
25 which would mean that a person would maybe be on hack and

1 squirt crew for as much as two months out of the year.

2 "Q Out of six months?

3 "A Yes.

4 "Q And the rest of the remaining four would be dedicated
5 to something other than hack and squirt during the regular
6 year?

7 "A Yes.

8 "Q Have you done hack and squirt yourself?

9 "A No, I don't recall ever having done it. I did mostly
10 the survey work after, so --

11 "Q Is it possible that some firefighters never did make
12 it, some firefighters never did hack and squirt?

13 "A Some is right. Some planted trees in the early spring,
14 so people would -- it would be a fragmented kind of crew
15 until the fire danger brought everybody together.

16 "Q You became a silva culture technician?

17 "A Yes.

18 "Q What were your duties then? Can you tell me that?

19 "A Well, I would go to survey plantations for disease and
20 for competition, for thinning needs. And then you come back
21 and report and prescribe treatment for those plantations.

22 "Q Did you ever supervise any hack and squirts in '77,
23 '76?

24 "A No.

25 "Q Did you ever supervise James Greenhill?

1 "A No.

2 "Q Did you ever personally see Jim Greenhill do hack and
3 squirt work?

4 "A I do remember being on a unit that year with him.

5 "Q Now the purchase of the weed killer that you had used
6 for the hack and squirt method, did you purchase that?

7 "A No.

8 "Q Did you have anything to do with the purchasing or
9 the selection of which weed killers would be used?

10 "A No.

11 "Q Who would be responsible for that?

12 "A My supervisor.

13 "Q Your supervisor?

14 "A Yes.

15 "Q Would you say there were different herbicides that were
16 used within the Forest Service for different purposes?

17 "A Yes, some for graze, some for herbicides.

18 "Q Would you not be involved with the direct selection,
19 but your supervisor would do that?

20 "A That is right. We have a vegetation problem in that
21 unit, but as far as ordering the chemical, that was out of
22 my hands.

23 "Q Would it be fair to say that you didn't have any
24 personal knowledge of exactly what chemicals were brought
25 in for the hack and squirt program for that year?

1 What your boss bought is what you used? You didn't make
2 the purchase? He could have gone to a variety of chemical
3 companies? As far as you know, it just came onboard?

4 "A I just know what was used, not all that was bought.
5 Except I did see everything in the warehouse.

6 "Q All right. When is the first time that you spoke to
7 Mr. Baldwin or anyone from his office regarding this case?

8 "A Well, let's see, it was a couple of months ago. I
9 don't remember the exact date.

10 "Q How did that come about? A phone call? A visit?

11 "A A phone call, and was subsequently visited.

12 "Q What did you discuss at those meetings?

13 "A Let's see, we talked.

14 "Q There is nothing wrong with talking to him.

15 "A We talked in June, and he asked if I had known that
16 Greenhill had passed away. And he brought me up-to-date
17 on the case and asked me what I had, you know, could offer,
18 what I remembered. And then I remember I made a statement
19 of everything that I could tell him about the program and
20 about the chemicals.

21 "Q Did he ever ask you to look for any documents, or cans,
22 or anything like that at the Forest Service?

23 "A I mentioned that I figured I had personally been
24 responsible for moving a lot of the old chemicals that
25 were too hot to use anymore, that we were no longer using,

1 say, after 1980, down to a central repository with the
2 county's blacklist of chemicals. And we, you know, we
3 handled them all at that time. However, my memory is not
4 good enough to tell you what was on all of those labels.

5 "Q Did you ever give Mr. Baldwin any documents or material
6 or --

7 "A Just verbal.

8 "Q Did you ever look up or do you have any intention of
9 looking up any other product, document, or producing any
10 documents for him?

11 "A If I can help, I am willing to, but I really don't have
12 anything to assess -- have any access.

13 "Q You are not there anymore?

14 "A Yeah.

15 "Q How many men, approximately, did hack and squirt in
16 1976?

17 "A It was usually a three or six-man crew.

18 "Q How many crews, approximately, were provided in '76 and
19 '77?

20 "A Just the one main crew. There may have been some
21 smaller projects that handled some individuals, but --

22 "Q Do you know whether hack and squirt was employed at
23 any other forests around the country?

24 "A Yes, I believe it was probably used on the majority
25 of the forests.

1 "Q More of a national program, then?

2 "A Well, I wouldn't say the program was nationalized.

3 "Q I mean nationalized?

4 "A There was wide-spread use throughout the Forestry
5 Service. However, the technique may have differed.

6 "Q Hack and squirt is performed by taking an ax and
7 putting a mark in the tree, and then putting a millimeter
8 of the --

9 "A Yes.

10 "Q -- like an eyedropper type?

11 "A An amount comparable to a full eyedropper, in this case.
12 They are like laboratory wash bottles. In fact, I think they
13 are more like spray bottles used for ironing, or, you know,
14 spraying plants or something.

15 "Q Did you ever socialize with Mr. Greenhill at all?

16 "A No, I didn't.

17 "Q Was he a personal friend of yours at all?

18 "A No, although I saw him around the station. I can't
19 really recall what he looked like. It was a long time ago,
20 and we weren't close friends.

21 "Q Would it be fair to say that you didn't have specific
22 knowledge of what he did, or work record, or what people
23 thought of him at the Forest Service?

24 "A No, I have no idea.

25 "Q Do you recall when you said these cans that herbicide

1 came in did have labels, did they say "Avoid skin
2 exposure," or "Don't drink it," or those general warnings?

3 "A I am sure at least they must have been on them, even
4 that far back. But I just can't recall what the labels said.

5 "Q Would it be fair to say that you are not an expert in
6 labels or the chemistry of chemicals, just have to rule
7 that out?

8 "A No.

9 "Q You are not an expert on herbicides?

10 "A No, I am an expert, certified applicator. I am not --
11 I don't have a photographic memory, but I am sure that
12 the '77 labels could be reproduced. I am sure they are
13 in the files here in the Forest Service.

14 "Q Absolutely. The U.S. Government keeps them obvious?

15 "A Yeah. Yeah.

16 "Q And this federal certified applicator, are there state
17 and federal regulations on use of herbicides?

18 "A Federal regulations? Well, we had, I would say, more
19 policy than anything else.

20 "Q And the Forest Service, to your knowledge, would comply
21 with all the federal policies when using these chemicals?

22 "A Yes.

23 "Q Did you ever know Mr. Greenhill or Mr. Greenhill's wife
24 at all?

25 "A No.

1 "Q Ever spoken to her since or --

2 "A No.

3 "Q At least you don't think you spoke to her?

4 "A Not knowingly, anyway.

5 "Q We are all set then. Thank you for your time. We
6 appreciate it."

7 This is by Mr. Baldwin:

8 "REDIRECT EXAMINATION

9 "Q Do you waive the signing?

10 "A I will waive my signature."

11 MR. BALDWIN, JR.: Your Honor, at this time we'd
12 like to introduce the deposition of Paul William Tipton.

13 MR. ORTEGO: Judge, may we approach on that first,
14 briefly?

15 THE COURT: All right.

16 (AT THE BENCH, on the record discussion with Messrs.
17 Baldwin, Sr. and Jr., Gillam, Ortego, Kardisch and Brown,
18 out of the hearing presence of the Jury:)

19 THE COURT: T-i-f-t-o-n? Tifton?

20 MR. ORTEGO: Tipton, T-i-p-t-o-n. I just want to
21 make my record -- I have the same objections, he can't
22 testified to any facts relevant to the lawsuit because
23 he never worked hack and squirt with Greenhill; he doesn't
24 know what he did. And besides, there are a lot of hearsay
25 lines in the deposition. But I just want to make my record.

1 THE COURT: Overruled.

2 MR. ORTEGO: Thank you, Judge.

3 (OPEN COURT)

4 MR. ORTEGO: Would you just give me one second,
5 Mr. Baldwin, while I get my file? (locating file) Thank
6 you.

7 MR. BALDWIN, JR.: This is the deposition of
8 Paul William Tipton. Be it remembered that the deposition
9 of Paul William Tipton was taken in behalf of the Plaintiff
10 before Eldon D. Reed, a registered professional reporter
11 and notary public for Oregon, on August the 20th, 1987,
12 beginning at the hour of six p.m., at the Best Western
13 Medford Inn, 1015 South Riverside, Medford, Oregon.

14 The same agreement with the stipulations, Mr.
15 Ortego?

16 MR. ORTEGO: Yes, Mr. Baldwin.

17 (Reading by Mr. Baldwin, Jr. and Mr. Gillam:)

18 DIRECT EXAMINATION OF PAUL WILLIAM TIPTON BY DEPOSITION

19 "Q Would you state your full name for the record, please,
20 sir?

21 "A Paul William Tipton.

22 "Q Mr. Tipton, my name is Scott Baldwin, Jr., and myself
23 along with the Dow Chemical attorneys are going to be taking
24 your deposition. Do you understand that?

25 "A Yes.

1 "Q Have you ever had your deposition taken before?

2 "A No, I haven't.

3 "Q Well, basically what we are going to do today is I am
4 going to ask you some questions and counsel will ask you
5 some questions, and the court reporter will type this up,
6 put it into a booklet form, and you have the right to
7 either read it and sign it or you can just waive your
8 signature and it will go on to the respective party. What
9 do you choose to do?

10 "MR. BALDWIN, JR.: Let's go off the record.

11 "A I would like to read it and sign it.

12 "Q That is no problem. How old a man are you, Mr.
13 Tipton?

14 "A I am thirty-eight years old.

15 "Q Are you married?

16 "A Yes.

17 "Q Do you have any children?

18 "A Yes, I do have.

19 "Q How many children do you have?

20 "A I have three children.

21 "Q And what are their ages?

22 "A One and a half, five and eight.

23 "Q Where do you presently live?

24 "A I presently live at 1240 Humbug Creek Road, in
25 Jacksonville, Oregon.

1 "Q Whom are you presently working for?

2 "A Currently self-employed as a carpenter.

3 "Q Have you ever worked for the National Forestry
4 Service?

5 "A Yes, I have.

6 "Q What were your job duties with the Forestry Service?
7 Let me do this first, when did you go to work for them?

8 "A I went to work for the Forest Service in 1973.

9 "Q And how long did you work for them?

10 "A I worked for them, to the best of my knowledge, through
11 1977.

12 "Q All right, sir. Now, what were your job duties during
13 that time period with the National Forestry Service?

14 "A My job duties varied from work in the Timber Management
15 Department, the Silva Culture Department, and occasionally
16 on fires.

17 "Q All right, sir. Were you ever a hack and squirter?

18 "A Yes, I was.

19 "Q Would you tell the Jury what hack and squirt or what a
20 hack and squirter does?

21 "A A person on a hack and squirt crew has a small hand
22 ax, or hatchet, and squirt bottles filled with Tordon, and
23 possibly other chemicals that were injected by means of
24 using the hatchet to make cut marks a couple of inches apart
25 around the trunk of trees, and then the chemicals are

1 sprayed into the incisions of the trees to kill the tree.

2 "Q All right, sir. I believe you mentioned the name
3 Tordon. Did you say that was a chemical that was used
4 in the hack and squirt?

5 "A Yes, that was a chemical that we used in the hack and
6 squirt.

7 "Q Would you explain to the Jury what is like to be a
8 hack and squirter?

9 "A Well, it's a pretty messy and nasty job. We would
10 get into a truck together, a crew of three or four people,
11 we would have chemicals stored in the back of the vehicle,
12 and we would drive from the Forest Service Station out to
13 the area where we are working to apply them. Then we would
14 go out through a unit, a stand of timber, or an acreage of
15 land that was being worked on and we would go through taking
16 a swath of a given stand, say twenty feet wide, and each
17 person would cover that area going through hack and squirting
18 and killing the supposed weed trees that were in the area.

19 "Q All right, sir. How long a ride would this be in your
20 car from the station to your job site with these chemicals?

21 "A It would vary from an hour and a half to even an hour
22 and a half -- rather, from half an hour to even an hour and
23 a half, depending upon the distance of the units from the
24 station.

25 "Q Do you know what chemical it was that was in the car

1 with you?

2 "A It was Tordon 101.

3 "Q Can you explain to the Jury what your exposure is to
4 Tordon 101 as a hack and squirter?

5 "A There is many ways of exposure, in that the mixing
6 of the chemical, the putting the chemical into the truck,
7 the riding in the truck with the fumes, the exposure to
8 the skin through the spray mist from the bottles bouncing
9 around, with the wind out out in the unit as we are doing
10 it, spraying, backsplashing off the trees and the brush,,
11 what -- from handling the equipment, from even the cleanup
12 process of taking gloves off and then having to pick up an
13 ax that still has Tordon on it, or any of a variety of
14 other means.

15 "Q All right. How often did you hack and squirt? Was it
16 on a day-to-day process?

17 "A While I was doing it it was on a day-to-day process.
18 That was for myself. I only worked in it for two or three
19 weeks.

20 "Q All right, sir. Do you know who made or manufactured
21 the product Tordon 101?

22 "A Dow Chemical was.

23 "Q What classes did they have in the Forestry as far as
24 safety is concerned in applying Tordon 101?

25 "A None to my knowledge. There was some verbal information

1 given, but it was not extensive.

2 "Q What literature did Dow Chemical provide you as a hack
3 and squirter as to the safety and precautions that should
4 be used with this chemical?

5 "A None."

6 MR. BALDWIN, JR.: This is cross-examination by
7 Mr. Ortego:

8 CROSS EXAMINATION BY DEPOSITION

9 "Q Mr. Tipton, when is the first time that you met with
10 Mr. Baldwin?

11 "A This afternoon.

12 "Q When did you meet him this afternoon?

13 "A About half an hour prior to this hearing here.

14 "Q At the time of this meeting did he discuss your
15 testimony?

16 "A The only thing that was discussed with Mr. Baldwin
17 and myself were the facts of how this would be conducted,
18 and I should tell the truth about what I know about the
19 situation.

20 "Q Did Mr. Baldwin tell you what particular questions he
21 was going to ask you?

22 "A No.

23 "Q Did you ever meet with anyone else from Mr. Baldwin's
24 office, an investigator or any other lawyer at all?

25 "A Yes, I met a gentleman named Randy Knight. I met with

1 him on two separate occasions.

2 "Q The first occasion that you met Mr. Knight, where was
3 that and when was that, sir?

4 "A That was at my home. I don't really know the time
5 period. Four or five weeks ago, at least.

6 "Q What was discussed at that meeting at your home?

7 "A The fact that this was happening; the fact that Jim
8 Greenhill had died from exposure to Tordon 101, and that
9 I should be -- he asked me to take part in this, and to
10 come tell the truth about what I knew.

11 "Q When was the second meeting?

12 "A The second meeting took place two nights ago.

13 "Q What happened at the second meeting?

14 "A I had dinner with Mr. Knight at a friend's house, and
15 basically the same kind of thing took place.

16 "Q And who was the friend?

17 "A The friend was Richard Goodnough.

18 "Q Did Mr. Knight discuss this case with Mr. Goodnough
19 and you together?

20 "A What do you mean discuss the case?

21 "Q Did you talk about what happened at the Forest Service?
22 Did you guys talk as a group or in separate rooms?

23 "A No, generally together about the case.

24 "Q What was the reason for the second meeting? What
25 happened differently at the meeting that didn't happen

1 at the first meeting?

2 "A Nothing in particular. An update as far as telling me
3 that this was happening.

4 "Q Are you being paid for your services and time?

5 "A No.

6 "Q Now they told you that Jim Greenhill died from
7 exposure to Tordon?

8 "A They told me in general that Jim Greenhill assumingly
9 died from Tordon.

10 "Q Assumingly?

11 "A Yes.

12 "Q You yourself don't know what he died of, do you?

13 "A Strictly conjecture.

14 "Q All right. You are not an expert in any field of
15 science, are you?

16 "A I wouldn't classify myself as an expert, no.

17 "Q Do you consider yourself an expert in any field, like
18 the field of carpentry?

19 "A Yes, in the field of carpentry.

20 "Q Would you consider yourself to be an expert in --

21 "A I consider myself to be pretty well founded in
22 forestry practices and in environmental silva culture and
23 management.

24 "Q What kind of training? Where did you get this?

25 "A Mostly on-the-job. Some with the Forest Service, and

1 some since then. I have worked as a forestry manager on
2 my own.

3 "Q What brought about -- why did you leave the Forest
4 Service?

5 "A Because I didn't feel my skills were being sufficiently
6 utilized there.

7 "Q What do you mean? Why weren't your skills -- why
8 weren't your skills being sufficiently utilized? Why do
9 you feel that way?

10 "A Because in the time I worked in the Forest Service,
11 particularly with the Silva Culture Department, I was the
12 person who was going out in the woods to collect data and
13 timber stand inventories. The data I was collecting would
14 help make the decisions on whether chemicals were applied
15 to areas that were being attempted -- they were being --
16 attempting to reforest. And for several years I felt that
17 the decisions were already being made before I brought the
18 information back in from the field.

19 "Q Would it be fair to say that you disagreed in part with
20 the decisions to use chemical management of the forests?

21 "A I disagreed with the extensive use of chemical manage-
22 ment in the forest.

23 "Q Those decisions of which you disagreed with extensive
24 use of chemical use of the forest were made by the United
25 States Forest Service upper-level people, aren't they?

