

Johnson v. Monsanto

 Heydens, William F. (Vol. 01) - 01/23/2017

1 CLIP (RUNNING 01:39:06.270)

 MR. MILLER: Good morning. ...

WH-0123-0000615

145 SEGMENTS (RUNNING 01:39:06.270)



1. PAGE 6:15 TO 6:19 (RUNNING 00:00:09.078)

15 MR. MILLER: Good morning.  
16 This is Michael Miller on behalf of  
17 plaintiffs, together with Tim  
18 Litzenburg and Nancy Miller also of  
19 The Miller Firm.

2. PAGE 9:03 TO 9:07 (RUNNING 00:00:05.771)

03 Q. Please state your full name.  
04 A. My name is William Francis  
05 Heydens.  
06 Q. Heyden?  
07 A. Heydens.

3. PAGE 10:06 TO 11:05 (RUNNING 00:00:40.640)

06 Q. How long have you been an  
07 employee of the Monsanto Corporation?  
08 A. I've been at Monsanto  
09 approximately 33 years.  
10 Q. All right. And you're a  
11 full-time employee of the Monsanto  
12 Corporation?  
13 A. That is correct.  
14 Q. Yes, sir.  
15 And you have been continuously  
16 a full-time employee of Monsanto for the last  
17 33 years?  
18 A. Almost 33, yes. I was actually  
19 a part-time employee when I was in graduate  
20 school and then came back, and I have been a  
21 full-time employee the remainder of the time.  
22 Q. Yes, sir.  
23 And we are going to refer to  
24 you today as Dr. Heydens because you, in  
25 fact, are a doctor, right, sir?  
00011:01 A. I am a doctor, yes.  
02 Q. You're a doctor of would it be  
03 fair to say toxicology?  
04 A. Yes, I have a Ph.D. in  
05 toxicology.

4. PAGE 14:12 TO 14:21 (RUNNING 00:00:27.196)

12 Q. All right, sir. And I want to  
13 look at a document that I think summarizes  
14 some of the things that you've done in the  
15 field with Roundup, or glyphosate, in the  
16 last several years, and I want to show you a  
17 copy. It's produced from your file, your  
18 custodial file, by Monsanto, and it's

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19 Exhibit 3:1. Here's a copy for you and a  
20 copy for -- I'm sorry, excuse me. I'm sorry



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21 to pull it back. I gave you the wrong copy.

**5. PAGE 15:02 TO 15:04 (RUNNING 00:00:03.506)**

02 Let me know when you've had a  
03 chance to look at this. I'd like to ask you  
04 a few questions about it.

**6. PAGE 15:08 TO 15:08 (RUNNING 00:00:01.705)**

08 THE WITNESS: Okay.

**7. PAGE 15:10 TO 16:25 (RUNNING 00:01:18.514)**

10 Q. Yes, sir.  
11 And this is an e-mail sent from  
12 you, William Heydens, right, sir?

13 A. That is correct.

14 Q. And it was sent in March -- it  
15 looks like St. Patrick's Day 2015; is that  
16 correct?

17 A. That is correct.

18 Q. Yes, sir.  
19 And you were reminding a fellow  
20 employee of Monsanto by the name of Josh  
21 about five issues that you faced in the early  
22 glyphosate days, mid to late 1980s, right,  
23 sir?

24 A. The issues that Monsanto faced,  
25 yes.

00016:01 Q. Yes, sir.  
02 And you were involved in these  
03 issues right, sir?

04 A. Yes, I was.

05 Q. Yes, sir.  
06 One of them, the first one, was  
07 the low level presence of formaldehyde,  
08 carcinogen by inhalation, in Roundup. That  
09 was an issue you dealt with, isn't it, sir?

10 A. Yes, that is something that has  
11 come up.

12 Q. Another issue that came up:  
13 Low level of presence of NNG,  
14 N-Nitroso-Glyphosate, in Roundup. Many  
15 N-Nitroso compounds are carcinogenic.  
16 That was one of the issues that  
17 you dealt with, right, sir?