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1 "A I don't know. I don't know who makes all those
2 decisions. Certainly not the chief of the Forest Service,
3 necessarily. It's done on a district by district basis,
4 and should be done on a site by site basis.

5 "Q Now the Forest Service when you worked for them, sir,
6 had been organized and is divided by regions?

7 "A Yes, that's correct.

8 "Q And do you know approximately how many regions there
9 are in the United States Forest Service?

10 "A I believe that there are eight or nine. I am not sure
11 of the exact number.

12 "Q Would it be fair to say that each region has its own
13 regional forester?

14 "A Yes, that is correct.

15 "Q And each regional forester in charge of a region within
16 the United States reports to the Chief of Forest Service?

17 "A Yes.

18 "Q And general decisions on chemical management and the
19 use of chemicals, herbicides and other forestry practices
20 are decided by regional foresters with the assistance of the
21 staff of the Chief of Forest Service?

22 "A The availability of those chemicals means, it seems,
23 would have been. The decisions to make those things
24 available would have occurred through that level of
25 bureaucracy.

1 "Q Would it be fair to say even in your expertise that
2 timber management with the use of herbicides was used
3 prevalently throughout the United States with different
4 forests for different purposes?

5 "A Generally, I would have to concur.

6 "Q And the reason why this was done was for many reasons--
7 would dictate the use of chemical management. Maybe you can
8 tell us some of the reasons you know about deforestation
9 took place, or timber management.

10 "A I don't think I quite understand.

11 "Q Neither do I. We will try again. When that happens,
12 feel free to jump in. What was the purpose of the chemical
13 management?

14 "A In the cases I was involved with, principally
15 reforestation practices. They were attempting to reforest
16 stands that had been cut over or completely clear-cut, and
17 the weed, or brush species, as they were called, were being
18 killed supposedly to create monoculture, or very small number
19 of other cultures of coniferous trees for selling to timber
20 companies.

21 "Q Would it be fair to say that by killing the woods
22 and unwanted brush that that would enhance the growth of
23 timber in those areas?

24 "A That was the purpose given by the Forestry Service,
25 but was not a recommendation that I would necessarily have

1 given for those areas.

2 "Q So would it be fair to say that the Forest Service
3 had made a decision to kill certain brush and foliage in
4 its attempts to enhance the growth of other timber, and
5 you disagree with that decision?

6 "A That is correct.

7 "Q Also be fair to say, sir, by the destruction of
8 certain unwanted foliage the risk of forest fires could
9 be diminished in certain areas?

10 "A I wouldn't say that's true at all.

11 "Q Was chemical management used within the United States
12 forest system, to the best of your knowledge, in order to
13 reduce the risk of fire?

14 "A I wouldn't see that being true at all.

15 "Q What other methods do you know are employed by the
16 United States Forest Service to get rid of some of these
17 unwanted foliage and brush to enhance some of the other
18 timber species?

19 "A Better management generally from the start rather
20 than taking all the trees off the site and then burning it,
21 and subjecting it to erosion for twenty or thirty years or
22 more; that more care in the harvesting practices, to my
23 mind, would have been one manner that could be used. Also
24 there are other ways -- hand-clearing of brush, paper mulch
25 around the young seedlings, and a variety of other ways.

1 "Q While you were at the Rogue River Forest did they
2 mechanically or by hand remove some of the growth?

3 "A In this timber, very little was done of that.
4 I believe a little bit of thinning was done on some stands,
5 but generally not.

6 "Q You were a full-time or part-time employee of the
7 United States Forest Service?

8 "A I was a temporary employee, seasonal.

9 "Q As a seasonal employee, how many months of the year
10 did you work, approximately, sir?

11 "A I believe eight to nine.

12 "Q Is there a time that is known as the fire season
13 within the Forestry Service?

14 "A Yes.

15 "Q What time period would that be?

16 "A That time would be from mid-May to late September,
17 probably generally.

18 "Q During that time period was any hack and squirt
19 technology or methodology employed?

20 "A I don't really know.

21 "Q You yourself worked at the Forest Service between
22 1973 through 1977 as a seasonal employee. Of all this
23 entire period how many days were you employed as a hack
24 and squirter?

25 "A For about three weeks.

1 "Q That is for about six years, excuse me, four years,
2 you only did hack and squirt for only about two or three
3 weeks?

4 "A No, that's not correct. Two or three weeks through
5 the entire period.

6 "Q Yearly?

7 "A No, for the entire period I worked for the Forest
8 Service.

9 "Q Okay. So for the years that you worked in the Forest
10 Service, it was two or three weeks of those four years
11 involved in hack and squirt?

12 "A Yes. Got off the crew as soon as I could.

13 "Q And why is that?

14 "A Because I didn't feel the chemicals were being safely
15 used, and I didn't want any part of it.

16 "Q Were you given any -- when you say they weren't --
17 when you say they weren't used properly, you felt that
18 the workers didn't use the chemicals properly or safely?

19 "A I felt that the use and the care involved with those
20 chemicals, that lackadaisical would describe the manner in
21 which they were dealt with.

22 "Q All right, as a result you requested to be removed
23 from that work?

24 "A Actually I believe I had other work that was coming
25 up, and I simply accepted work prior to, I believe. I can't

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1 really recall whether it was prior to or after my normal
2 duties for the year. I did certain things that I would
3 normally do through the year, and that was a fill-in at
4 the beginning of the end of the season.

5 "Q Sounds like some of the people were somewhat careless
6 and maybe not as cautious in the use of these things?

7 "A Yes.

8 "Q Did you ever do hack and squirt with Jim Greenhill?

9 "A No.

10 "Q What year did you do hack and squirt work, if you
11 recall, sir?

12 "A As I stated previously, my best guess is 1975. It
13 could have been '76. I believe it was '75.

14 "Q 1975, all right. When you say you used Tordon for
15 hack and squirt, is that your recollection from the year
16 that you used it?

17 "A Yes, I remember the name specifically being mentioned.

18 "Q In '75?

19 "A Yes.

20 "Q Did you ever read any of the labels on the products
21 that were used in the hack and squirt?

22 "A I am sure that I did.

23 "Q What did the labels say?

24 "A I can't recall.

25 "Q Did you ever have anything to do with the purchase

1 of what chemicals or herbicides were used in the Forest
2 Service?

3 "A No.

4 "Q Who made those decisions?

5 "A I would assume someone at least at the district ranger
6 level.

7 "Q Do you know whether or not when you did hack and
8 squirt you followed the instructions on the label?

9 "A I don't know that.

10 "Q Do you know whether the other men followed the
11 instructions on the label?

12 "A Well, to the degree that I was already -- I have
13 already described the lackadaisicalness and lack of care
14 with the use of the chemicals. I know that I certainly
15 didn't feel that whatever information I had gotten from
16 the labels didn't say that I should do things that I saw
17 was being done with the chemicals.

18 "Q So people were doing things with the chemicals that
19 the labels didn't say they should be doing?

20 "A I don't know whether that's true so much as the
21 people weren't doing what I thought should be done in
22 conjunction with the use of those chemicals.

23 "Q Was there any horseplay ever with any chemical or
24 sprayers when you were out in the field?

25 "A Some horseplay with the chemicals.

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1 "Q I presume you didn't condone nor did you want to
2 participate in any of that?

3 "A No, I didn't.

4 "Q When you were out in the field with hack and
5 squirters was hack and squirt done in primarily the rainy
6 season?

7 "A No, I don't ever recall doing it in the rainy season.

8 "Q What season do you recall doing it in 1975?

9 "A To the best of my knowledge, it was early in the year,
10 so it would have had to be the spring of '75. It would have
11 been probably in early June.

12 "Q Now this hack and squirt method, what type of brush
13 was this being applied to?

14 "A On the units I was on, madrona and probably
15 White Oak, I believe it was, that was the only tree species
16 that we did it to, and those are the only two that I can
17 think of. There may have been some other varieties of oak,
18 and it depended on that unit. And the vegetation changes
19 rapidly from one acre to another mountain, that sort of
20 thing. But I do know that madrona and oak.

21 "Q This bottle, spray bottle, that contained the
22 herbicide or weed killer, what did it look like?

23 "A As I recall, we used plastic, white plastic spray
24 bottles.

25 "Q Would it be fair to describe these plastic bottles

1 similar to something that you would use for ironing or
2 spray-mist your plants?

3 "A Certainly.

4 "Q What was the capacity of that spray bottle?

5 "A I believe it was a quart.

6 "Q Would it be fair to describe the technique of hack
7 and squirt is that you come up to a foliage which was
8 considered undesirable by the Forest Service, hack it with
9 an ax and spray it with the spray mist bottle?

10 "A That is correct.

11 "Q And then you would go on to the next tree?

12 "A Yes.

13 "Q In this hack and squirt method, there was no aerial
14 application, was there?

15 "A The aerial sprayings were separate from --

16 "Q Okay. And those folks on the hack and squirt team
17 were not responsible for taking spray tanks and spraying
18 with a hose, were they?

19 "A They may have been. Normally not.

20 "Q Now basically you go out and you do this to different
21 trees, and how long will you be out there on a given day
22 when you did a hack and squirt?

23 "A Less the travel time, approximately six hours.

24 "Q How many undesirable trees could you do with that one
25 quart bottle?

1 "A Well, I have no exact idea of that. I would say
2 somewhere over one hundred.

3 "Q Would have been done with that quart container?

4 "A Yes.

5 "Q Now when I said spray, would it be almost like a
6 stream sort of thing -- hack the tree, and then hold the
7 bottle close to the cut and spray in the stream?

8 "A Yes, that is correct, it was a stream.

9 "Q How long would it take to do approximately one
10 hundred trees? I know this is tough.

11 "A This is fairly far in the past and I don't have any
12 exact knowledge of that.

13 "Q This bottle had the sprayer on the top and it shot out
14 a stream, and would be closed on the top, wouldn't it?

15 "A What would be closed?

16 "Q Sealed on the top and the liquid would come out
17 through the sprayer?

18 "A Yes, come out through the sprayer, but drip down over
19 the entire spray machine, sprayer.

20 "Q Did the Forest Service give out gloves?

21 "A Yes, we did have gloves.

22 "Q What kind of gloves did you use?

23 "A As I recall, they were disposable latex type gloves.

24 "Q Did you wear goggles as well as -- were they given
25 out?

1 "A No.

2 "Q Did the men wear the gloves out in the field?

3 "A Generally yes, I believe most of them did most of
4 the time.

5 "Q You say that there would be fumes when you were traveling
6 in the truck up to the site?

7 "A Yes, the chemicals were being stored in the back. It
8 was pervasive, chemical atmosphere.

9 "Q Did you ever roll down the windows in those
10 circumstances?

11 "A It depended on the day and the time of the morning.
12 In the morning it was less likely to have it rolled down
13 than in the evening, but I am sure the windows were rolled
14 down some.

15 "Q Obviously the smell of the herbicide wasn't that bad
16 that it didn't warrant people rolling down windows at
17 certain times?

18 "A Well, there is also more than one person to consider
19 as far as being in the vehicle, and so certainly you can't
20 just open a window and throw a blast of air on someone else,
21 unless you are really concerned about it.

22 "Q Would it be fair to say at certain times windows
23 would not be rolled down because people wanted the windows
24 up as opposed to breathing the odor?

25 "A I wouldn't -- I can't remember any time that the

1 windows weren't at least cracked open.

2 "Q How far away from the tree would you be when you put
3 the stream into the cut?

4 "A Well, that would depend entirely -- you must be --
5 you don't want to do it right in front of your face nor
6 too far away. It's depending on the slope and the conditions.

7 "Q Would you put the bottle up to the hole to do it.
8 that you would cut?

9 "A As I recall, a couple of inches away from the cut,
10 which is the recommended procedure.

11 "Q Were you given any witten material to read before you
12 came to the deposition?

13 "A No.

14 "Q Were you asked to look for any written materials?

15 "A No.

16 "Q Did you ask any questions regarding the case of Mr.
17 Baldwin or his investigator?

18 "A Did I ask them questions? Just questions pertaining
19 to what this deal was with this, that just with the dealings
20 at this meeting today.

21 "Q Do you use any pesticides yourself at home now?

22 "A No, I don't.

23 "Q Have you ever used pesticides?

24 "A Yes, in the past five years I have.

25 "Q What kind of pesticides have you used?

1 "A I have two different fungicides.

2 "Q What are those fungicides?

3 "A I have used Matnectic 6 Flowable Sulphur, and
4 Rollinon (pho) Fungicide.

5 "Q Do you use chemicals as a carpenter, stains and
6 paint thinners and paint removers?

7 "A None of those that you mentioned very much.

8 "Q What kind of chemical do you use as a carpenter, if at
9 all?

10 "A Does that have something to do with what is being
11 discussed here?

12 "Q Yes, it does.

13 "A Well, there is certainly some chemical formulas. Yes,
14 glue is associated with the construction industry.

15 "Q Have you ever used any weed killers at all since your
16 working at the Forest Service?

17 "A No.

18 "Q What is your knowledge of weed killers, if any?

19 "A Well, we are in a pretty general class, weed killer.
20 But many of the herbicides that I have been able to find
21 out very much about have been, to my knowledge, is enough
22 that it leaves me not to desire to use any of those products
23 on my own property.

24 "Q That is your personal choice that you would rather
25 not use the chemicals on your own property?

1 "A That is correct.

2 "Q Don't particularly feel personally that they are
3 safe, nor do you like these particular chemicals?

4 "A I don't trust the products that are put out for use
5 by the general public by the chemical companies, generally.

6 "Q Is that because you feel that the chemical companies
7 aren't motivated to put out a good product?

8 "A More than it seems to me that the chemical companies
9 put out a product without giving the users enough informa-
10 tion about the possible harmful consequences of using those
11 products.

12 "Q Would it be fair to say that you don't particularly
13 like the chemical companies?

14 "A I don't have anything particularly against chemical
15 companies. It's the products and the way they are presented
16 that I disagree with.

17 "Q Products that the chemical companies put out on the
18 market aren't they regulated by the Environmental Protection
19 Agency?

20 "A Yes. That doesn't seem to me to mean very much.

21 "Q Would it be fair to say that you don't trust the
22 Environmental Protection Agency or feel that the Environ-
23 mental Protection Agency does not test or give enough time
24 or adequate time to test these products?

25 "A In the past five years, I would say that it has proven

1 itself to be quite true.

2 "Q Were it up to you, would you feel a strike limitation
3 of herbicides in the environment should be employed?

4 "A I think that cautious use should be allowed in
5 circumstances that warrant it.

6 "Q Do you think that the use of herbicides are warranted
7 under certain uses?

8 "A In specific cases.

9 "Q Now, how far from the ground would you cut those
10 trees when you applied the hack and squirt method?

11 "A Breast height.

12 "Q How many cuts would be put in that particular tree?

13 "A It depends on the size of the tree.

14 "Q Would it require more than one cut, depending on --

15 "A Almost always.

16 "Q You would just put a stream of the chemical in that
17 cut and move on to the next tree once you spray it?

18 "A In each cut.

19 "Q In each cut. Did you know James Greenhill personally?

20 "A Yes.

21 "Q When did you first meet James Greenhill?

22 "A I don't really recall the circumstances. I don't
23 really -- I didn't really know him that well.

24 "Q So would it be fair to say that he was not a particular
25 close friend of yours?

1 "A No. He was on a different crew than I was generally,
2 and I mostly just knew him from seeing him around the
3 Forest Service.

4 "Q Do you know whether or not Mr. Goodnough was a friend
5 of his?

6 "A I knew -- I know that Mr. Goodnough was a friend of --
7 was Jim Greenhill's crew leader and worked together on the
8 fire crew.

9 "Q But you never worked with him on the hack and squirt,
10 Mr. Greenhill?

11 "A No.

12 "Q Do you know Mr. Bramekes (pho)?

13 "A Yes.

14 "Q At the Forest Service?

15 "A Yes.

16 "Q Who is he?

17 "A He's a gentleman that is still -- that still works
18 for the Forest Service, as far as I know. He was involved
19 in the fire suppression part of the Forest Service here.

20 "Q And the Fire Suppression Unit, what do they do?

21 "A Well, I am trying to recall the general term -- Fire
22 Suppression Unit. It's the fire department within each
23 ranger district. There is one segment of each trained
24 district that deals specifically with fire.

25 "Q In addition to the mechanical defoliation at times

1 which was employed in the Rogue River Forest, were there
2 controlled burnings as well?

3 "A Yes, there was controlled burn.

4 "Q That was also another methodology of defoliation?

5 "A Yes. Well, defoliation of weed species.

6 "Q Yes.

7 "A No, normally -- in some cases, yes, it could be.

8 "Q Chemicals that were in the truck did you ever mix them?

9 "A No, I don't remember being involved in the mixing
10 mess.

11 "Q How were they placed in the truck?

12 "A What do you mean by that?

13 "Q When you say fumes, what kind of container? Where
14 were the spray bottles when you went out to the job site,
15 or how did that work?

16 "A The containers with the chemicals themselves in it
17 were put into the truck. Larger amounts of it in five-
18 gallon containers, and the spray bottles were kept in the
19 truck as well.

20 "Q Were they mixed someplace else?

21 "A To the best of my knowledge, they were mixed prior to
22 going into the field.

23 "Q Do you know whether or not the chemicals or herbicides
24 that were sprayed in the tree incision, whether it was
25 diluted or not?

1 "A No, I don't.

2 "Q These five-gallon containers that were in the truck,
3 did they have labels on them?

4 "A Yes.

5 "Q What were the labels on them?

6 "A I don't know.

7 "Q So you don't recall what chemical labels or anything
8 were on those five-gallon containers that were in the truck
9 themselves?

10 "A It seems to me that the chemical, to the best of my
11 knowledge, the chemicals were mixed before going out, and
12 that they were put in the truck. I can't recall whether
13 the containers in the truck were necessarily containers
14 that chemicals had come in or whether there were other
15 containers that they were being carried in.

16 "Q Would it be fair to say in hack and squirt work that
17 when you would get in the truck chemicals will be put in
18 the truck already mixed and in different containers from
19 what they originally were in?

20 "A That is a possibility of that.

21 "Q So what -- when you would go in your truck there would
22 be containers of the diluted or mixed chemicals in your
23 truck that were mixed by someone else?

24 "A Yes, that is right.

25 "Q You yourself never participated in the mixing?

1 "A I never did the actual mixing.

2 "Q I think I am all finished."

3 MR. BALDWIN, JR.: Redirect by Mr. Baldwin.

4 REDIRECT EXAMINATION BY DEPOSITION

5 "Q I have just a few follow-up questions, Mr. Tipton.

6 When you say truck, what kind of vehicle were you actually
7 in when you were going from the station to the job site?

8 "A We were in a vehicle that -- I don't know whether
9 it had three rows of seats or two, but it was totally
10 enclosed and the back doors opened up to each side. It
11 was completely enclosed.

12 "Q Were the chemicals inside with you?

13 "A Yes.

14 "Q Now there has been some discussions about labels here
15 today, and I've got a question for you as a person who has
16 read these labels and as a layman, and as all laymen are
17 supposed to read the labels, do you feel you were given
18 adequate information as to the use and given fair warning
19 from the labels you read?

20 "A No.

21 "Q You said you never worked with Jim Greenhill, is
22 that true?

23 "A Yes.

24 "Q So you don't know whether he engaged in any horseplay
25 or any other activities like that, do you?

1 "A No.

2 "Q Now isn't it also true that you have been contacted
3 by the Dow Chemical lawyers?

4 "A Yes, they've called me on the phone one time.

5 "Q Do you know who it was that you talked to?

6 "A No, I don't.

7 "MR. BALDWIN, JR.: I believe that's all I have.
8 Thank you."

9 This is recross by Mr. Ortego:

10 RECROSS EXAMINATION BY DEPOSITION

11 "Q Sir, you told Mr. Baldwin here you have read the
12 labels. Do you remember what you read? Can you sit here
13 today from, I guess eleven years ago, and tell us what was
14 on those labels?

15 "A I certainly couldn't remember all of the specific
16 wording.

17 "Q Also is it fair to say if you don't remember the
18 wording as you sit here today you can't say in fairness
19 whether it's adequate or inadequate?

20 "A That what is?

21 "Q The label warnings? You don't know? You didn't
22 know what is on the labels, so you don't remember?

23 "A I know that in reading the labels at that time that
24 it certainly gave me cause to wonder why these things
25 weren't more specifically labeled.

1 "Q You say "more specifically labeled." What labels
2 did you read? Can you tell us exact labels as you sit
3 here today?

4 "A I am sure that I read the labels on the containers
5 of Tordon 101.

6 "Q The Forest Service used other chemicals other than
7 Tordon 101?

8 "A I am sure I looked at them as well.

9 "Q Would it be fair to say that the Forest Service used
10 different chemicals in its chemical management?

11 "A They used several at least.

12 "Q Other chemicals manufactured by other chemical
13 companies other than Dow Chemical Company?

14 "A I don't know. I don't really know.

15 "Q Who told you that Tordon 101 was manufactured by the
16 Dow Chemical Company?

17 "A Well, I know that it was from that time period from
18 being told that.

19 "Q Who told you that?

20 "A Crew leader.

21 "Q You yourself personally have no knowledge as an expert
22 in the field of chemicals who manufactured Tordon 101
23 except what you were told?

24 "A I remember the name "Dow." I remember the Dow name
25 on the container.

1 "Q But you also remember seeing other chemical labels
2 from other manufacturers?

3 "A Seeing other chemical --

4 "Q Other products there besides Tordon 101 that the
5 Forest Service used, weren't there?

6 "A Yes, I already answered that.

7 "MR. ORTEGO: That's it."

8 THE COURT: Does this complete this deposition?

9 MR. BALDWIN, JR.: Yes, sir.

10 THE COURT: Let's take a fifteen minute break.

11 Be back in the jury box at five till eleven.

12 (Recess at 10:42 a.m., until 10:55 a.m.; open court,
13 jury and all parties present)

14 THE COURT: Please be seated. Call your next
15 witness.

16 MR. BALDWIN, SR.: Your Honor, we have some
17 documentary evidence to offer at this time. We will offer
18 Plaintiff's Exhibit 20 X which is a document from Dow
19 Chemical showing that they made Tordon 101. We will just
20 read portions of it.

21 THE COURT: This is your Exhibit No. 20?

22 MR. BALDWIN, SR.: "X."

23 MR. ORTEGO: Mr. Baldwin, this document is in
24 Spanish?

25 MR. BALDWIN, SR.: On the back page.

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1 MR. ORTEGO: May we approach?

2 MR. BALDWIN, SR.: The back page is not.

3 THE COURT: All right, go ahead.

4 MR. BALDWIN, SR.: It's a Dow Chemical document,
5 "Physical Properties (Typical, Not Specifications) Tordon
6 101 Herbicide Mixture: Picloram, picloram equivalent,
7 2,4-Dichlorophenoxyacetic acid, 2,4-Dichlorophenoxyacetic
8 acid, equivalent."

9 We offer that simply to show that Dow manufactured
10 Tordon 101.

11 MR. ORTEGO: Judge, I think to make it simpler,
12 the part of the document I have a problem with is not in
13 English. But I will gladly stipulate that the Dow Chemical
14 Company manufactures Tordon 101. There is no problem with
15 that. I will stipulate.

16 THE COURT: All right.

17 MR. BALDWIN, SR.: And they hold a registered
18 patent to it, is that right?

19 MR. ORTEGO: Well, I have some objections to some
20 of the things in here because they are irrelevant, but I
21 will stipulate to the Tordon 101.

22 MR. BALDWIN, SR.: And, Your Honor, next we have
23 some Government documents.

24 THE COURT: What numbered exhibit is that in your
25 list in your Pre-Trial Order, or is it?

1 MR. BALDWIN, SR.: It's 22 X on our Exhibit List.
2 It's 20 X, I'm sorry.

3 THE COURT: Go ahead.

4 MR. BALDWIN, SR.: We offer some Government
5 documents, 11 a, h, g, f, e, d, like dog, c, 11 c, and 11 b;
6 and these are documents furnished to us by the Government
7 relating to the time frame in which Mr. Greenhill was working
8 and the forest that he was working.

9 MR. ORTEGO: May I see them, Mr. Baldwin?

10 MR. BALDWIN, SR.: Yes, you have copies of them.

11 MR. ORTEGO: Well, I don't know which ones. There
12 are a lot of these.

13 (Mr. Baldwin, Sr. tenders exhibits to Mr. Ortego)

14 MR. BALDWIN, SR.: I think it would be better if
15 I just read from the document.

16 MR. ORTEGO: If I can just see what they say
17 first.

18 THE COURT: What is 20 X? I didn't get what it
19 was.

20 MR. ORTEGO: 20 X, Judge, is a two-page document
21 which consists of one page in Spanish and one page in English,
22 and "Tordon 101 Mixture Herbicide." And I don't have any
23 objection to this. The Spanish part, I don't know whether
24 the Jury will understand, but the English part I have no
25 problem.

1 THE COURT: All right.

2 MR. ORTEGO: Go through each individually, Your
3 Honor?

4 THE COURT: Well, I assume that those exhibits
5 have been exchanged between the parties.

6 MR. ORTEGO: Well, what happened, Judge, is that
7 Mr. Baldwin's original Exhibit 11 consists of about 200
8 documents, and I am just trying to see which one they are,
9 and they are individual.

10 THE COURT: Go ahead. Go ahead and look at it.

11 (Mr. Ortego examining documents.)

12 MR. ORTEGO: Judge, I do have an objection to
13 these documents on some of them is that the dates are not
14 the dates in which Mr. Greenhill worked. Some of these
15 documents are from 1981, when Mr. Greenhill left the Forest
16 Service in Oregon in 1978, and it also deals with parts of
17 the Forest Service that he didn't work at. But subject to
18 that, I mean -- I see one date here '81, '81. They involve
19 some other previous dates. There are reports done here obviously
20 I think four years afterwards.

21 MR. BALDWIN, SR.: These reports were done after
22 the fact, but they relate. They have dates in there that
23 relate to the time of Mr. Greenhill.

24 MR. ORTEGO: Subject to that, realizing that
25 some of these things are from the -- I see some of the forest

1 areas are not where he worked either.

2 THE COURT: Overruled.

3 MR. BALDWIN, SR.: These are documents furnished
4 to us by the Government.

5 THE COURT: I would suggest to the attorneys
6 that just in the interest of time that all these matters
7 that you expect to introduce that you get together and maybe
8 take a look at these things before this point, so that we
9 will not have the delay.

10 MR. ORTEGO: I will do that. Mr. Baldwin and I
11 will meet this afternoon, and we will gladly do that.

12 THE COURT: All right, go ahead.

13 MR. BALDWIN, SR.: These are documents furnished
14 to us by the Government relative to the herbicides used in
15 the Rogue River National Forest, the Applegate Ranger Dis-
16 trict where Mr. Greenhill worked. 11 c shows unit for year
17 for spray of 2,4-D; 11 h shows a unit for the year '77, and
18 it shows for the year '79 also, and it shows Tordon 101;
19 11 g shows the date, July '77, and '78 also, and it shows
20 2,4-D.

21 MR. ORTEGO: Judge, I don't have any objection
22 to reading exactly what's in the document, but summarizing
23 them the way he views them to be I don't think is appropriate.
24 If he wants to read what the document says --

25 MR. BALDWIN, SR.: I don't mind the Jury -- handing

1 them to the Jury. In view of the Court's ruling, I was not
2 reading other matters in the document.

3 MR. ORTEGO: If you want to for those purposes,
4 I don't have any problem with that.

5 THE COURT: Go ahead, Mr. Baldwin. Overruled.

6 MR. BALDWIN, SR.: This shows date May '77.

7 THE COURT: Of course, I am not cutting you off
8 from any ruling in which you indicate he may be reading
9 something that's not on there, which I don't anticipate
10 happening.

11 MR. BALDWIN, SR.: Tordon 101.

12 THE COURT: Is this 11 g?

13 MR. BALDWIN, SR.: That was 11 d, like dog.

14 THE COURT: All right.

15 MR. BALDWIN, SR.: 11 c it shows the date 6-'76,
16 again Tordon 101; and 11 b, like boy, shows a date May of
17 '77, and you can barely make out Tordon 101; and 11 a shows
18 again November of '76, Tordon 101.

19 It's my understanding you did not want to pass
20 these to the Jury at this time?

21 THE COURT: Unless the attorneys think that it
22 should be.

23 MR. BALDWIN, SR.: I don't think in view of the --

24 MR. ORTEGO: Just one thing, if I can just read
25 the caption at the top of the document to the Jury, since

1 we are here?

2 THE COURT: Yes, you may.

3 MR. ORTEGO: I don't think it's necessary to
4 pass -- if these records are places in the Forest Service
5 in which chemicals were used, and not Mr. Greenhill's
6 personal records, just areas in different parts of the
7 United States' Forest Service.

8 MR. BALDWIN, SR.: Those are United States
9 Government records.

10 MR. ORTEGO: Oh, absolutely, sir, but they are
11 not Mr. Greenhill's records. They are from different Forest
12 Service records from different forests.

13 MR. BALDWIN, SR.: Shall I proceed, Your Honor?

14 THE COURT: Go ahead.

15 MR. BALDWIN, SR.: Mrs. Greenhill.

16 (The witness is sworn.)

17 ANN I. GREENHILL,

18 having been duly sworn, testified as follows:

19 DIRECT EXAMINATION

20 BY MR. BALDWIN, SR.:

21 Q Would you give us your name, please?

22 A Ann Irene Greenhill.

23 THE COURT: Now, Mrs. Greenhill, you are going to
24 have to talk louder than that so we can hear you.

25 THE WITNESS: Okay.

1 A Ann Irene Greenhill.

2 Q Ms. Greenhill, this is a big room. As the Judge
3 told you, please hold your voice up so the Jury can hear
4 what you have to say.

5 A Yes, sir.

6 Q Could you tell us when and where you were born?

7 A I was born in Birmingham, England, July the 9th, 1942.

8 Q And what education did you receive, Ms. Greenhill?

9 A I completed high school and two years of technical
10 college.

11 Q And where did you go to college?

12 A I went to college in Birmingham, Bornville, England.

13 Q And did you work while you were in college?

14 A Yes, sir.

15 Q And where did you work, Ms. Greenhill?

16 A I worked at Cabrey (pho) Brothers.

17 Q And what was your job?

18 A I was a Hollowith (pho) keypunch operator.

19 Q Now, after you finished your two years of -- is that
20 equivalent to two years of college here in the U.S.?

21 A Yes, sir.

22 Q What did you do next?

23 A I went to Germany.

24 Q And what did you do in Germany?

25 A I worked in a hotel.

1 Q As what?

2 A A chambermaid.

3 Q All right. Could you speak the language when you first
4 got to Germany?

5 A No, sir.

6 Q Did you try to learn the language?

7 A Yes, sir.

8 Q How did you do that?

9 A I went to the Billet School of Language in Frankfurt,
10 Germany.

11 Q Did you ultimately learn to speak the German language?

12 A Yes, sir.

13 Q And what was your next job?

14 A An international operator.

15 Q Now what do you mean when you say "international
16 operator"?

17 A I worked for the U. S. Government at army headquarters
18 in Frankfurt on the red lines.

19 Q And what did you do?

20 A On the telephone switchboard, I operated the red lines
21 for the generals, and I did directory inquiries for the U.S.
22 Army.

23 Q For somebody who doesn't understand, what do you mean
24 when you say you operated the red lines for the generals?

25 A Their confidential lines come onto your switchboard to

1 the generals that you have to transfer important telephone
2 calls to.

3 Q And how long did you hold that job?

4 A A year and a half.

5 Q And what did you do next, Ms. Greenhill?

6 A I came to the United States.

7 Q And where did you come?

8 A I came to New York.

9 Q All right, and where did you go next?

10 A I went to Seattle, Washington.

11 Q Why did you go to Seattle Washington?

12 A I had some--met some friends in Germany from Seattle.

13 Q You just wanted to come to the United States?

14 A No, I came with a girlfriend of mine and she had met
15 somebody over here, and we decided just to come on. We were
16 single at the time.

17 Q And what did you do in Portland?

18 A In Portland I worked for Hertz Rent-a-Car.

19 Q All right. Were you married?

20 A When I worked at Hertz, yes, sir.

21 Q Did you have a child?

22 A Yes, sir.

23 Q Did that marriage end in a divorce?

24 A Yes, sir.

25 Q And when was that?

- 1 A In 1964, approximately.
- 2 Q All right, were you married a second time?
- 3 A Yes, sir.
- 4 Q And who did you marry the second time?
- 5 A Frederick Shorn Louevering (pho).
- 6 Q All right, and did that marriage end in divorce?
- 7 A Yes, sir.
- 8 Q All right.
- 9 A Can I make -- can I say something?
- 10 Q Yes.
- 11 A It wasn't in 1964 when I divorced my first husband.
- 12 It would have been in 1970.
- 13 Q All right. Now did you ever meet Mr. Greenhill?
- 14 A Beg your pardon?
- 15 Q Did you ever meet Mr. Greenhill?
- 16 A Yes, sir.
- 17 Q Mr. Jim Greenhill?
- 18 A Did I ever meet him?
- 19 Q Yes.
- 20 A Yes, sir.
- 21 Q Obviously. And that was after you had gotten your
- 22 second divorce?
- 23 A Yes, sir.
- 24 Q When did you meet Mr. Greenhill?
- 25 A I met Mr. Greenhill in 1975.

- 1 Q And where was that?
- 2 A In Medford, Oregon.
- 3 Q And what were you doing in Medford, Oregon?
- 4 A I was working for the State of Oregon at that time.
- 5 Q And were you and Mr. Greenhill married?
- 6 A Yes, sir.
- 7 Q And when did you marry?
- 8 A March the 20th, 1976.
- 9 Q And what was his job at that time?
- 10 A At that time he was working for Al B. Company.
- 11 Q And doing what?
- 12 A He was a traveling salesman. He delivered hardware
- 13 and stuff.
- 14 Q And where was that?
- 15 A In Medford.
- 16 Q Did he have a job after that?
- 17 A Yes, sir.
- 18 Q And what job was that?
- 19 A He worked at Copeland Lumber.
- 20 Q And what did he do at Copeland Lumber?
- 21 A He drove a forklift.
- 22 Q All right. Do you know the date of birth of Mr.
- 23 Greenhill?
- 24 A Yes, it was the 4th of November, 1948.
- 25 Q And did I ask you your date of birth?