18 A. That is another one, yes.

19 Q. Okay. And by "carcinogenic,"  
20 we mean cancer-causing; is that what the word  
21 means?

22 A. That is correct.

23 Q. The other issue, or the third  
24 issue, here is: Many toxic studies for  
25 glyphosate had been done at a lab, IBT,

**8. PAGE 17:04 TO 18:05 (RUNNING 00:01:01.517)**

04 You dealt with that issue as  
05 well, right, sir?

06 A. Monsanto did. I did not  
07 personally.

08 Q. All right, sir. The next issue  
09 is: EPA seriously questioned if glyphosate  
10 produced tumors in chronic mouse study -  
11 glyphosate was put in Category D for  
12 carcinogenicity for several years - our  
13 detractors falsely spread the word that the

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14 EPA considered glyphosate to have  
15 carcinogenic potential; was generally an  
16 issue that you personally dealt with as well  
17 as Monsanto, right?  
18 A. I was involved in that issue,  
19 yes.  
20 Q. All right, sir.  
21 And the next issue that you  
22 were involved in here was: It was falsely  
23 said that glyphosate is organophosphate, OP,  
24 molecule, and OPs produce neurotoxicity;  
25 thus, glyphosate is a neurotoxin.  
00018:01 Generally an issue that you  
02 dealt with, right, sir?  
03 A. I personally didn't spend a lot

 -KE0357 - Clear Attached Exhibit 0357

04 of time, but that was something that did come  
05 up.

9. PAGE 37:01 TO 37:02 (RUNNING 00:00:01.902)

00037:01 Q. Let's take a look at the  
02 documents.

10. PAGE 37:08 TO 38:09 (RUNNING 00:01:20.548)

08 Q. We're going to look now at  
09 Exhibit 3:5. Now, before we do, just to put  
10 a time reference on this, Dr. Heydens, this  
11 article came out in January -- I'm sorry, you  
12 can tell us perhaps. I thought it came out  
13 earlier.  
14 A. It came out in September.  
15 Q. September 2016, I thought, yes,  
16 sir.  
17 A. That is correct.  
18 Q. All right. And the planning  
19 for it began back in 2015, right, sir?  
20 A. Let me think about that just a  
21 second. So many things happened.  
22 Yes, that would have been in  
23 2015.  
24 Q. It was, fair to say, something  
25 you guys wanted to initiate after IARC to  
00038:01 sort of explain your position on the science,  
02 generally speaking?  
03 A. This was something that we  
04 wanted to initiate not to explain our view of  
05 science. It's something that we wanted to  
06 explain the best sound science way to look at  
07 the data, which is exactly the way these  
08 panels approached it, these scientists  
09 approached it.

11. PAGE 38:10 TO 38:15 (RUNNING 00:00:13.646)

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10 Q. All right. Here's Exhibit 3:5,  
11 a series of e-mails between you and others in  
12 May of 2015 concerning post-IARC activities  
13 to support glyphosate.  
14 A copy for you and counsel,  
15 sir. Thank you.



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12. PAGE 38:20 TO 38:20 (RUNNING 00:00:00.999)

20 THE WITNESS: Okay.

13. PAGE 38:22 TO 40:04 (RUNNING 00:01:26.214)

22 Q. Yes, sir.  
23 This is -- one of the e-mails  
24 here is from you. That's William Heydens,  
25 right, sir?  
00039:01 A. That is correct.  
02 Q. In May of 2015, right?  
03 A. That is correct.  
04 Q. Sent it to Donna Farmer and  
05 others, right, sir?  
06 A. That is correct.  
07 Q. And it's concerning a meeting  
08 that you folks had had that day, right?  
09 A. That is correct.  
10 Q. And some things that you were  
11 going to do is publish on animal data cited  
12 by IARC, right, sir?  
13 A. Really what this is, these  
14 are -- these were ideas that we had at that  
15 point in time. We hadn't established  
16 which -- exactly which ones. This was more  
17 the things that rose to the top as  
18 possibilities as part of our overall  
19 brainstorming on the topic.  
20 Q. And you wrote, sir, on the  
21 publication on animal data cited by IARC,  
22 there would be a manuscript to be initiated  
23 by Monsanto as ghostwriters, right, sir?  
24 A. That is written there, that's  
25 true, but that's not -- but again, as I said,  
00040:01 this was just thinking early on in the  
02 process, and that's not what happened.  
03 Ultimately, a totally different paradigm was  
04 used.

14. PAGE 40:13 TO 41:17 (RUNNING 00:01:28.106)

13 Q. Let's see what it says here.  
14 You say, "It was noted this would be more  
15 powerful if authored by non-Monsanto  
16 scientists, that is, Kirkland, Kier,  
17 Williams, Greim and maybe Keith Solomon."  
18 Do you see that?  
19 A. Oh, yeah, I see that. So  
20 I sort of misunderstood your question.  
21 The idea here really is -- I  
22 mean, you know, obviously it would be real  
23 easy for Monsanto to write a scientific  
24 paper, but really it would hold more weight  
25 if we selected or, you know, if the panel was  
00041:01 put together by independent experts who are  
02 experts in the field, people that have done  
03 these evaluations for 30 or 40 years and have  
04 reputations in the international scientific  
05 community.  
06 And so that was what the --  
07 thought that the best -- the best way for the  
08 oncogenic potential to be evaluated is by  
09 individuals like that.