1 A Yes.

2 Q I asked you where, I know.

3 A Yes, you did.

4 Q And did you and Mr. Greenhill have a child?

5 A Yes -- no, sir.

6 Q Did Mr. Greenhill have a child by any other marriage?

7 A Yes, sir.

8 Q And is that the son who sits here in the courtroom?

9 A Yes, it is.

10 Q And how old is he?

11 A He is twenty.

12 Q What did Mr. Greenhill do after the job you told us he

13 had with Copeland Lumber?

14 A He started working for the U.S. Forest Service.

15 Q And do you know about when that was?

16 A It was in 1975 -- '76.

17 Q '76. And tell me whether or not Mr. Greenhill was an

18 outdoors person?

19 A Definitely. He loved the outdoors.

20 Q And would he take a job making less money in order to

21 be outdoors in another type work?

22 A Yes, sir.

23 Q All right. You said he went to work for the Forest

24 Service in 1976?

25 A Yes, sir.

1 Q And is that the United States Government Forest
2 Service?

3 A Yes, sir.

4 Q And where was that?

5 A That was in Medford. Well, it was in Jacksonville,
6 outside of Medford.

7 Q Is that what is known as the Rogue River National
8 Forest?

9 A Yes, sir.

10 Q The Applegate Ranger District?

11 A Yes, sir.

12 Q And what was his job title?

13 A Hack -- well, firefighter.

14 Q He was primarily a firefighter?

15 A Yes, sir.

16 Q Do you recall what he made when he was in Oregon
17 per hour?

18 A About six dollars and some cents per hour.

19 Q My records show \$6.12 per hour, is that correct?

20 A Yes, sir.

21 Q And later did you move to Arkansas?

22 A Yes, sir.

23 Q And my records indicate -- or your records indicate
24 his earnings in Arkansas were high of \$8,366 per year, and
25 a low of \$7,930 per year, is that correct?

1 A That's correct.

2 Q Now, as a firefighter did Mr. Greenhill have any other
3 duties?

4 A Yes, sir.

5 Q And what were they?

6 A He was on the hack and squirt crew.

7 Q All right, how often would they hack and squirt?

8 A They hack and squirt daily five days a week for three
9 to four months out of the year.

10 Q All right, do you know when the hacking and squirting
11 season was?

12 A In the spring of the year. Well, it started at the
13 end of October and it continued on for approximately four
14 months.

15 Q To March?

16 A Yes, sir.

17 Q Well, that would be what we call the fall of the year.

18 A Yes, sir.

19 Q All right. So then did he -- when did he go to work
20 in '76 for the Forest Service?

21 A What -- what time of the year? In the beginning of
22 the year.

23 Q Was it June?

24 A Yes, sir.

25 Q Well, June is not the beginning of the year, is it?

1 A No, the middle of the year. I'm sorry.

2 Q So if he went to work somewhere in June or that
3 neighborhood of '76, would that mean he hacked and squirted
4 October through March of '76 and '77?

5 A Yes, sir.

6 Q And when did he leave?

7 A We left in March 1978.

8 Q All right, so that would mean he worked -- he hacked
9 and squirted in October of '76 --

10 A Uh-huh.

11 Q -- through March --

12 A Yes, sir.

13 Q -- October of '77 through March --

14 A Yes, sir.

15 Q -- and October of '78 --

16 A Yes, sir.

17 Q -- through -- up till March when he left?

18 A March, yes, sir.

19 Q So that would be three years he worked as a hack and
20 squirter?

21 A Yes, sir.

22 Q And what did he do during the summer months?

23 A They fought fires and planted trees and cleared, made
24 trails, cleared the forests.

25 Q And then you moved to Arkansas?

1 A Yes, sir.

2 Q And why did you move to Arkansas?

3 A Jim had put in for a transfer for Idaho or Arkansas,
4 and we got Arkansas.

5 Q All right. And why did he want to transfer?

6 A To Arkansas mainly because his parents were in
7 Alabama.

8 Q He wanted to be closer to his family?

9 A Yes, sir.

10 Q Did he work in the Forest Service in Arkansas?

11 A Yes, sir.

12 Q When was that?

13 A He began work in April, I believe it was, of 1978.

14 Q All right. And was it the same type work he did in
15 Oregon?

16 A He was a firefighter here.

17 Q Well, he was a firefighter in Oregon?

18 A In Arkansas, yeah.

19 Q I mean in Oregon he was also?

20 A He was also, yes.

21 Q Now let's go back and talk about Oregon.

22 A Yes, sir.

23 Q Do you know whether or not he was working with
24 herbicides in Oregon?

25 A Yes, sir.

1 Q Do you know if he was working with herbicides when he
2 worked as a hack and squirter?

3 A Yes, sir.

4 Q Do you know whether or not his job involved killing
5 trees?

6 A Yes, sir.

7 Q Did it?

8 A Yes, it did.

9 Q Did you ever -- well, did you know that he -- his job
10 was that of a hack and squirter?

11 A Yes, sir.

12 Q Do you know what a hack and squirter is?

13 A I do.

14 MR. ORTEGO: I am going to object to this line
15 of questioning unless she knows what he did at work every
16 day or saw what he did. That's personal information besides
17 the hearsay that what might be told to her.

18 THE COURT: Overruled.

19 (Mr. Baldwin, Sr. continuing:)

20 Q Tell us what your understanding of what his job entailed
21 as a hack and squirter?

22 A He went out with an ax, and they had squirt bottles,
23 which they hacked the tree and squirted it into the incisions
24 that they made with the ax.

25 Q And what did they squirt into the trees?

1 A Tordon 101.

2 Q Now, what would be the appearance of his clothing when
3 he came home in the afternoon after working as a hack and
4 squirter?

5 A Soaking wet.

6 Q What portion of his clothing would be soaking wet?

7 A His left leg.

8 Q From where to where?

9 A The main part of it was from his knee to his ankle,
10 but he was wet most of the day from his waist down to his
11 ankles.

12 Q Do you know what it was wet with?

13 A Yes, sir.

14 Q What?

15 A Herbicide, Tordon 101.

16 Q Did it have an odor?

17 A Yes, it did.

18 Q A very distinct odor?

19 A A very pungent, nasty odor.

20 Q And could you tell it?

21 A Yes, sir.

22 Q Who washed his clothes?

23 A I did.

24 Q Now, how often did he work in Oregon? Was it a five
25 day week, six day week, or what?

1 A Five day week.

2 Q And how many hours a day did he work?

3 A Eight.

4 Q And how many months a year did he work as a hack and
5 squirter?

6 A Three to four months every year.

7 Q So would that mean that three or four months out of
8 every year he worked eight hours a day on a five day week --

9 A Yes, sir.

10 Q -- hacking and squirting this herbicide?

11 A Yes.

12 Q Tordon 101?

13 A Yes, sir.

14 Q Please tell us whether or not you noticed anything
15 abnormal about his leg?

16 A He had a rash on it, flaky rash.

17 Q On his left leg?

18 A Yes, sir.

19 Q Do you know whether he was right-handed or left-handed?

20 A He was right-handed.

21 Q So would that mean he carried the squirt with his
22 left hand and he hacked with his right hand?

23 A Yes, sir.

24 Q Would that explain to you why his left leg got soaked?

25 A Yes, sir.

1 Q Did the rash on his left leg ever go away?

2 A No, sir.

3 Q Do you know who made the Tordon 101 that he used?

4 A Dow Chemical.

5 Q And you told us you moved to Arkansas?

6 A Yes, sir.

7 Q I believe you said March of '78?

8 A Yes, sir.

9 Q Was he working as a hack and squirt operator --

10 A When we left?

11 Q -- when you left Oregon?

12 A Yes, sir.

13 Q How long did his rash last?

14 A It lasted until they put him on chemotherapy.

15 Q Now let's talk about his illness. What's the first
16 incident or advice or knowledge that you had that he had
17 anything wrong with him?

18 A They diagnosed in hospital.

19 Q When was that?

20 A That was the end of December of 1978.

21 Q And what occasioned him to be in the hospital in
22 December of 1978?

23 A He had an accident at work.

24 Q What happened?

25 A He slipped on a rock. It was icy outside. He slipped

1 and fell onto his rear end.

2 Q Did he have pain?

3 A Yes, he had severe pain in his back.

4 Q Did he at first think it was simply back trouble?

5 A Yes, he thought he'd just fallen down.

6 Q And what did Dr. Teeter do?

7 A Dr. Teeter treated him with mild medication, like
8 aspirin, and then sent him to a specialist.

9 Q What type of specialist?

10 A A bone doctor.

11 Q And who was that?

12 A Dr. Kolb of Russellville, Arkansas.

13 Q Did Dr. Teeter think he had a back problem?

14 A I'm not sure.

15 Q And what did Dr. Kolb do, if you know?

16 A He put him into therapy, whirlpools, back brace,
17 aspirin.

18 Q Did he tell him to go back to work, or to take time
19 off, or what?

20 A He told him to go on and go back to work.

21 Q At this time was Mr. Greenhill in any kind of pain?

22 A Excruciating pain.

23 Q Where? What part of his body?

24 A Mainly in his back, but all over. It affected his
25 whole body.

1 Q Did it affect the way he walked, his extremities, or
2 his arms?

3 A Yes, sir, he leaned over.

4 Q Because of the pain?

5 A Because -- yes, sir.

6 Q All right. And what happened next, Ms. Greenhill?

7 A He tried to go back to work and couldn't stand or sit
8 for any long period of time, so they sent him home. And
9 he went back to Dr. Kolb. Dr. Kolb sent him into hospital,
10 St. Mary's, where they diagnosed cancer.

11 Q And what did they tell him he had?

12 A He had --

13 MR. ORTEGO: I am going to object, Your Honor --

14 A He had cancer.

15 MR. ORTEGO: -- to hearsay.

16 THE COURT: I sustain the objection. I sustain
17 the objection to what they told him he had.

18 (Mr. Baldwin, Sr. continuing:)

19 Q Do you understand what his problem was, or what
20 condition he had?

21 A Yes, sir.

22 Q What was it?

23 A Cancer.

24 Q Cancer of what part of his body?

25 A Lymph nodes, the lymph system, I'm sorry.

1 Q Was he in pain?

2 A Yes, sir.

3 Q And who treated him for the cancer?

4 A Dr. Fecher.

5 Q And now when was that diagnosis made?

6 A The diagnosis was made in December or early January
7 of '79.

8 Q Did they perform any tests on him?

9 A They did a biopsy.

10 Q And where was that?

11 A On his neck.

12 Q Where? I mean, what city, town?

13 A Oh, sorry, that was at St. Mary's Hospital in
14 Russellville, Arkansas.

15 Q Now did they do chemotherapy?

16 A Yes, sir.

17 Q And did they do radiation therapy?

18 A Yes, sir.

19 Q Tell us about the radiation therapy.

20 A The first one or the second one?

21 Q The first one.

22 A They put Jim onto radiation because he couldn't -- his
23 blood wouldn't stay up long enough to take the chemotherapy.

24 Do you want me to tell --

25 Q Well, let me just ask you this, Ms. Greenhill, I may be

1 getting ahead of myself. Did he have chemotherapy first or
2 radiation therapy first?

3 A He had chemotherapy.

4 Q First?

5 A Two courses, yes, sir.

6 Q Well, tell--let's keep in chronological order --

7 A Okay.

8 Q -- if we can. Tell us, then, what treatment he
9 received first.

10 A Okay, they started him on chemotherapy in June of 1979,
11 and he took two courses and they had to take him off of it.
12 In November they put him on radiation, and he did one
13 session of that and then --

14 Q How long did the radiation take?

15 A Twenty-eight days, every day.

16 Q All right, now let's stop here a minute and talk
17 about whether or not he had any problems with either the
18 chemotherapy or the radiation therapy?

19 A He had a lot of problems with both.

20 Q Would you explain what type problems he had? Did it
21 make him sick or what?

22 A It made him nauseous, made him dizzy, had excruciating
23 joint pain, and that was one of the reasons they took him
24 off chemotherapy. He was irritable.

25 Q Did he lose weight?

- 1 A He lost a lot of weight. He lost over 150 pounds.
- 2 Q In what period of time did he lose that weight?
- 3 A Over six years.
- 4 Q All right. It was six years from the time he was
- 5 diagnosed until the time he died?
- 6 A '79 -- seven years total.
- 7 Q And during that period of time he lost how much weight?
- 8 A Approximately 150 pounds.
- 9 Q Did he lose any of his beard?
- 10 A On the first session of radiation he lost all of his
- 11 hair. He had a large beard, and he lost his hair from
- 12 where they marked him from here (indicating) down to his
- 13 lower stomach. He lost his voice. The radiation affected
- 14 his voice box, and he didn't speak -- well, off and on
- 15 like he had laryngitis-type thing. And up until the time
- 16 he died, he had swallowing problem, dryness of the throat,
- 17 from the radiation where they had radiated too--I guess
- 18 where they had blocked off his voice box, they didn't block
- 19 it off completely, I guess.
- 20 Q All right, did he become depressed?
- 21 A Yes, he was very depressed. He talked about the
- 22 quality of his life was not good.
- 23 Q Did he, at the time he was depressed, did he lose his
- 24 desire to do things?
- 25 A He lost his desire to do everything. He couldn't do

1 anything physically, but he lost his desire to do anything
2 because of watching me do it all, I guess.

3 Q Without telling the Jury what he said, tell us whether
4 or not he discussed with you the possibility of taking his
5 life due to the fact he was suffering so much?

6 A Yes, he did discuss that.

7 MR. ORTEGO: I will object to this line of
8 questioning, Judge.

9 THE COURT: I sustain the objection in the manner
10 in which you asked the question.

11 (Mr. Baldwin, Sr. continuing:)

12 Q Ms. Greenhill, I am not asking you to tell us anything
13 that Mr. Greenhill told you. I simply want you to tell us
14 whether or not he discussed the possibility of taking his
15 life because of the pain and suffering he was in?

16 A Yes, he did.

17 Q What about his hobbies, did he continue to do his
18 hobbies?

19 A No, sir, he couldn't do any hobbies because they all
20 involved the outdoors.

21 Q Was he in pain?

22 A Yes, he was always in pain.

23 Q What part of his body hurt?

24 A His body hurt all over, mainly his back.

25 Q What about his relationship with you as man and wife,

1 was that affected?

2 A Yes, tremendously. We didn't sleep together anymore.
3 We couldn't. Jim had to sleep in a hospital bed in a certain
4 position because the pain to his lower back.

5 Q Did you have to sleep in a separate bed?

6 A Yes, sir.

7 Q Well, what about his condition, how did it progress?
8 Did it get better, get worse?

9 A He got progressively worse.

10 Q Did he deteriorate?

11 A Yes, he looked like a corpse.

12 Q What about his condition both mentally and physically?

13 A Mentally, he was very depressed. I guess feeling
14 inadequate being the male of the household played on his
15 mind a lot.

16 Q Now, then would it be accurate for me to say that his
17 condition both mentally and physically deteriorated rapidly?

18 A Yes, sir, it did.

19 MR. ORTEGO: Object to the leading of the witness.

20 THE COURT: I sustain the objection.

21 MR. ORTEGO: Could we have the answer stricken
22 then, please, Your Honor?

23 (Mr. Baldwin, Sr. continuing:)

24 Q Now, let's talk about the chemotherapy. Did they give
25 him any medicine along with that?

1 A That was in 1986.

2 Q And how long did that last?

3 A He took two courses and was taken off, for his blood
4 was too low to take anymore again.

5 Q Was it stopped because he couldn't stand it anymore?

6 A He couldn't stand anymore pain, and he just couldn't
7 make himself do anymore.

8 Q And at that time do you know whether or not his liver
9 had become affected?

10 A Yes.

11 MR. ORTEGO: Well, Judge, I am going to object
12 to this scientific question. This is really for a doctor.

13 THE COURT: I sustain the objection.

14 (Mr. Baldwin, Sr. continuing:)

15 Q Now did he have any problem that required any surgery
16 along about that time?

17 A Yes, sir, he did.

18 Q And what was that?

19 A He had surgery on his liver where the cancer had
20 started in the soft tissue behind the back.

21 MR. ORTEGO: Judge, I am going to object to this
22 line of questioning where the cancer started. She is not
23 a medical doctor.

24 THE COURT: Overruled. Overrule the objection.

25 (Mr. Baldwin, Sr. continuing:)

1 Q Just tell what you understand, and what you know the
2 type surgery he had.

3 A I know he went in the hospital because the cancer
4 had broken out in an area of his back at that time. They
5 went in there and they found cancer in his liver and they
6 put what they call, I think it's a J-stint, which opens it
7 to the ureter to allow his kidneys to function, because one
8 of his kidneys had stopped functioning because this tube
9 had closed over, that they inserted this plastic tube to
10 make it work.

11 Q Do you know when they took him off of chemotherapy for
12 the last time?

13 A The last time Jim came off chemotherapy was in July of
14 1979 -- I mean '86.

15 Q And without again discussing any conversation between
16 he and the doctor, did or not he know he was to die?

17 A It was inevitable. We were told that from the
18 beginning.

19 Q And did he accept this and discuss it with you?

20 A He accepted it as well as anybody could, and he did
21 discuss it with me, yes, sir.

22 Q Was his son aware that his father was about to die?

23 A Yes, sir.

24 Q Was his son with him, living with him, at that time?

25 A Jimmy came out, yes, sir.

1 Q All right, now tell us what happened then on the day
2 he died.

3 A The day --

4 Q When was that?

5 A Jim died July 28th, 1986.

6 Q Just describe what happened.

7 A From the beginning?

8 Q Did he wake you up?

9 A He woke me up at ten minutes to six on that morning.

10 MR. ORTEGO: Judge, I would object to this line
11 of questioning. I don't see how the relevance of the day
12 he died has to the lawsuit. I know it invokes sympathy,
13 and it is a very sad story, but I don't understand the
14 relevance.

15 THE COURT: Overruled.

16 (Mr. Baldwin, Sr. continuing:)

17 Q I know this is hard for you, Ms. Greenhill, but it is
18 one of the matters the Jury has got to consider.

19 A Yes, sir.

20 THE COURT: You are objecting to what the deceased
21 told his wife --

22 MR. ORTEGO: Yes, Your Honor.

23 THE COURT: -- said to his wife?

24 MR. ORTEGO: Yes.

25 THE COURT: Overruled.

1 (Mr. Baldwin, Sr. continuing:)

2 Q Just go ahead and tell us what, the best you can, what
3 happened.

4 A I was awoken at ten minutes to six. Jim told me he
5 couldn't breathe. He needed air. It was very hot that
6 summer. And I helped him into the bathroom because he
7 said he needed to use the bathroom. He couldn't sit onto
8 the stool. He said -- he lost control of his bowels, and
9 he fell in front of me on the floor and kept telling me he
10 needed air, give him air. So his sister was there at the
11 time visiting. I called her and we both drug him outside
12 onto the ground outside. I got a fan and put a fan on him
13 because he kept telling me to give him air, and so I tried
14 to do mouth-to-mouth. And in the meantime, I called the
15 hospital to get them to send the ambulance on the way. This
16 had already been discussed if some emergency came up,
17 because we live pretty rural.

18 And I started to give Jim mouth to mouth resuscitation
19 and it wasn't very long after that he started hemorrhaging
20 from the mouth and saying "Give me air," and I kept doing
21 that, and he died while I was giving him mouth to mouth.

22 Q What is the last thing he said to you?

23 A The last thing he said to me was he loved me, he loved
24 the kids, and he hoped God forgave him.

25 Q Now, Ms. Greenhill, let's try to talk about some happier

1 things.

2 A Yes.

3 Q Let's talk about some of the things you and he did
4 together during your lifetime.

5 A We did a lot of outdoor camping.

6 Q Did you do any backpacking?

7 A Yes, we did backpacking.

8 Q What type did you do?

9 A We went out into the woods with the backpacks and
10 the kids, and just about every other weekend we would go
11 out.

12 Q How long would you stay?

13 A We would stay the whole weekend, from the time the
14 children got out of school on Friday.

15 Q And would you take any paraphernalia with you?

16 A Yeah, we took our tents and all of our camping
17 equipment, sleeping bags and all the cookware and stuff.

18 Q Did he or any of the children fish?

19 A Yes, sir.

20 Q Did you hike?

21 A Yes, we sure did.

22 Q Did you cook out?

23 A Yes.

24 Q Did his son ever accompany him on these trips?

25 A When Jimmy lived with us, yes, all the time. Even

1 Even when he wasn't living with us. Jimmy came out every
2 summer.

3 Q And how often would you make these backpack trips?

4 A Oh, at least twice a month.

5 Q Did he have any type of hobby that he liked to engage
6 in?

7 A Yeah, he liked photography. He liked music. He liked
8 we liked to walk. We liked to dance.

9 Q Back to the photography, did he do it just for his
10 enjoyment, or did he try to do it in a professional way,
11 or what?

12 A Mainly just as a hobby, but he did enter a couple of
13 contests.

14 Q And what type pictures did he take?

15 A Outdoor pictures, scenery; some portraits, but not as
16 much as the scenery and flowers that he took.

17 (Mr. Baldwin, Sr. tendering exhibits to Mr. Ortego)

18 MR. ORTEGO: Judge, I am going to object to the
19 photographs. You know, I don't see what the relevance is
20 of the photographs that he took.

21 THE COURT: Overruled.

22 MR. BALDWIN, SR.: We need those numbers. What
23 numbers will they be?

24 (Mr. Baldwin, Sr. continuing:)

25 Q While we are marking those, what type pictures did he

1 like to take?

2 A He liked to take pictures of flowers and scenery,
3 portraits of the children.

4 Q Did they describe to you what kind of a person he was --

5 A Yes, sir.

6 Q -- in a way with these photographs?

7 A Yes, sir.

8 Q Are 31 and 32 examples of those photographs that you
9 brought to me that he took?

10 A Yes, sir, he took both of these.

11 MR. BALDWIN, SR.: Your Honor, if I might just show
12 these to the Jury?

13 THE COURT: All right.

14 (Mr. Baldwin, Sr. tendering exhibits to Jury)

15 MR. BALDWIN, SR.: We will offer those into
16 evidence at this time.

17 THE COURT: They will be admitted.

18 (Mr. Baldwin, Sr. continuing:)

19 Q Now, you said you liked to go dancing?

20 A Yes, sir.

21 Q And what else did you like to do that you and he
22 enjoyed together?

23 A We went to the movies. We used to go out eating.

24 Q Just you and he?

25 A Yes, sir.

1 Q Did you enjoy being together?

2 A We always enjoyed being together. In fact, we had,
3 always had an understanding that one day of the week was
4 ours, just he and I.

5 Q Would it be accurate to say that you were together
6 most of the time when you were not working?

7 A Yes, sir, we were always together when we were not
8 working.

9 Q Now were you working when you were in Arkansas when he
10 became ill?

11 A Yes, sir.

12 Q What did you do with your job after he became ill?

13 A I quit.

14 Q And why?

15 A Because my husband was ill and I needed to be at home
16 to take care of him.

17 Q Were you happily married?

18 A Yes, sir.

19 Q Was he a healthy person up to the time that he got
20 this problem with the Tordon 101?

21 A Yes, sir.

22 MR. ORTEGO: I am going to object to the form of
23 that question, Your Honor.

24 THE COURT: I sustain the objection.

25 (Mr. Baldwin, Sr. continuing:)

1 A Yes, sir.

2 Q And what did they give him?

3 A Prednisone.

4 Q And what did that do? Is that a cortisone?

5 A Yes, sir.

6 Q Or steroid, as some people call it?

7 A Yes, it is.

8 Q What did the cortisone do to him? How did it affect
9 him?

10 A Made him very nervous, almost made him crazy.

11 Q Was he able to eat?

12 A No, he couldn't eat. He couldn't keep anything in his
13 stomach at all.

14 Q And how long did this chemotherapy -- when was this
15 that he took it?

16 A The first treatment only lasted two course, which is
17 two months.

18 Q And that was when?

19 A That was in June of 1979.

20 Q All right. And did that make him ill?

21 A Yes, it made him very ill.

22 Q Was he ill the whole course of the treatment, or just
23 portions of the treatment?

24 A The only time that Jim felt well was the last three
25 days before we went back for another chemotherapy treatment.

1 Q And how long did that last?

2 A The chemotherapy treatments?

3 Q Yes.

4 A Six months for each one.

5 Q And when was the next chemotherapy? Was there one in
6 '83?

7 A Yes, there was, sir. It was radiation and chemo-
8 therapy.

9 Q And how long did that last?

10 A The radiation was a full course, and the chemotherapy
11 was --

12 Q When you say "full course," what do you mean?

13 A Twenty-eight days. I'm sorry.

14 Q All right, go ahead.

15 A And the chemotherapy was the full six months.

16 Q All right. During that period of time what did the
17 chemotherapy do to him?

18 A Made him lose weight. He couldn't eat. He couldn't
19 walk right. He couldn't sleep.

20 Q Did he vomit?

21 A Yes, he vomited continually.

22 Q And after that did he have another series of chemo-
23 therapy?

24 A Yes, sir.

25 Q And when was that?

1 Q Was he healthy up until the time he worked as a hack
2 and squirter in the forest?

3 A Yes, sir, Jim was always big and healthy.

4 Q Did you and he have a happy and satisfying and healthful
5 sex life prior to the time that he became ill?

6 A Yes, sir.

7 Q Did you enjoy each other?

8 A Yes, sir.

9 Q Did he love his children?

10 A He loved his kids, yes.

11 Q Would he stay in contact with his children, particularly
12 his son?

13 A Yes, sir.

14 Q Was he the type of person who would make gifts?

15 A All the time.

16 Q Now let's talk a little bit about the services he would
17 perform around the house when he was healthy.

18 A Uh-huh.

19 Q What are some of the things he did as a husband?

20 A Things like splitting wood, making the fire, making
21 decisions about what to do with the children.

22 Q Did he bring the wood in?

23 A Yes, he brought the wood in, and he kept the fire
24 going. He got up at night to do the fire. We heat with
25 wood.

- 1 Q I'm sorry?
- 2 A I say he got up at night to do the fire.
- 3 Q Is that the way you had for heat where you live?
- 4 A Yes, sir. I'm sorry, I didn't understand.
- 5 Q What type heat did you have?
- 6 A We had wood heat.
- 7 Q And no other kind?
- 8 A No, sir.
- 9 Q You live kind of in the country?
- 10 A Yes, sir.
- 11 Q Now go ahead. He sat out the wood to keep the fire
- 12 going?
- 13 A Yes, he would get up at night and do the fire. He took
- 14 charge of the bills and all the money.
- 15 Q Did he fix plumbing leaks?
- 16 A Yes, he fixed minor repairs around the house, yes, sir.
- 17 Q Who mowed the grass?
- 18 A He did.
- 19 Q Did he have a garden?
- 20 A Not really. A small one.
- 21 Q Was he a cook?
- 22 A Yeah, he cooked real good. In fact, he cooked while I
- 23 was at work.
- 24 Q Who made the decisions in the family?
- 25 A He did.

1 Q And particularly the decisions about what type of car
2 you would buy, or the financial decisions?

3 A Yes, Jim did all that.

4 Q What about the decisions relating to the children?

5 A He did all that, too, always.

6 Q Was he a frugal person --

7 A Yes, sir.

8 Q -- with reference to what he spent on himself?

9 A Yes, sir.

10 Q Was it very minimal?

11 A Very minimal. Jim didn't like to spend money on him-
12 self at all.

13 Q And were his medical bills in the neighborhood of
14 \$100,000?

15 MR. ORTEGO: I am going to object, Your Honor --

16 A Yes, sir.

17 MR. ORTEGO: -- unless there is a foundation for
18 this.

19 (Mr. Baldwin, Sr. continuing:)

20 Q Do you know what his medical bills were?

21 A Over \$100,000.

22 THE COURT: Overruled.

23 Q I am asking you not to tell us. I am asking you if you
24 know what his medical bills were?

25 A Yes, sir.

1 Q And what were they?

2 A Over a hundred thousand at least.

3 MR. BALDWIN, SR.: I pass the witness, Your Honor.

4 THE COURT: I know you can't finish this cross-
5 examination by noon. Would you rather come back?

6 MR. ORTEGO: I think it might be easier. I can
7 organize and be quick and don't waste time.

8 THE COURT: Ladies and gentlemen, since we cannot
9 finish the cross-examination by noon, and rather than get
10 into it and have to stop I am going to recess for lunch
11 and ask you to be back in the jury box at one fifteen. Now,
12 don't discuss this case with each other. As I indicated to
13 you earlier, it is not time for that yet. Don't allow
14 anyone to discuss it with you. We have kind of small
15 quarters up here, and don't talk to any of the lawyers and
16 they are not going to talk to you. Don't talk to any of
17 the parties who are involved in this case. Be back here
18 in the jury box at one fifteen.

19 (Recess at 11:45 a.m., until 1:15 p.m.; open court,
20 jury and all parties present)

21 THE COURT: Please be seated. Mr. Ortego, you may
22 cross-examine.

23 MR. ORTEGO: Thank you, Your Honor.

24 CROSS EXAMINATION

25 BY MR. ORTEGO:

1 Q Good afternoon, Mrs. Greenhill.

2 A Good afternoon.

3 Q I know this might be difficult, so if there is any time
4 you feel uncomfortable, just let me know and I will stop
5 the questioning. You testified this morning that James
6 had about a hundred thousand dollars in medical bills?

7 A Yes, sir.

8 Q Did you add them all up?

9 A No, sir.

10 Q How did you come about that figure?

11 A I estimated it.

12 Q That's an estimate?

13 A Yes, sir.

14 Q It could be lower?

15 A It could be higher; it could be lower.

16 Q But you are not really sure?

17 A No, sir.

18 Q You discussed with Mr. Baldwin the medical bills, how
19 much they were?

20 A No, sir.

21 Q Did you go look at the medical bills and try to add
22 them up?

23 A They came to the house every month.

24 Q But that's just an estimate, ma'am?

25 A Yes, sir.

1 Q When is the first time you ever came to Texas?

2 A When I came for jury selection.

3 Q Prior to that jury selection two weeks ago had you ever
4 lived or been to Texas before?

5 A No, sir.

6 Q Is this your first visit, then, for this trial?

7 A Yes, sir.

8 Q Did you or Jim ever live in Texas?

9 A No, sir.

10 Q Did Jim ever live in Texas?

11 A No, sir, not that I know of.

12 Q Where do you currently live, ma'am?

13 A I live in Ozark, Arkansas.

14 Q And when did you come down for the trial? When did you
15 get here?

16 A Sunday evening about eight thirty p.m.

17 Q How did you get here, ma'am?

18 A I drove.

19 Q Did you do the same the last time for jury selection?

20 A Yes, sir.

21 Q A little clarity, I was a little confused this morning,
22 ma'am. James wasn't your first marriage?

23 A No, sir.

24 Q Who did you marry first?

25 A Larry Clark Filbrook (pho).

1 Q And where did you meet Mr. Filbrook?

2 MR. BALDWIN, SR.: Your Honor, I would object to
3 this, any testimony about any prior marriages. It has
4 nothing to do with this case.

5 MR. ORTEGO: It was brought up, and there was
6 some talk of the children.

7 THE COURT: It was brought up on direct. I
8 overrule the objection.

9 (Mr. Ortego continuing:)

10 Q Where did you meet Mr. Filbrook?

11 A In Frankfurt, Germany, the first time.

12 Q The first time. And is that when you came to the
13 United States, after you married him?

14 A No, sir.

15 Q Did you marry him in Germany?

16 A No, sir.

17 Q Where did you marry him?

18 A I married him in Portland, Oregon.

19 Q Was he a service man?

20 A Yes, sir.

21 Q How long were you married to Mr. Filbrook?

22 A Approximately two years.

23 Q Did you have any children with him?

24 A Yes, sir.

25 Q And how many children did you have with him?

- 1 A One.
- 2 Q And what was his or her name, ma'am?
- 3 A Her name is Michelle Ann.
- 4 Q And what name does she go by?
- 5 A Louevering (pho).
- 6 Q And her father was Mr. Filbrook?
- 7 A Her natural father.
- 8 Q Did there come a time where you married again, ma'am?
- 9 A Yes, sir.
- 10 Q When was that?
- 11 A 1970, approximately.
- 12 Q And who did you marry?
- 13 A No.
- 14 Q Oh, I'm sorry.
- 15 A I married Fred Louevering.
- 16 Q And where did you marry Mr. Louevering?
- 17 A At Reno, Nevada.
- 18 Q Did you have any children with Mr. Louevering?
- 19 A Yes, sir.
- 20 Q When was that child born?
- 21 A 1972.
- 22 Q What happened to Michelle, the first child, after you
- 23 married Mr. Louevering?
- 24 A Could you repeat that again?
- 25 Q Sure. You divorced your first husband, Mr. Filbrook --

- 1 A Yes.
- 2 Q -- with whom you had one child?
- 3 A Yes, sir.
- 4 Q What happened to Michelle Ann when you married Mr.
- 5 Louevering?
- 6 A She stayed with me. Mr. Louevering adopted her.
- 7 Q Mr. Louevering adopted her?
- 8 A Yes, sir.
- 9 Q And you had one child with Mr. Louevering?
- 10 A Yes, sir.
- 11 Q And what was his or her name? I missed that, I'm
- 12 sorry.
- 13 A Soren Christian Louevering.
- 14 Q Now you married James in 1975?
- 15 A Yes, sir.
- 16 Q Did he ever adopt either Michelle or Soren?
- 17 A Not legally, no.
- 18 Q Did they live with you?
- 19 A Yes, sir.
- 20 Q When you married Mr. Greenhill in 1975 did you meet him
- 21 through an acquaintance?
- 22 A Yes, sir.
- 23 Q You were friendly with his first wife?
- 24 A Yes, sir.
- 25 Q And that would be Sandra Watkins?



FORMULA

HERBICIDE

CONTAINS ALKANOLAMINE SALT

Acid Equivalent: 4 Pounds per Gallon

For the Selective Control of Many Broadleaf Weeds in Non-Corn Pastures, Rangelands and in Certain Crops. Also for Control of

ACTIVE INGREDIENTS:

Alkanolamine Salt† (of the Ethanol and Isopropanol series) of 2,4-Dichlorophenoxyacetic acid 59.7%
INERT INGREDIENTS: 40.3%
2,4-Dichlorophenoxyacetic Acid Equivalent 38.6%
E.P.A. Registration No. 464-1-AA E.P.A. Est. No. 464-MI-1

†Salts are the least volatile forms of 2,4-D and do not release enough vapors from treated areas to reduce yield of adjacent susceptible crops.