 -KE0336 - Clear Attached Exhibit 0336



10 Q. In fact, you wanted to keep the

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11 costs down and use outside authors so you'd  
12 have something to support your litigation  
13 defense to the people that had non-Hodgkin's  
14 lymphoma, right, Doctor?  
15 A. As I said, it was just a  
16 thought at this point in time, and that's not  
17 ultimately how it was done.

**15. PAGE 41:18 TO 41:22 (RUNNING 00:00:12.961)**

18 Q. On the very same day, sir, you  
19 wrote another e-mail with a PowerPoint, and I  
20 want to talk to you about that. That is

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21 May 11, 2015. We'll mark that as  
22 Exhibit 3:6.

**16. PAGE 42:02 TO 42:03 (RUNNING 00:00:02.082)**

02 Q. A copy for you and counsel,  
03 sir.

**17. PAGE 42:04 TO 42:25 (RUNNING 00:01:08.530)**

04 Yes, sir. And this is a

 0391A -

05 PowerPoint that you prepared, right, about  
06 that same time, right, sir?

07 A. Yeah, I was -- there was  
08 contributions from other individuals, but,  
09 yes, I believe I did put this PowerPoint  
10 together.

 0391A-004 -

11 Q. Let's go, sir, to page 4 of the  
12 PowerPoint. This is the front page. Page 4  
13 of that. Just a few questions on a couple of  
14 things you were thinking at the time.

15 On page 4 you discussed  
16 possibly doing a new meta-analysis. Explain  
17 to the jury what a meta-analysis is.

18 A. A meta-analysis is where you  
19 take more than one study, you take preferably  
20 several studies that have been reported  
21 individually, and you look at them  
22 collectively.

23 Q. And you knew -- you already  
24 knew what the meta-analysis would show before  
25 you ever did it, right?

**18. PAGE 43:03 TO 43:11 (RUNNING 00:00:14.450)**

03 THE WITNESS: That's not  
04 correct.

05 QUESTIONS BY MR. MILLER:

06 Q. It says, "The risk of doing a  
07 new meta-analysis is none since we have  
08 already done the analysis," right?

09 Is that what it says?

10 A. Where are you now?

11 Q. On page 4, sir.



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19. PAGE 43:22 TO 44:19 (RUNNING 00:01:00.206)

22 THE WITNESS: Yes.  
23 QUESTIONS BY MR. MILLER:  
24 Q. Okay. See it?  
25 A. I don't recall exactly what I  
00044:01 meant when I did that, but I think what I  
02 referred to was the fact that the individual  
03 studies that would be included in such  
04 analysis, I was cognizant of what those  
05 studies said. And so you would expect a  
06 meta-analysis wouldn't show much different  
07 than what the individual studies show.

 0391A-005 -

08 Q. Let's look at page 5, Doctor.  
09 On page 5, you lay out some  
10 points about possibly, quote, "Publication on  
11 animal carcinogenicity data," right, sir?  
12 A. That is correct.  
13 Q. And what you say is, "Cost:  
14 Majority of writing can be done by Monsanto,  
15 keeping the costs down."  
16 That's what happened, right?  
17 The majority of the writing was done by  
18 Monsanto?  
19 A. That is not correct.



20. PAGE 44:20 TO 47:23 (RUNNING 00:03:11.261)

20 Q. You also wanted to do, if we

 0391A-007 -

21 could turn to page 7, an overall weight of  
22 evidence --  
23 Is that what WOE stands for,  
24 sir?  
25 A. That is correct.  
00045:01 Q. -- overall weight of evidence  
02 plausibility publication possibly via expert  
03 panel concept.  
04 Right, sir?  
05 A. That is one of the  
06 possibilities that we were thinking about at  
07 that time.  
08 Q. And you -- possible authors,  
09 panelists, authors, you named a bunch of  
10 folks, right, some of whom went on to be  
11 authors in the Intertek report, right?  
12 A. Yes. These are individuals, as  
13 I said before, who are considered experts,  
14 top of their field. And it was important  
15 that if we were going to go ahead and do  
16 something like this, we wanted top-notch  
17 people in the field, and these are some  
18 examples of individuals that would fall in  
19 that category.  
20 Q. And you were going to pay  
21 around 200, \$250,000 to have these top-notch  
22 people involved, right?  
23 A. That was a real high-level  
24 guesstimate that I put on the slide. I have  
25 really no idea what ultimately it cost.  
00046:01 Q. But you knew that by Monsanto  
02 writing the article, you could keep the cost



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03 down, right?  
04 A. Well, yes, I think I stated  
05 that, but, again, I stated that ultimately

 0391A-008 -



06 that was not the model that we went with.  
07 Q. And on page 8, you make it  
08 clear what Monsanto's purpose is on the  
09 genotox -- MOA means mechanism of action,  
10 right, Doctor?

11 A. That is correct.  
12 Q. Okay. You wanted to counter  
13 IARC's claim of strong evidence of DNA

14 damage/oxidative stress, right, sir?  
15 A. What we wanted to do is we  
16 definitely wanted -- I mean, you know, when  
17 you look at IARC, IARC did not do a solid  
18 weight of evidence and did not use accepted  
19 scientific principles. So we were interested  
20 in making sure that that data did get  
21 evaluated using accepted scientific  
22 principles.

23 Q. You were actually interested in  
24 litigation support, right?

25 A. That is not correct.

00047:01 Q. You wrote that.

02 A. I think I stated at least a  
03 couple of times so far that my job and my  
04 interest is to make sure that when glyphosate  
05 is evaluated, that its evaluated using the  
06 best scientific principles in a weight of  
07 evidence evaluation.

08 Q. Let's go to what you wrote on  
09 page 2, sir.

 0391A-002 -



10 A. Page, excuse me?

11 Q. 2.

12 A. 2?

13 Q. Yes, sir.

14 "Why do more?"

15 And your first bullet point:

16 "Severe stigma attached to a Group 2A  
17 classification," right, sir?

18 A. That is written there.

19 Q. And what 2A classification  
20 means is the World Health Organization, IARC,  
21 determining that Roundup, glyphosate, is a  
22 probable human carcinogen for non-Hodgkin's  
23 lymphoma?

21. PAGE 48:04 TO 49:12 (RUNNING 00:01:15.174)

04 Q. You can answer.

05 A. That was their ultimate  
06 classification, and we believe that is an  
07 improper classification.

08 Q. And Aaron Blair was the head of  
09 that IARC panel, right?

10 A. I don't know -- I don't know  
11 that he was head of the panel. I don't know  
12 if there was an actual overall chair and, if  
13 so, who would have been the lead of that.

14 Q. But you knew Aaron Blair was  
15 associated with IARC; that's why you wrote

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16 that sentence, right?  
17 A. Certainly Aaron Blair  
18 participated. He was one of the IARC panel  
19 members, yes.  
20 Q. Yes, sir.  
21 And after the panel, he  
22 continued to defend his work, right?  
23 A. I recall seeing one instance  
24 where he did that. Kind of vague on that.  
25 Q. And what you were concerned  
00049:01 about is that this IARC finding might move  
02 pesticides to Group 1.  
03 What does Group 1 mean, Doctor?  
04 A. Group 1 is -- I believe the  
05 word they use is a "known human carcinogen."  
06 Q. Yes, sir.  
07 And I didn't mean to interrupt.  
08 Are you finished?  
09 A. No, I was done.  
10 Q. Okay. And you were concerned  
11 about litigation support, right, sir?

 -KE0391A-002 - Clear Attached Exhibit 0391A-002



12 A. Where are you?

**22. PAGE 49:15 TO 49:18 (RUNNING 00:00:08.730)**

15 THE WITNESS: Again, my job is  
16 to -- for the molecule, my job is to  
17 make sure that the best science is  
18 done.

**23. PAGE 81:25 TO 82:04 (RUNNING 00:00:07.148)**

25 Q. And you saw it before that  
00082:01 journal article ever came out and helped edit  
02 it, true, Dr. Heydens?  
03 A. I don't recall telling them  
04 what to say.

**24. PAGE 82:08 TO 82:10 (RUNNING 00:00:04.478)**

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08 Q. Let's take a look at  
09 Exhibit 3:9, please. There's a copy for you  
10 and counsel.