AGRICULTURAL CHEMICAL

Do Not Ship or Store with Food, Feeds, or Clothing

PRECAUCION AL USUARIO: Si usted no lee Inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

TRANSLATION: (TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

C
KEEP OUT
HARM
CAUSES IRRITATION
Do Not Get In

In case of contact, flush eyes, get medical attention; wash wash contaminated clothing

18.9 L / 5 GAL

86-1142 PRINTED IN U.S.A. IN OCTOBER, 1975

REPLACES SPECIMEN LABEL 86-1142 PRINTED IN SEPTEMBER, 1974

DISCARD PREVIOUS SPECIMEN LABELS.

REVISIONS INCLUDE: (1) USE ON ASPARAGUS ADDED (2) USE ON STRAWBERRIES ADDED (3) PREHARVEST APPLICATION ON CORN ADDED.

SPECIMEN LABEL
REDUCED TO 73%

FEB 14 1977

40*

OF 2,4-D

n

Areas. Grass
es by Injection

UTION

REACH OF CHILDREN
. IF SWALLOWED
TION OF SKIN AND EYES
s, on Skin or on Clothing

plenty of water for at least 15 minutes and
with soap and plenty of water. Remove and
re re-use. Do not wear contaminated shoes.

D-1053

[illegible]

Generally, the lower dosages given will be satisfactory for young, succulent growth in sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed. Apply FORMULA 40 during warm weather when weeds are young and growing actively. Use enough spray volume for uniform coverage by ground or air application. If only bands or rows are treated, leave middle rows unsprayed; the dosage per crop acre is reduced proportionately. Do not spray where spray drift may be a problem due to proximity of susceptible crops or other desirable plants. Read and follow all Use Precautions given on this label.

To Prepare the Spray, mix FORMULA 40 only with water, unless otherwise directed on this label. Add about half the water to the mixing tank then add the FORMULA 40 with agitation, and finally the rest of the water with continuing agitation. Note: Adding an wetting agent or other surfactant to the spray may increase effectiveness on weeds, but also may reduce selectivity to crops resulting in crop damage.

The use of Liquid Fertilizer FORMULA 40 may be combined with liquid fertilizers suitable for foliar application to accomplish weeding and feeding of corn, small grains, sorghum and grass pastures in one operation. Use FORMULA 40 in accordance with recommendations for these crops given in the following text and table. Use liquid fertilizer at rates recommended by supplier or local extension service. Special instructions for use of liquid fertilizer are given below.

To prepare the spray, FORMULA 40 must first be premixed with water for liquid nitrogen fertilizer use a premix consisting of 1 part of FORMULA 40 and 4 parts of water, for other liquid fertilizers use 1 part of FORMULA 40 with 50 to 60 parts of water. Add the premix to the fertilizer while maintaining continuous agitation during both mixing and spraying operations. Apply the spray the same day it is prepared. Do not store. Note: Always premix FORMULA 48 with water before adding to the liquid fertilizer.

WILD CONTROL IN ASPARAGUS: See Table for recommended use rates. To control water marmory and certain other broadleaf weeds apply 1/2 gallon per acre for aircraft application per acre for ground application and about 1/2 gallons per acre for aircraft application. Apply on actively growing weeds, usually in April or May. If weeds are present, treat immediately after cutting. Make no more than 2 applications during the harvest season and these should be spaced at least one month apart. Spores contacted by the foliage may be molluscated. These spores should be cut immediately and discarded. Spray harvest spraying should be only by ground rig using drop nozzles to avoid harvesting the ferns.

WET CONTROL ON SMALL GRAINS NOT UNDERTREATED WITH A LIGULINE (Barley, Oats, Rye, Wheat). See Table for recommended use rates. Scarify after grain begins to germinate and before the boot stage (usually 4 to 8 inches tall) and weeds are small. Do not apply before the tiller stage as small weeds are not controlled. Do not apply to control weeds that will interfere with harvest or to suppress perennial weeds. Pre-emergent treatment can be applied when the grain is in the dough stage. Best results will be obtained when seed moisture is adequate for plant growth and weeds are growing well. Note: Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain feeds within 2 weeks after treatment. Do not feed treated straw to livestock.

WEED CONTROL IN CORN: See Table for recommended use rates. Preemergence Apply to soil anytime after planting but before corn emerges. Do not use on very light, sandy soil. Emergence — Apply just as corn plants are breaking ground. Postemergence — Apply to corn foliage. When corn is over 8 inches tall use post-nastizone to keep spray off corn leaves. Do not apply from tasseling to dough stage. Injury to corn is most likely to occur if FORMULA 40 is applied when corn is growing rapidly under high temperature and high soil moisture conditions. In such situations, use the low rate of $\frac{1}{2}$ pint per acre. After application, delay cultivation for 8 to 10 days to allow the corn to overcome any temporary brittleness. NOTE: Hybrid, very late maturing corns to 2,4-D. Some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Consult the seed company or your Agricultural Experiment Station or Extension Service Weed Specialist for this information. Preharvest — After the hard dough or denting stage, apply by air or ground equipment to suppress perennial weeds. Decrease weed seed production, and control tall weeds such as blackweed, cocklebur, dogfennel, blackswallowweed, ragweed, sunflower, velvetleaf, and vines that interfere with harvesting.

WHEED CONTROL IN FOREMAN (M40): See table for recommended use rates. Treat only after the soughm is 4 inches high and preferably before it is 13 inches high. Do not treat during the boot, heading or early dough stages. Reduce spray rate by keeping the boom and spray nozzles as low as possible. If crop is taller than 18 inches, use drop nozzles to keep the spray off the leaves. Temporary crop injury can be expected under conditions of high air moisture and high air temperatures. It is necessary to apply FORMULA 14 tolerance to 2.4-D. Some are more than 1/2 pint per acre. NOTE: Hybrid variety is tolerant to 2.4-D. Consult the seed company or your Agricultural Experiment Station or Extension Service Weed Specialist for this information.

WEED CONTROL IN RICE: See Table for recommended use rates. Apply in the tillering stage of rice development at the time of first joint development (first to second green ring), usually 4 to 8 weeks after emergence. Do not apply after panicle initiation other rice internodes develop ½ inch. At early seedling, early panicle, boot and green ring.

flowering or early heading growth stages. NOTE: Some rice varieties under certain conditions may be susceptible to lodging. Therefore, before spraying consult local Extension Service or University consultants for appropriate rates and timing of E-100 sprays.

WEED CONTROL IN STRAWBERRIES: See Table for recommended use rates. To control many broadleaf weeds in established or old strawberry plantings apply 25 to 50 gallons of water per acre in early spring when the strawberry is dormant or immediately after the last picking. Do not apply unless possible injury to the crop is acceptable. Follow recommendations of State Extension Weed or Horticultural Specialists for local conditions.

NOTE: Do not apply when weather conditions favor drift from treated areas. Read complete directions and precautions before using by air or ground application.

CROP		DOSAGE PER ACRE	
		Normal rates (usually safe for crop)	Higher rates for special situations, ¹ (more likely to injure crop)
SMALL GRAINS	Spring Pstemurgence wheat, barley, rye, oats	$\frac{1}{2}$ to $1\frac{1}{2}$ pints $\frac{1}{2}$ to 1 pint	2 to 2 pints $1\frac{1}{2}$ to 2 pints
	Preharvest (though stages) wheat, barley, oats	1 to 2 pints	2 to 2 pints
CORN ¹	Pstemurgence	2 to 4 pints 1 pint	$1\frac{1}{2}$ pints
	Pstemurgence ² up to 8 inches tall 8 inches to heading (use only directed spray); Preharvest	$\frac{3}{4}$ to 1 pint 1 pint 1 to 2 pints	$1\frac{1}{2}$ to 2 $\frac{1}{2}$ pints
SORGHUM (milo) ¹	Pstemurgence	$\frac{3}{4}$ to 1 pint 1 pint	$1\frac{1}{2}$ to 2 pints
	8 to 8 inches tall 8 to 15 inches tall (use only directed spray)		
RICE		1 to 2 $\frac{1}{2}$ pints	2 to 2 pints
SUGAR CANE		2 to 4 pints	
ASPARAGUS		$1\frac{1}{2}$ to 2 quarts	
STRAWBERRIES		1 to $1\frac{1}{2}$ quarts	

*Corn and sorghum varieties vary in tolerance to 2,4-D. Some are easily injured. Before spraying, get information on 2,4-D tolerance of nearby varieties and spray only those known to be resistant to 2,4-D injury. If plants are more than 8 inches tall, use directed spray and keep spray off corn and sorghum foliage.

These higher rates may be needed to handle difficult weed problems in certain areas such as under dry conditions, especially in western areas. However, do not use unless possible crop injury will be acceptable. Consult State Agricultural Experiment Station or Extension Service weed specialists for recommendations or suggestions to be local conditions.

WEED CONTROL IN ESTABLISHED GRASS PASTURES AND RANGELANDS: Use at 2 to 4 parts per acre. Apply preferably when weeds are small and growing actively before the bud stage. Do not use on burgrass, sheath, or other legumes. Do not use on newly seeded areas until grass is well established. Do not use from early boot to milk stage where grass seed production is desired. Do not graze dairy animals on treated areas within 7 days after application.

GRASS SEED COPIES: Use 1 to 4 points per acre in spring or fall to control broadleaf weeds in grass pastures for seed. Do not spray from early June to the middle August. Spray seedling grass only after the five-leaf stage. Use 5% to 1 pint per acre. Do not control small seedling weeds. After the grass is well-established, higher rates, up to 4 points, can be used to control hard-to-kill annual or perennial weeds. For best results, apply when soil moisture is adequate for good growth. **NOTE:** Do not use on bentgrass unless grass injury can be tolerated. Do not graze dairy animals nor cut forage for hay within 7 days after application.

BROADLEAF WEED CONTROL IN NON-CROPLAND GRASS AREAS SUCH AS LAWNS, GOLF COURSES, CEMETERIES AND PARKS, ARBUTHEDS, ROADSIDES, VACANT LOTS, AND DRAINAGE DITCH BANKS. Use 1 to 2 quarts of FORMULA 40 per acre in the amount of water needed for uniform application. Treat when weeds are young and growing well. Apply 2 quarts per acre will provide adequate weed control. Do not use on dicotyledons or other herbaceous ground covers. Do not use on creeping grasses such as bent except for spot treating nor on freshly seeded turf until grass is well established. Seeding of lawns should be delayed following treatment. With spring application, weeds in the fall, with fall application, treated in the spring. Legumes are usually damaged or killed. Desperately perennial weeds such as bindweed and 3 Canada thistles may require repeated applications.

CONTROL OF SOUTHERN WILD ROSE: On rangelands, roadsides and fence rows use 1 gallon of FORMULA 40 plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water and spray thoroughly as soon as foliage is well-developed. Two or more treatments may be required. On rangeland, apply a maximum of 8 quarts of FORMULA 40 per acre per application. Do not graze dairy animals on treated areas within 7 days after application.

SPOT TREATMENT IN NON-CROP AREAS: To control broadleaf weeds in small areas with a hand sprayer, use $\frac{1}{2}$ pint of FORMULA 40 in 3 gallons of water and spray thoroughly wet all foliage.

THESE STUDIES AND
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AVOID CONTACT WITH
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11

TM control unwanted hard-wood trees such as elm, etc. forest and other non-crop areas, apply FORMULA 40 1 ml of the undiluted product through the bark around the to 3 inches between edges of the injector wounds. For harder as ash, maples and dogwood use 2 ml of undiluted FORMULA 40 hnuous cuts around the trunk often provide improved control and level may be more effective than at higher levels. Treat- any season, however, effectiveness may be less during winter I not be treated during the spring sap flow.

USE PRECAUTIONS

12,4-D SUSCEPTIBLE CROPS AND OTHER DESIRABLE BROADLEAF 10 herbicide is injurious to most broadleaf plants. Therefore, do otherwise permit even minute amounts (as in spray mist) to tobacco, fruit trees, vegetables, flowers, ornamentals or other ptible to 2,4-D. Do not use in or near a greenhouse.

IE VICINITY OF COTTON, GRAPES, TOBACCO, TOMATOES OR D SUSCEPTIBLE CROPS OR ORNAMENTAL PLANTS.

I WIND IS BLOWING TOWARDS SUSCEPTIBLE CROPS OR ORNA-

Applications should be made only when there is no hazard from small quantities of the spray, which may not be visible, may nble crops during both growing and dormant periods. Use coarse ft since, under certain weather conditions, fine spray droplets re. The spray thickening agent MALCO-TROL¹ may be used with educing spray drift. If used follow all use recommendations and educt label.

ark of MALCO Chemical Company.

- With ground equipment, spray drift can be lessened by keep- is low as possible, by applying 20 gallons or more of spray per e than 20 pounds spraying pressure with large-droplet producing ng when wind velocity is low, and by stopping all spraying when per hour. Do not apply with hollow cone-type insecticide or other e fine-droplet spray.

- With aircraft, drift can be lessened by applying a coarse spray, : 20 pounds spray pressure at the nozzle; by using straight stream ght back, by using a spray boom no longer than $\frac{1}{2}$ the wing span r spraying only when wind velocity is less than 6 mph.

AIRCRAFT WHEN AN AIR TEMPERATURE INVERSION EXISTS. Such ized by little or no wind and with air temperature lower near gher levels. The use of a continuous smoke column at or near site eated to indicate a temperature inversion by layering of the smoke tion and velocity of air movement.

may move soil particles. If 2,4-D is on these particles and they are de r visible symptoms may appear but serious injury is un- no. of 2,4-D on dust is reduced if treated fields are irrigated ly at... application. Do not contaminate irrigation ditches or water domestic purposes.

istles & seeds, insecticides or fungicides. To avoid injury to de- store, handle or apply other agricultural chemicals with the same vent used for FORMULA 40 except as specified on this label. Ex- 2,4-D in the soil may temporarily inhibit seed germination or

affect the use of herbicides. Consult your Agricultural Experiment Service weed specialists for advice in selecting treatments from local conditions.

this product conforms to all applicable regulations. Apply this lled on this label.

0 herbicide, exposed to subfreezing temperatures, should be 40°F and mixed thoroughly before using.

I containers and dispose of wastes by burying in non-crop areas plies. Containers should be disposed by punching holes in them ees. Follow official local disposal regulations where required.

MONEY BACK GUARANTEE

herbicide is guaranteed by The Dow Chemical Company to of the purchase price: satisfactory control of weeds listed on container when used rided. suitable spray mixture in any water R for spray use.

We that the product conforms to its chemical description and is reasonably lid on the label when used in accordance with directions under normal com- her this warranty nor any other warranty of MERCHANTABILITY OR FITNESS URPOSE, express or implied, extends to the use of this product contrary to rder abnormal conditions or under conditions not reasonably foreseeable nesumes the risk of any such use

5975

DOW CHEMICAL COMPANY

AND SUBSIDIARIES

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SPECIMEN LABEL
(BACK)
REDUCED TO 73%

D-1054

SPECIMEN LABEL
REDUCED TO 15%



86-1173 PRINTED IN U.S.A. IN DECEMBER, 1974

REPLACES SPECIMEN LABEL 86-1173 PRINTED IN AUGUST, 1972

REVISIONS INCLUDE: (1) EPA ESTABLISHMENT NUMBER ADDED
(2) AGRICULTURAL CHEMICAL STATEMENT ADDED

DOWPON C

GRASS KILLER



JOHNSON GRASS



CRAB GRASS



BERMUDA GRASS

ACTIVE INGREDIENTS:
2,2-Dichloropropionic Acid, Sodium Salt 55.0%
Dalapon (2,2-Dichloropropionic Acid) Equivalent 47.7%
Trichloroacetic Acid, Sodium Salt 30.6%
Trichloroacetic Acid Equivalent .. 27.0%
INERT INGREDIENTS: 14.4%
E.P.A. Registration No. 484-331-ZA
E.P.A. Est. 484-MI-1

AGRICULTURAL CHEMICAL

Do Not Ship or Store with Food, Feeds, or Clothing
PRECAUCION AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.
TRANSLATION: (TO THE USER:) If you cannot read English, do not use this product until the label has been fully explained to you.

WARNING

**KEEP OUT OF REACH OF CHILDREN
HARMFUL IF SWALLOWED
MAY CAUSE BURNS**

**Do Not Get In Eyes, on Skin, or on Clothing or Shoes
Avoid Breathing Spray Mist**

In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes; for eyes, get medical attention. Remove contaminated clothing and wash before re-use.

RAPID TOP GROWTH KILL • LONG TERM CONTROL

plus

3 CONTAINERS OF
DYNAWET

**WETTING
AGENT**

ACTIVE INGREDIENTS:
Sodium Hexafluoroantimonate
polyethylene glycol ether
INERT INGREDIENTS

45 LB. OF DOWPON C

PLUS 3-2 Quart Cans of DYNAWET Wetting Agent

1036 D-1059

000370

FOR

CONTAIN

For the Select
Pastures

ACTIVE INGREDIENTS:

Alkanolamine Salts† (of the Ethanol & propanol series) of 2,4-Dichlorophenoxyacetic Acid

INERT INGREDIENTS:.....