**25. PAGE 82:11 TO 82:12 (RUNNING 00:00:05.011)**

11 A. I apologize, but I'm still  
12 looking for one thing that I have not found.

**26. PAGE 82:13 TO 83:18 (RUNNING 00:01:34.698)**

13 Okay.  
14 Q. Yes, sir.  
15 Now, if we could go to Bate

 0394-004 -



16 stamp 59011 of this chain of e-mails, what we  
17 see here is that -- we'll start at the  
18 bottom. Ashley Roberts from Intertek sends  
19 you a copy of the proposed declaration of  
20 interest, March of 2016, right, sir?  
21 A. Yeah, I had forgotten that he

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22 did send that, but, yes, he did send it. How  
23 it existed at that point in time, I think it  
24 was -- if I recall correctly, he had  
25 indicated to me that he had lots of  
00083:01 conversations with the journal editor, but at  
02 this point in time it was shared, yes.  
03 Q. Yes, sir.

 0394-005 -



04 And we go to page 0112. So to  
05 be clear, you knew that the declaration was  
06 going to say the authors had sole  
07 responsibility for the writing and the  
08 content of the article, and the  
09 interpretations and opinions expressed in the  
10 paper were those of the authors.  
11 You were aware of that before  
12 the article came out, right, sir?  
13 A. I was aware of whatever it says  
14 in the version that he sent me, yes.  
15 If he sent it to me, I probably  
16 read it.  
17 Q. And to be clear, you had made  
18 28 edits to the article in one draft alone?

27. PAGE 83:21 TO 85:06 (RUNNING 00:01:21.508)

21 THE WITNESS: Yeah, I'm not --  
22 I think I stated before and -- you  
23 brought that up, and I think I stated,  
24 and certainly I would say, I don't  
25 recall 28 edits, so I'd have to see  
00084:01 what you're referring to.  
02 QUESTIONS BY MR. MILLER:  
03 Q. We'll look at that in a minute,  
04 sir, but right now let's finish with this.  
05 You said here -- did you review  
06 the article before it was sent to the  
07 journal?  
08 A. What article are you referring  
09 to?  
10 Q. Any of the Intertek expert  
11 panel articles.  
12 A. As I said, they were certainly  
13 sent to me. I read some parts of some of  
14 them. I didn't read other parts. I don't  
15 recall exactly which ones I -- you know,  
16 which pieces I looked at and which pieces I  
17 didn't, but I received copies.  
18 Q. Sir --  
19 A. I did not send back any --  
20 where any evaluations or -- you know, any  
21 information where I thought that, you know,  
22 evaluations and conclusions should be  
23 changed.  
24 Q. Sir, you knew before the  
25 article was published that the declaration  
00085:01 was going to contain this language, quote,  
02 "Neither Monsanto nor any attorney reviewed  
03 any of the expert panel's manuscripts prior  
04 to submission to the journal."  
05 You knew that to be inaccurate,  
06 didn't you, sir?

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28. PAGE 85:09 TO 85:18 (RUNNING 00:00:31.880)

09 THE WITNESS: Yeah, I don't

 -KE0394-005 - Clear Attached Exhibit 0394-005

10 know what he meant when he said that.  
11 When I -- when I look at that  
12 sentence, to me that says that, you  
13 know, Monsanto, or namely me, that --  
14 didn't ask for any substantive  
15 changes, any edits, any conclusions,  
16 any evaluations. That was -- that  
17 work was theirs, and that's how I read  
18 that to mean.



29. PAGE 98:03 TO 98:05 (RUNNING 00:00:05.512)

03 Q. A series of e-mails produced by

 0359 -

04 Monsanto in this litigation. Here you go,  
05 sir.



30. PAGE 98:06 TO 98:20 (RUNNING 00:00:56.120)

06 A. Okay.  
07 Q. Yes, sir. So the series of  
08 e-mails in July and in -- yes, sir, July

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09 of 2016. And start on page 2 with me, if you  
10 could.  
11 Here is an e-mail from Roger,  
12 the editor of Critical Reviews of Toxicology,  
13 to Ashley Roberts at Intertek.  
14 Do you see that?  
15 A. Yes.  
16 Q. And what Roger is telling him,  
17 among other things, "I am concerned that the  
18 authors have chosen not to comply with  
19 requests to make it easier for the readers to  
20 identify all the relevant literature."



31. PAGE 98:24 TO 98:24 (RUNNING 00:00:00.882)

24 Q. Do you see that sentence?

32. PAGE 99:08 TO 99:18 (RUNNING 00:00:24.714)

08 A. You're just going to have to  
09 let me read it here because I'm not getting  
10 it.

11 Q. I'm sorry, I can't hear.

12 A. Oh, I'm sorry. I said let me  
13 just take a little extra time because I'm  
14 looking at this, and I'm confused by it.

15 Q. It's forwarded to you later. I  
16 just wanted to ask you about this original  
17 e-mail between the editor, Roger McClellan,  
18 and Ashley Roberts at Intertek.

33. PAGE 99:22 TO 99:25 (RUNNING 00:00:05.436)

22 MR. MILLER: Of course.

23 THE WITNESS: I really don't  
24 understand what that sentence is

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25 saying.

34. PAGE 100:11 TO 101:01 (RUNNING 00:00:33.508)

11 A. I think you would have to check  
12 with Ashley on that. He's the person that  
13 wrote that sentence.

14 Q. Is it your testimony Monsanto  
15 wasn't giving Intertek any pressure to get  
16 this published?

17 A. Well, clearly, you know, this  
18 is a project that had gone on for a long  
19 period of time, so I will say that I  
20 personally was anxious to see this get  
21 published, yes.

22 Q. You wanted to get this paper to  
23 the agency so they could use this paper in  
24 part of their obligations concerning public  
25 health and their regulatory obligations,  
00101:01 right?

35. PAGE 101:04 TO 102:03 (RUNNING 00:01:18.410)

04 THE WITNESS: I wanted to see  
05 this paper get published because it is  
06 the most comprehensive review by  
07 experts that I've ever -- you know,  
08 that I've ever seen. And so, I mean,  
09 obviously I would want to see this get  
10 published. You know, I think that's  
11 an obvious thing.

12 QUESTIONS BY MR. MILLER:

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13 Q. And so Robert -- I'm sorry,  
14 Roger writes back to Ashley fairly promptly  
15 and says, "I'm also eager to get these papers  
16 wrapped up."

17 And he goes on to say, "If  
18 there" -- excuse me. I want to get this  
19 right. "If you can say without consultation  
20 with Monsanto, that would be great."

21 Let me back up. I want to make  
22 sure I get this right.

23 See where I am at the bottom of  
24 the page? I want to make sure I get the  
25 whole thing.

00102:01 A. Yes, I see that.

02 Q. And a DOA is a declaration of  
03 interest. That's what that means, right?

36. PAGE 102:06 TO 102:23 (RUNNING 00:00:44.348)

06 Q. I'm sorry, DOI, excuse me.

07 A. Yes.

08 Q. "The Declaration of Interest  
09 should start something like this: The  
10 employment affiliation of the authors is as  
11 shown on cover page. However, it should be  
12 recognized that each individual participated  
13 in the review process and preparation of this  
14 report as an independent professional and not  
15 as a representative of their employer. The  
16 remainder of the Declaration of Interest  
17 should make clear how individuals were  
18 engaged, that is, by Intertek. If you can  
19 say without consultation with Monsanto, that

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20 would be great."  
21 Now, would it be fair to say  
22 that they were retained without consultation  
23 from Monsanto, or would that not be true?

**37. PAGE 103:02 TO 103:09 (RUNNING 00:00:13.280)**

02 THE WITNESS: Yeah, could you  
03 ask that question again, give me a  
04 little context?  
05 QUESTIONS BY MR. MILLER:  
06 Q. Would it be fair to say or  
07 would it not be true that Monsanto was  
08 involved in selecting the experts for this  
09 panel?

**38. PAGE 103:12 TO 104:18 (RUNNING 00:01:16.323)**

12 THE WITNESS: So we -- I  
13 thought that we had covered this  
14 previously, so I'll give you my answer  
15 again.  
16 So at the very beginning of the  
17 process -- right now we're at the very  
18 end of the process, but at the  
19 beginning of the process we did -- I  
20 did offer some names of who I believed  
21 to be top-notch experts, gave that --  
22 those names to Ashley, and then Ashley  
23 and his folks selected who they  
24 thought should be on the paper.  
25 So as part of that process --  
00104:01 and there were some cases where --  
02 again, going all the way back to the  
03 beginning of the process where some  
04 contact might have been made with some  
05 of them just from the standpoint of  
06 asking them if they were interested  
07 and if they're available.  
08 So just really around that,  
09 because obviously it wouldn't make  
10 sense to offer up names of individuals  
11 who either could not or did not want  
12 to get involved.  
13 QUESTIONS BY MR. MILLER:  
14 Q. Well, the truth is, Doctor,  
15 Monsanto selected some of the panel members,  
16 but before any panel member was approved,  
17 they had to go through Monsanto's legal  
18 department?