2,4-Dichlorophenoxyacetic Acid

E.P.A. Registration No. 484-1-AA

†Salts are the least volatile forms of 2,4-D vapors from treated areas to reduce yield

AGRICULTURAL

Do Not Ship or Store with Food

PRECAUCION AL USUARIO: Si usted usa este producto hasta que la etiqueta le haya

TRANSLATION: (TO THE USER: If you use this product until the label has been

86-1142 PRINTED IN U.S.A. IN OCTOBER, 1975
REPLACES SPECIMEN LABEL 86-1142 PRINTED IN
DISCARD PREVIOUS SPECIMEN LABELS.
REVISIONS INCLUDE: (1) USE ON ASPARAGUS AND
STRAWBERRIES ADDED (3) PREHARVEST APPLICATION

DOW

*

SPECIMEN LABEL
REDUCED TO 73%

FEB 14 1977

MULA 40

*

HERBICIDE

ALKANOLAMINE SALTS OF 2,4-D

and Equivalent: 4 Pounds per Gallon

Control of Many Broadleaf Weeds in Non-Crop Areas. Grass
and in Certain Crops. Also for Control of Trees by Injection

acetic acid..... 59.7%
..... 40.3%
..... 38.6%
E.P.A. Est. No. 464-MII-1

do not release enough
scent susceptible crops.

HEMICAL

Feeds, or Clothing

lee Inglés, no use este
explicada ampliamente.
nnot read English, do not
y explained to you.)

CAUTION

KEEP OUT OF REACH OF CHILDREN
HARMFUL IF SWALLOWED
CAUSES IRRITATION OF SKIN AND EYES
Do Not Get In Eyes, on Skin or on Clothing

In case of contact, flush eyes with plenty of water for at least 15 minutes and
get medical attention; wash skin with soap and plenty of water. Remove and
wash contaminated clothing before re-use. Do not wear contaminated shoes.

18.9 L / 5 GAL

SEPTEMBER, 1974

ED (2) USE ON
ON ON CORN ADDED.

1037

D-1060

WEED LIST

FORMULA 40 herbicide is recommended for control of numerous broadleaf weeds and certain 2,4-D susceptible woody perennials without injuring most grasses. Species controlled include the following plus many others:

bitterweed	glennweed	regweed, common	sweetclover
broomweed	hemp, wild	rape, wild	swimsuitweed
burdock	jewelweed	mustards	thistle, bull
carpetweed	chickweed	penstemon	thistle, bull
coriander	chickweed	penstemon	thistle, Russian
cocklebur	lambquarters	smartweed	thistleweed
coffweed	lamb, bighead	smartweed	velvetleaf
crabgrass	lupines	sunflower	velvetleaf
deadnettle	maize, Venetian	sunflower	velvetleaf
deadnettle	maize, Venetian	sunflower	velvetleaf
deadnettle	maize, Venetian	sunflower	velvetleaf

USE DIRECTIONS

Generally, the lower dosages given will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed. Apply FORMULA 40 during warm weather when weeds are young and growing actively. Use enough spray volume for uniform coverage by ground or air application. If only bands or rows are treated, leaving middles unsprayed, the dosage per crop acre is reduced proportionately. Do not apply where spray drift may be a problem due to proximity of susceptible crops or other desirable plants. Read and follow all Use Precautions given on this label.

To Prepare the Spray, mix FORMULA 40 only with water, unless otherwise directed on this label. Add about half the water to the mixing tank, then add the FORMULA 40 with agitation, and finally the rest of the water with continuing agitation. Note: Adding oil wetting agent or other surfactant to the spray may increase effectiveness on weeds, but also may reduce selectivity to crops resulting in crop damage.

Use with Liquid Fertilizers: FORMULA 40 may be combined with liquid fertilizers suitable for foliar application to accomplish weeding and feeding of corn, small grain, sorghum and grass pastures in one operation. Use FORMULA 40 in accordance with recommendations for these crops given in the following text and table. Use liquid fertilizer at rates recommended by supplier or local extension service. Special note: To prepare the spray, FORMULA 40 must first be premixed with water. For liquid nitrogen fertilizer use a premix consisting of 1 part of FORMULA 40 and 4 parts of water. For other liquid fertilizers use 1 part of FORMULA 40 with 50 to 60 parts of water. Add the premix to the fertilizer while maintaining continuous agitation during both mixing and spraying operations. Apply the spray the same day it is prepared, do not store. Note: Always premix FORMULA 40 with water before adding to the liquid fertilizer.

WEED CONTROL IN ASPARAGUS: See Table for recommended use rates. To control wild morning glory and certain other broadleaf weeds apply in about 60 gallons of water per acre for ground application and about 12 gallons per acre for aircraft application. Apply on actively growing weeds, usually in April or May. If spears are present, treat immediately after cutting. Make no more than 2 applications during the harvest season and these should be spaced at least one month apart. Spears contacted by the spray may be malformed. These spears should be cut immediately and discarded. Post-harvest spraying should be only by ground rig using drop nozzles to avoid spraying the fern.

WEED CONTROL IN SMALL GRAINS NOT UNDERSEED WITH A LEGUME (Barley, Oats, Rye, Wheat): See Table for recommended use rates. Spray after grain begins tillering and before the boot stage (usually 4 to 8 inches tall) and weeds are small. Do not apply before the boot stage nor after early boot through the milk stage. To control weeds that will interfere with harvest or to suppress perennial weeds, preharvest treatment can be applied when the grain is in the dough stage. Best results will be obtained when soil moisture is adequate for plant growth and weeds are growing well. Note: Do not permit dairy animals or meat animals being finished for slaughter to forage or grass treated grain fields within 2 weeks after treatment. Do not feed treated straw to livestock.

WEED CONTROL IN CORN: See Table for recommended use rates. Preemergence — Apply to soil anytime after planting but before corn emerges. Do not use on very light, sandy soil. Emergence — Apply just as corn plants are breaking ground. Post-emergence — Apply to emerged corn. When corn is over 8 inches tall use drop nozzles to keep spray off corn foliage. Do not apply from tillering to dough stage. Injury to corn is most likely to occur if FORMULA 40 is applied when corn is growing rapidly under high temperature and high soil moisture conditions. In such situations, use the low rate of 1/2 pint per acre. After application, delay cultivation for 8 to 10 days to allow the corn to overcome any temporary brittleness. NOTE: Hybrids vary in tolerance to 2,4-D. Some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Consult the seed company or your Agricultural Experiment Station or Extension Service Weed Specialist for this information. Preharvest — After the hard dough or denting stage, apply by air or ground equipment to suppress perennial weeds, decrease weed seed production, and control tall weeds such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower, velvetleaf, and vines that interfere with harvesting.

WEED CONTROL IN SORGHUM (MILO): See Table for recommended use rates. Treat only after the sorghum is 6 inches high and preferably before it is 15 inches high. Do not treat during the boot, tasseling or early dough stages. Reduce spray drift by keeping the boom and spray nozzles as low as possible. If crop is taller than 8 inches, use drop nozzles to keep the spray off the leaves. Temporary crop injury can be expected under conditions of high soil moisture and high air temperatures. If it is necessary to apply FORMULA 40 under these conditions, use no more than 1/2 pint per acre. NOTE: Hybrids vary in tolerance to 2,4-D. Some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Consult the seed company or your Agricultural Experiment Station or Extension Service Weed Specialist for this information.

WEED CONTROL IN RICE: See Table for recommended use rates. Apply in the late tillering stage of rice development, at the time of first joint development (first to second green leaf), usually 6 to 9 weeks after emergence. Do not apply after panicle initiation, after rice internodes exceed 1/2 inch, at early seedling, early panicle, boot, or

flowering or early heading stages. NOTE: Conditions can be injured by 2,4-D. Therefore, before Service or University specialists for appropriate WEED CONTROL IN SUGAR CANE: See Table (as a preemergence or postemergence spray in late May or early June, use DOWPONT M or D. In addition to FORMULA 40. Always read the label use of these products before using them with PO. WEED CONTROL IN STRAWBERRIES: See Table for many broadleaf weeds in established or old in gallons of water per acre in early spring when immediately after the last picking. Do not apply acceptable follow recommendations of State Extensionists in local conditions.

AMOUNT OF FORMULA 40

by air or ground application
NOTE: Do not apply when weather conditions are complete directions and precautions before use.

CROP	Normal rate (usually safe)
SMALL GRAINS	
Spring Preemergence	1/4 to 1/2 pint
Postemergence	1/4 to 1/2 pint
Preharvest (dough stage)	1 to 2 pints
CORN	
Preemergence	2 to 4 pints
Emergence	1 pint
Postemergence	1/4 to 1 pint
Preharvest	1 to 2 pints
SORGHUM (MILO)	
Preemergence	1/4 to 1 pint
Postemergence	1/4 to 1 pint
Preharvest	1 to 2 pints
WHEAT	
Preemergence	1 to 1 1/2 pints
Postemergence	1/4 to 1 pint
Preharvest	1 to 2 pints
ASPARAGUS	
Preemergence	1/4 to 1 pint
Postemergence	1/4 to 1 pint
Preharvest	1 to 2 pints

*Corn and sorghum varieties vary in tolerance to 2,4-D. Some get information on 2,4-D tolerance of specific varieties from seed companies. If plants are more than 8 inches tall, use 1/2 pint per acre. If plants are less than 8 inches tall, use 1/4 pint per acre. These higher rates may be needed to handle difficult under dry conditions, especially in western areas. Crop injury will be acceptable. Consult State Agricultural Experiment Station for recommendations or for further information.

WEED CONTROL IN ESTABLISHED GRASS PASTURE: See Table for recommended use rates. Apply to 4 pints per acre. Apply preharvest when weeds are in the boot stage. Do not use on bermudagrass. Do not use on newly seeded areas until grass is early boot to milk stage where grass seed production is reduced within 7 days after application.

GRASS SEED CROPS: Use 1 to 4 pints per acre in weeds in grass being grown for seed. Do not use spray seedling grass only after the first leaf. To control small seedling weeds, after the grass is up to 4 pints, can be used to control hard-to-kill weeds. Apply when soil moisture is adequate on bermudagrass unless grass injury can be tolerated cut forage for hay within 7 days after application.

BROADLEAF WEED CONTROL IN NON-CROPLAND: See Table for recommended use rates. Apply to 4 pints per acre. Apply preharvest when weeds are in the boot stage. Do not use on bermudagrass. Do not use on newly seeded areas until grass is early boot to milk stage where grass seed production is reduced within 7 days after application. Broadleaf weeds in grass being grown for seed. Do not use spray seedling grass only after the first leaf. To control small seedling weeds, after the grass is up to 4 pints, can be used to control hard-to-kill weeds. Apply when soil moisture is adequate on bermudagrass unless grass injury can be tolerated cut forage for hay within 7 days after application. Broadleaf weeds in grass being grown for seed. Do not use spray seedling grass only after the first leaf. To control small seedling weeds, after the grass is up to 4 pints, can be used to control hard-to-kill weeds. Apply when soil moisture is adequate on bermudagrass unless grass injury can be tolerated cut forage for hay within 7 days after application.

CONTROL OF SOUTHERN WILD ROSE: On range use 1 gallon of FORMULA 40 plus 4 to 8 fluid ounces of water and spray thoroughly. Two or more treatments may be required. On treated areas within 7 days after application.

SPOT TREATMENT IN NON-CROPLAND AREAS: To control weeds in a band sprayer, use 1/2 pint of FORMULA 40 thoroughly wet all foliage.

me rice varieties under certain spraying consult local Extension is and timing of 2,4-D sprays recommended use rates. Apply dance with State recommendation TCA grass herbicides in ditions and precautions for the A 40

mmended use rates. To control ry plantings apply in 25 to 50 strawberries are dormant or is possible injury to the crop is on Weed or Horticultural Spe

USE IN CROPS

in drift from treated areas. Read

GE PER ACRE

Higher rates for special situations? (more likely to injure crop)
2 to 3 pints 1½ to 2 pints 2 to 3 pints
1½ pints 1½ to 2½ pints
1½ to 2 pints 2 to 3 pints

are easily injured. Before spray, and spray only those known to be tall, use directed spray and

problems in certain areas such as, do not use unless possible agreement Station or Extension is in local conditions.

NO RANGELANDS: Use of 2,4-D on small and growing actively, la, clover, or other legumes, established. Do not use from as desired. Do not graze dairy

g or full to control broadleaf early boot to the milk stage, using ½ to 1 pint per acre well-established, higher rates, vel or perennial weeds. For od growth. **NOTE:** Do not use not graze dairy animals nor

SS AREAS SUCH AS LAWNS, ROADSIDES, VACANT LOTS, 40 per acre in the amount of are young and growing well, ed control. Do not use on on creeping grasses such as nil grass is well established, and. With spring application, spring. Legumes are usually bandweed and Canada thistle

roadsides and fence rows of an agricultural surfactant as foliage is well-developed, nd, apply a maximum of 6 not graze dairy animals on

adleaf weeds in small areas allons of water and spray to

TREE INJECTION TREATMENT: To control unwanted hardwood trees such as elm, hickory, oaks and sweetgum in forest and other non-crop areas, apply FORMULA 40 herbicide by injecting 1 ml of the undiluted product through the bark around the trunk at intervals of 1 to 3 inches between edges of the injector wounds. For harder to control species such as ash, maples and dogwood use 2 ml of undiluted FORMULA 40 per injection site. Continuous cuts around the trunk often provide improved control. Also, cuts near the ground level may be more effective than at higher levels. Treatments can be made at any season, however, effectiveness may be less during winter months. Maples should not be treated during the spring sap flow.

USE PRECAUTIONS

AVOID CONTACT WITH 2,4-D SUSCEPTIBLE CROPS AND OTHER DESIRABLE BROADLEAF PLANTS - FORMULA 40 herbicide is injurious to most broadleaf plants. Therefore, do not apply directly to or otherwise permit even minute amounts (as in spray mist) to contact cotton, grapes, tobacco, fruit trees, vegetables, flowers, ornamentals or other desirable plants susceptible to 2,4-D. Do not use in or near a greenhouse.

DO NOT APPLY IN THE VICINITY OF COTTON, GRAPES, TOBACCO, TOMATOES OR OTHER DESIRABLE 2,4-D SUSCEPTIBLE CROPS OR ORNAMENTAL PLANTS.

DO NOT SPRAY WHEN WIND IS BLOWING TOWARDS SUSCEPTIBLE CROPS OR ORNAMENTAL PLANTS.

AVOID SPRAY DRIFT - Applications should be made only when there is no hazard from spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods. Use coarse sprays to minimize drift since, under certain weather conditions, fine spray droplets may drift a mile or more. The spray thickening agent MALCO-TROL[®] may be used with this product to aid in reducing spray drift. If used follow all use recommendations and precautions on the product label.

MALCO-TROL - Trademark of MALCO Chemical Company.

GROUND EQUIPMENT - With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible, by applying 20 gallons or more of spray per acre; by using no more than 20 pounds spraying pressure with large-droplet producing nozzle tips, by spraying when wind velocity is low, and by stopping all spraying when wind exceeds 8 miles per hour. Do not apply with hollow cone-type insecticide or other nozzles that produce a fine-droplet spray.

AERIAL APPLICATION - With aircraft, drift can be lessened by applying a coarse spray, by using no more than 20 pounds spray pressure at the nozzles; by using straight stream nozzles directed straight back, by using a spray boom no longer than ½ the wing span of the aircraft; and by spraying only when wind velocity is less than 6 mph.

DO NOT APPLY BY AIRCRAFT WHEN AN AIR TEMPERATURE INVERSION EXISTS. Such a condition is characterized by little or no wind and with air temperature lower near the ground than at higher levels. The use of a continuous smoke column at or near site of application is suggested to indicate a temperature inversion by layering of the smoke and to indicate direction and velocity of air movement.

Violent windstorms may move soil particles. If 2,4-D is on these particles and they are blown onto susceptible plants, visible symptoms may appear but serious injury is unlikely. The hazard of movement of 2,4-D on dust is reduced if treated fields are irrigated or if rain occurs shortly after application. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes.

Do not store near fertilizers, seeds, insecticides or fungicides. To avoid injury to desirable plants, do not store, handle or apply other agricultural chemicals with the same containers or equipment used for FORMULA 40 except as specified on this label. Excessive amounts of 2,4-D in the soil may temporarily inhibit seed germination or plant growth.

Local conditions may affect the use of herbicides. Consult your Agricultural Experiment Station or Extension Service weed specialists for advice in selecting treatments from this label to best fit local conditions.

Be sure that use of this product conforms to all applicable regulations. Apply this product only as specified on this label.

NOTE: FORMULA 40 herbicide, exposed to subfreezing temperatures, should be warmed to at least 40°F and mixed thoroughly before using.

Rinse equipment and containers and dispose of wastes by burying in non-crop areas away from water supplies. Containers should be disposed by punching holes in them and burying with wastes. Follow official local disposal regulations where required.

MONEY BACK GUARANTEE

FORMULA 40 herbicide is guaranteed by The Dow Chemical Company to the full extent of the purchase price:

1. To give satisfactory control of weeds listed on container when used as recommended.
2. To form a suitable spray mixture in any water fit for spray use.