**39. PAGE 105:03 TO 106:01 (RUNNING 00:01:04.290)**

03 THE WITNESS: So could you  
04 repeat the part of the question that I  
05 can answer?  
06 MR. MILLER: We'll have her  
07 read the question back.  
08 (Court Reporter read back  
09 question.)  
10 THE WITNESS: So again,  
11 provided names, and Ashley and  
12 whomever he may have worked with was  
13 responsible for ultimately deciding  
14 who was going to be on the panel.  
15 QUESTIONS BY MR. MILLER:  
16 Q. Well, we'll look at some more  
17 documents in that regard then in a second.

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18 Let's finish Exhibit 3:11. The  
19 editor of the Critical Review of Toxicology,  
20 Roger McClellan, says on July 5, 2016, "If  
21 there was any review of the reports by  
22 Monsanto or their legal representatives, that  
23 needs to be disclosed."  
24 Do you see that?  
25 A. I see that.  
00106:01 Q. It was not disclosed, was it?

**40. PAGE 106:04 TO 106:14 (RUNNING 00:00:30.268)**

04 THE WITNESS: Again, I can only  
05 tell you this is conversation -- well,  
06 not conversation. It's e-mail and

 **-KE0359 - Clear Attached Exhibit 0359**



07 conversations between the two of them.  
08 I can only interpret what I  
09 think they may have been talking  
10 about, and my -- and I've already told  
11 you, the only interpretation I can  
12 come up with is it was their paper,  
13 and there was no substantive  
14 contribution from Monsanto.

**41. PAGE 114:24 TO 114:25 (RUNNING 00:00:03.556)**

24 Q. You mentioned to us how Larry  
25 Kier got involved in this. Let's take a look

**42. PAGE 115:11 TO 116:03 (RUNNING 00:00:51.006)**

 **0361 -**



11 He was being retained to be on  
12 a glyphosate expert panel, the one we've been  
13 talking about, right?  
14 A. Yes.  
15 Q. Yes, sir.  
16 And his job was to support a  
17 panel review and analysis of the data on  
18 genotoxicity and oxidative stress, right?  
19 A. Yes. This is what I explained  
20 previously, that we retained Larry originally  
21 not as to be an author. And I think that's  
22 reflected in the detailed objectives there.  
23 Recall how I explained that  
24 Larry had the best overall knowledge of the  
25 database, and so he was retained for purposes  
00116:01 of bringing everything together to support  
02 the review. And that's exactly what's  
03 reflected here.

**43. PAGE 116:09 TO 117:14 (RUNNING 00:01:13.830)**

09 Q. All right. He was supposed to  
10 support the genotoxicity and oxidative stress  
11 portion of the Intertek, and support the  
12 generation of a panel draft manuscript on  
13 glyphosate genotoxicity and oxidative stress,  
14 right?  
15 A. That's exactly what I said  
16 previously.  
17 Q. Right.  
18 And he wasn't supposed to be an

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19 author, but later he did, in fact, become an  
20 author, right?  
21 A. That is correct.  
22 Q. And these are the -- was he  
23 paid more than this or -- or these amounts?  
24 A. I don't know what he was paid.  
25 I didn't -- I don't handle that.  
00117:01 Q. All right, sir.

 **-KE0361 - Clear Attached Exhibit 0361**



02 A. I certainly don't keep track of  
03 it.  
04 Q. And to be clear, John  
05 Acquavella was paid by Monsanto for his  
06 support as well, right, sir?  
07 A. The two of them -- as I've  
08 said, the two of them were initially  
09 consultants to Monsanto and later became  
10 panelists and authors.  
11 Q. I mean, would it be fair to say  
12 there's two reasons why Monsanto would want  
13 to ghostwrite these things: It's cheaper and  
14 they get what they want, right?

**44. PAGE 117:18 TO 117:25 (RUNNING 00:00:19.673)**

18 THE WITNESS: As I've said  
19 before, this document was not  
20 ghostwritten. This document -- the  
21 conclusions and documents came from  
22 the panel. These are international  
23 experts, and it reflects their  
24 opinions on the data and their  
25 conclusions.

**45. PAGE 118:04 TO 118:06 (RUNNING 00:00:15.046)**

04 Q. All right. Let's take a look

 **0362 -**



05 at Exhibit 3:14, a series of e-mails between  
06 you and others concerning IARC planning.