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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THE DOW CHEMICAL COMPANY

AND SUBSIDIARIES

INDIAN, MICHIGAN 48646, USA ZURICH, SWITZERLAND HONG KONG, S.C.C.
CORAL GABLES, FLORIDA 33134, USA SARNIA, ONTARIO, CANADA
© Trademark of THE DOW CHEMICAL COMPANY

SPECIMEN LABEL
(BACK)
REDUCED TO 73%

1038

D-1061



KURCI

Contains Propylene Glycol Butyl Ether Esters of Silvex

USES

KURON herbicide is recommended for control of many species of woody, herbaceous and aquatic plants growing on industrial sites, in forests, on right-of-ways such as common-cane lines, electrical power lines, pipelines, highways and railroads, along drainage ditch banks, fuel breaks and fence rows, on golf courses, parks and athletic fields, in ponds and similar aquatic areas, in farmyards, pastures and rangeland, and in rice and sugarcane. Use only as recommended on this label.

KURON herbicide will control most unwanted (1) woody plants, such as alder, bramble, buttonbush, dogwood, honeysuckle, locust, maple, mesquite, oak, persimmon, poison ivy, poison oak, pricklypear cactus, sagebrush, salamberry, soft cedar, wild rose, willow, yucca; (2) broadleaf weeds such as bitterweed, black medic, brassweed, burdock, burr-cup, cress, chickweed, delphinium leafless, dandelion, dogfennel, groundcherry, larch, lupine, marshelder, plantain, ragweed, spurge; (3) aquatic weeds, both emergent and submerged species, such as arrowweed, bladderwort, fanwort, pickerelweed, waterhily, waterhail and waterweed. Many other species in each category also can be controlled.

DIRECTIONS

Foliage sprays should be applied when brush or weeds are actively growing. Application under drought conditions may give poor results. Use low spray pressure to minimize spray drift. Do not apply KURON where spray drift may contact nearby susceptible crops or other desirable plants. Read and follow all Use Precautions given on this label. NOTE: Consult your Agricultural Experiment Station or Extension Service weed specialists for advice concerning special local use conditions.

PREPARING THE SPRAY

KURON herbicide in water or oil-water sprays forms an emulsion. Separation may occur unless the spray mixture is continually agitated. Mechanical agitation is recommended. When mixed only with oil a solution is formed and further agitation is not needed. NOTE: Where oil is recommended, use diesel oil, No. 1 or No. 2 fuel oil or kerosene.

Oil Spray: Add KURON to the required amount of oil in the spray tank or mixing tank and mix thoroughly. Do not let any water or oil-water mixture get into the KURON or into the mixture, since this may cause formation of a thick gel.

Water Spray: Fill the spray tank about half full with water. Then, with agitator running, slowly add the required amount of KURON and finally complete filling the tank with water. Continue agitation while spraying.

Oil-Water Spray Mixture: With vigorous agitation, 1 gallon of KURON will emulsify up to 10 gallons of oil in 100 gallons of spray mixture. Preferred mixing procedure: Fill the KURON and oil in a separate container. Start filling the spray tank with water. After the tank is about 1/2 full, slowly add the required quantity of the KURON-oil premix with agitator running and complete filling the tank with water. Alternate procedure: Start filling the spray tank with water. After it is about 1/2 full, add the required quantity of KURON with agitator running. Then add the oil and complete filling the tank. Vigorous agitation in the spray tank is required to make a good emulsion. NOTE: Agitation in the spray tank should be continued during spraying.

USES IN INDUSTRIAL AND NON-CROPLAND AREAS

RIGHT-OF-WAYS AND FOREST SITE PREPARATION: With ground application on mixed brush, use 3 to 4 quarts of KURON in 100 gallons of water and apply as a full-coverage spray when foliage is well developed and plants are growing actively. This usually requires 100 to 400 gallons of spray per acre depending on height and density of the brush. With aerial application on mixed brush, use 2 to 4 gallons of KURON in 10 to 30 gallons of water per acre and provide uniform spray coverage of target areas. Aircraft should be equipped and operated to minimize spray drift. With either air or ground application, apply only when there is little or no wind and when there is no hazard from spray drift.

As long as there is ample soil moisture and brush is growing well, spraying can be effective throughout the growing season up to 3 weeks before normal fall frost. Spraying during hot dry weather or after the foliage loses its normal green color may result in poor control. Under dry conditions the inclusion of added oil (up to 10% of spray volume) may increase overall effectiveness. Avoid drift of spray from areas being treated. To lessen spray drift when using a spray gun, use only enough pressure to obtain coverage, usually 40 to 50 psi at the gun. Brush taller than 6 to 8 feet can be sprayed successfully but in many cases treatment of basal bark, dormant stems or stumps as described on this label may be preferred.

On right-of-ways and industrial sites only, KURON can be used in a tank mix with TORDON 101 Mixture to obtain improved control of nonchambering species and other species not adequately controlled by silvex alone. Avoid drift of spray from areas being treated. With ground equipment use 2 quarts of KURON plus 1 gallon of TORDON 101 Mixture in 100 gallons of water and apply as a full coverage, usually requiring 100 to 400 gallons per acre. With aerial application use 1 1/2 quarts of KURON plus 2 to 3 gallons of TORDON 101 Mixture per acre by diluting with water to a total spray volume of 10 to 30 gallons per acre. Application should be made only with a helicopter mounted Microtail applicator or an equipment system providing equivalent drift control. Keep the spray mixture agitated to prevent separation. Do not use oil in sprays containing TORDON 101 Mixture.

FOREST CONIFER RELEASE: Oil Spray: Apply 2 to 3 quarts of KURON in about 10 gallons of oil per acre by aircraft or ground equipment to control undesired hardwoods in dormant Douglas fir, true fir, hemlock and spruce. Rates higher than 2 quarts may cause conifer injury. Do not use oil spray on plants (see water spray recommendation below). Apply before conifer bud break during late dormancy, usually February and March in the northwest. Application of this spray after conifer bud break can injure the conifers.

Water Spray: Apply 2 to 3 quarts of KURON in 10 to 15 gallons of water per acre to control hardwood species in conifers including pines. Apply during the summer after the conifers have spring growth and have "hardened off". Rates higher than 2 quarts may cause conifer injury.

Consult your State, Regional or Extension Forester for recommendations to fit local conditions.

BASAL BARK A the basal 12 in. of the trunk of the tree and control. All was soaked in with equipment and ground line.

POWERED KHA 100 gallons of spray. Total can at 1/2 1/2 there most for maximum

MODIFIED BASI of KURON in 10 lower 1/2 to 3/4 a

permanence, was readily visible a hot fallen. Brush of spray per acre

SPOT TREATMENT of KURON in 25 regrowth occurs

LAWNS, GOLF C leaf weed control areas use 3 to 4

injury to the grass as measure the following treatment in the up

Augustine, corpa established, or to

Schmargent Was most, bladderwort in early summer a form distribution

during the KURON most. Also, spray water. A pond will be as overflor

Enter Weeds grow on at spray are of

arrowweed can be foliage very short the treatment if re

cation is required Special Precaution tions governing at

To avoid injury, do rice production, to Do not apply to an

may occur in shallow fresh water. Treat dead weeds. This l

area in a single up that treatment be trapped in shallow

vegetation along th water levels are low

Do not apply algaec since they may later

For general broadl water to provide an equipment and 3 to

young and growing control of yucca are plus water to make

developed and plan sufficient but apply by ground eq

of oil. For post and of diesel oil and 2V application on well

beetgrass, newly see not use on pastures to silvex. NOTE DO AFTER APPLICATION. PRIOR TO SLAUGHTER

MENT.

THE DOW

MIDLAND, MICHIGAN 486
CORAL GABLES, FLORIDA

* Trade

LOW-VOLATILE BRUSH AND WEED HERBICIDE

Id Equivalent: 4 pounds per gallon

TUMP TREATMENT: Brush and small trees can be controlled by spraying the stems and trunks, down to the ground line, with a solution containing 1/2 quart of KURON in 100 gallons of oil. Such growth can be cut close to freshly cut stumps sprayed with the same solution for effective regrowth back down to the ground line as well as the cut surfaces should be treated. Apply in a low pressure coarse spray with power or knapsack at time of year except when water, snow or ice prevents spraying to the

BASAL TREATMENT: Mix 10 to 14 gallons of KURON in oil to make a solution. Apply with a portable knapsack mistblower to lower brush stems and root collars in essential for best results. Run mistblower or best spray delivery and brush coverage. Use a basal nozzle attachment control and do not raise spray nozzle above horizontal position.

DORMANT CANE TREATMENT: For mixed brush, use 1 1/2 to 2 gallons of oil and thoroughly wet the base of stems. Then also spray the top portions of the brush. Under root suckering species such as locust, and sumac, also spray the ground area to that small sprouts not rooted. Spray any new after brush is dormant and most of the foliage coverage density and 4 to 6 feet tall may require 150 to 200 gallons proper coverage.

Treat small brush clumps in industrial and non-crop areas use 1 quart of oil and water and spray to wet the foliage without runoff. Repeat if

SEES, ATHLETIC FIELDS AND OTHER GRASS TURF AREAS: For broadleaf weeds, use 5 quarts of KURON in 30 to 100 gallons of water per acre. For small weeds in 2 gallons of water. Apply in fall or early spring to minimize second treatment may be needed to control hard-to-kill species such as red, yellow and ground ivy. Re-seeding of lawns should be delayed. With spring application reseed in the fall, with fall application. Do not apply to stoloniferous grasses such as bent, Bermuda, St. d. centipede, to dichondra, to new turf of any variety until well-grown.

AQUATIC WEED CONTROL

Still Water Such as Ponds: To control species such as milfoil, fan waterweed, use 5 quarts of KURON per acre foot of water. Apply water in above 50°F and weeds are near the water surface. Use the water surface is necessary. This can be accomplished by first with water to provide enough spray volume for the usual spray equipment. Watering equipment can be used. NOTE: Do not treat flowing light current can be treated after the water level is lowered if there is at least 3 days following treatment.

1. Use of KURON in 100 gallons of water and spray actively growing water is well developed. Use 100 to 200 gallons of oil. 2. Species such as waterhyacinth, spatterdock, pickerelweed and trifoliate. For free floating or attached mats of aquatic weed spray by as soon as plants reach a vigorous flowering stage and repeat in reaches 4 inches above the water surface. Full coverage application.

Apply only in accordance with state and local laws and regulations treatment of bodies of water for control of weeds.

Use KURON where pond water is being used for irrigation (including irrigation) for domestic water supply, or for livestock watering, containing valuable fish water, some fish kill can be tolerated, but use if application is not uniform or in shallow areas not killed by of aquatic weeds can result in oxygen loss from decomposition of can cause fish suffocation. Therefore, treat 1/2 to 1/3 of the water in and wait 10 to 14 days between treatments. It is recommended to pond edges or lake shoreline first so that fish will not be lost or taken. If desirable to minimize the exposure of desirable portions of ponds and similar aquatic areas, apply KURON when

such as copper sulfate for 3 days before or after applying KURON with the action of the KURON.

USES IN PASTURE AND RANGELAND

weed control, use 1 1/2 to 2 quarts of KURON per acre in sufficient spray coverage, usually 30 to 100 gallons per acre by ground means per acre by aircraft. For best control, the weeds should be very young when treated. Forage legumes may be injured or killed. For alfalfa, use 1 1/2 to 2 pints of KURON in 1 gallon of oil. For other spray per acre and apply by aircraft after foliage is well growing well. Usually a single application in any one year is sufficient in successive years may be needed. For pricklypear cactus, use 2 quarts per acre in 90 gallons of water plus 10 gallons k-jack milk, apply by aircraft using 2 quarts per acre in 1 gallon 3 1/2 gallons of water or in 2 1/2 to 4 1/2 gallons of oil only. Make treated foliage, usually in May or June. Do not use KURON on areas, or after heading begins (grass in boot to milk stage). Do not feed to cows, alfalfa or other desirable species susceptible GRAZE DAIRY ANIMALS ON TREATED AREAS WITHIN 7 DAYS NOT GRAZE MEAT ANIMALS ON TREATED AREAS FOR 14 DAYS DO NOT CUT GRASS FOR HAY DURING THE SEASON OF TREAT.

SPOT TREATMENT: Use 1 quart of KURON per acre in brush clumps in pastures and rangelands. Use 3 tablespoons (1 1/2 fluid ounces) of KURON in 2 gallons of water and spray to just wet the foliage without runoff. Repeat if regrowth occurs.

USES IN CROPLAND

WEED CONTROL IN RICE: Use 1 1/2 to 2 1/2 pints of KURON per acre. Apply in the late tillering stage of rice development, at the time of first joint development (first to second green ring), usually 6 to 8 weeks after emergence. Do not apply after panicle initiation, after rice internodes exceed 1/2 inch, or at very early seedling, early panicle, boot, flowering, or early heading growth stages. Follow use precautions to avoid injury from spray drift to nearby crops. Do not apply to rice paddies where shellfish are of economic importance or where flood water is used for irrigation of other crops. Consult Agricultural Experiment Station or Extension Service weed specialists for appropriate rates and timing of sprays for rice.

WEED CONTROL IN SUGARCANE

FLORIDA

Postemergence: Apply 1 to 1 1/2 quarts of KURON in 20 to 40 gallons of water per acre as broadcast spray to control broadleaf weeds. Apply after cane emerges in spring and when weeds are growing well. A second spray can be applied to control late germinating weeds. NOTE: Do not apply after the cane is 3 1/2 feet tall.

LOUISIANA

Preemergence: Apply 1 quart of KURON per acre on the row (1/2 of total area) shortly before weed seeds are expected to germinate. If cane is shaved and off-barred, spray immediately afterwards. Follow this early treatment, when needed, with 2 pounds of DOWPON M grass herbicide per acre on the row in accordance with label directions for this product.

Postemergence: To control wild lettuce and other broadleaf weeds, apply 1 quart of KURON per acre to cane over the row (1/2 total area) by ground sprayer. When necessary, repeat if not applied preemergence. With air application, use 2 to 3 pints per acre in enough water for uniform broadcast coverage. NOTE: Do not apply within 3 months of harvest on cane to be processed for food or feed. Use at any time up cane to be used for planting purposes.

HAWAII

Preemergence: Apply 4 to 5 quarts of KURON per acre immediately after planting or ratooning and before cane emergence to control seedling weeds and grasses.

Postemergence: Spray the interline space without spraying the cane directly, using 4 to 5 quarts of KURON plus 3 to 4 pounds of DOWPON M per acre. Apply up to the time of "closing in" but not within 3 months before harvest. Do not make more than two applications of 5 quarts each of KURON to any one crop.

USE PRECAUTIONS

Do not apply KURON directly to, or otherwise permit it to come into contact with cotton, soybeans, grapes, fruit, nut or ornamental trees, vegetables, flowers or other desirable crop or non-crop plants which are sensitive to silvatic herbicides, and do not permit spray mist containing it to drift onto such plants since even very small quantities of the spray, which may not be visible, may cause severe injury during both growing and dormant seasons. Use coarse spray to minimize drift. Application by aircraft, ground rig or hand dispenser should be carried out only when there is no hazard from spray drift. Do not spray when the wind is blowing towards susceptible crops or ornamental plants. Do not spray when wind velocity exceeds 5 miles per hour. Do not apply in the vicinity of susceptible crops or ornamental plants near in or near a greenhouse.

With aircraft application, drift can be reduced by applying at least 5 gallons of spray per acre; by using no more than 20 pounds spray pressure at the nozzle; by using nozzles which produce a coarse spray pattern; and by spraying only when the wind velocity is less than 5 miles per hour. With ground equipment, drift can be reduced by keeping the spray boom as low as possible; by applying at least 20 gallons of spray per acre; by using no more than 20 pounds spraying pressure with flat fan or flooding flat fan nozzle tips; by spraying only when wind velocity is less than 5 miles per hour. With gun application, use pressures at the nozzle no greater than 50 psi and apply in such manner as to confine the spray to the target area.

At high temperatures (above 90°F), vapors from this product may injure susceptible plants growing nearby. Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination and plant growth.

Do not use on creeping grasses such as bent except for spot spraying nor on freshly seeded turf until grass is well established. Most legumes are damaged or killed so do not treat areas where legumes are desired. Do not use on golf greens nor on dishboards or other broadleaf herbaceous ground covers. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes.

Do not store near fertilizers, seeds, insecticides or fungicides. To avoid injury to desirable plants, do not handle or apply other agricultural chemicals with the same equipment used for KURON except as specified on this label. This product can be stored in an unheated building, but if exposed to subfreezing temperatures, should be heated to at least 45°F and mixed thoroughly before using.

Wash equipment and containers and dispose of waste by burying in non-crop lands away from water supply. Do not reuse containers. Dispose of empty containers by puncturing holes in them and burying with waste. Where required, follow official local container disposal regulations.

Local conditions may affect the use of herbicides. Consult your State Agricultural Experiment Station or Extension Service weed specialists for advice in selecting treatments from this label to best fit local conditions. Be sure that use of this product conforms to all applicable regulations. Apply this product only as specified on this label.

CAUTION

KEEP OUT OF REACH OF CHILDREN
HARMFUL IF SWALLOWED
MAY CAUSE SKIN IRRITATION
Avoid Contact with Eyes, Skin and Clothing

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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