**46. PAGE 119:03 TO 119:05 (RUNNING 00:00:03.963)**

03 Q. When you're ready, Doctor.  
04 A. I'm almost there.  
05 Q. No, I understand.

**47. PAGE 119:06 TO 125:01 (RUNNING 00:07:00.430)**

06 A. Okay.  
07 Q. All right, sir.  
08 Now, this is Exhibit 3-14, a  
09 series of e-mails produced to us from you and  
10 others in February of 2015, which to put this  
11 in context, the original IARC report that  
12 we've been talking about came out in March,  
13 right, of 2015?  
14 A. That's correct.  
15 Q. So this was an IARC planning  
16 discussion here, right, sir?  
17 A. That's correct.  
18 Q. All right. So let's go to the

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19 second page of it and look at an e-mail from  
20 you -- I said second page and I meant -- yes,  
21 sir, second page I meant. Sorry for the  
22 confusion.  
23 And it's an e-mail from you to  
24 Donna Farmer and others regarding IARC  
25 planning, right?  
00120:01 A. That's correct.  
02 Q. All right. So -- and I just  
03 want to ask you a few questions about it.  
04 The two -- "Prior phone call the other day --  
05 with John the other day" --  
06 Would that be John Acquavella?  
07 A. Yes.  
08 Q. -- "the next two most important  
09 things that we are to do" -- I'm sorry. "The  
10 next most important things that we need to do  
11 are the meta-analysis publication and the Ag  
12 Health Study follow-up publication, assuming  
13 we can get our hands on the data in a  
14 reasonable time frame."  
15 Okay. What was the plan there?  
16 A. Well, there wasn't a plan.  
17 This is -- as you've noted, this is in our  
18 brainstorming method -- or excuse me, mode.  
19 We hadn't seen what IARC had done yet, so  
20 these are things that we were considering at  
21 that point in time.  
22 And so the Ag Health Study, if  
23 you're asking me -- are you asking me about  
24 the Ag Health Study?  
00121:01 Q. I am, sir. Yes, sir.  
02 A. Okay. So that -- the Ag Health  
03 Study, we haven't talked about that, but that  
04 is a very large-scale study that is ongoing  
05 here in the United States. It's an  
06 epidemiology study. And that study is a very  
07 powerful study, in my opinion, much more  
08 powerful than the other -- some of the  
09 case-control epidemiology studies. But  
10 anyway, it's a study that's ongoing.  
11 And when you look at that  
12 study, they collect data every year. That  
13 study started approximately 1994, and then  
14 they update that study on a yearly basis  
15 after that.  
16 If you look at the -- and then  
17 they would -- when they update it, if they  
18 have findings, then they will publish those  
19 findings in a peer-reviewed journal. That's  
20 what they do.  
21 And when you look at that  
22 study, that study -- the last update on that  
23 was a publication that came out in 2005,  
24 which actually had data collection. I  
25 believe data collection ended around 2001.  
00122:01 And so one of the thoughts was  
02 that -- could take that study and add all the  
03 additional information that has been  
04 generated because we're sitting -- at this  
05 point in time we're sitting at 2015. So it  
06 seemed to us that there's a lot of

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07 information that's available, and why would  
08 you not want to update that so you have a  
09 more thorough set of data. That's what was  
10 going on there.

11 Q. All right, sir. So in this  
12 e-mail in February 2015 to Donna Farmer and  
13 others, you go on to say, "For the overall  
14 plausibility paper that we discussed with  
15 John, where he gave us a butadiene example,  
16 I'm still having a little trouble wrapping my  
17 mind around that. If we went full-bore  
18 involving experts from all the major areas,  
19 epi, tox, genotox, mechanism of action,  
20 exposure - not sure who we'd get, we could be  
21 pushing 250,000 or maybe even more."

22 That was sort of the genesis  
23 for this Intertek panel, right?

24 A. Yes. As I already explained,  
25 this was kind of an evolving process, you  
00123:01 know, brainstorming process. And originally  
02 it was conceived as a plausibility paper,  
03 which then did evolve into the more  
04 comprehensive expert panel.

05 Q. Yes, sir.  
06 And you go on to say, "A less  
07 expensive, more palatable approach might be  
08 to involve experts only for the areas of  
09 contention, epidemiology and possibly  
10 mechanism of action, depending on what comes  
11 out of the IARC meeting, and we ghostwrite  
12 the exposure tox and genotox sections."

13 You wrote that, right, sir?

14 A. Yes, I wrote that. And as I  
15 indicated just -- or as I said just a moment  
16 ago, again, this was early stage. This was  
17 thoughts. It is not how it evolved.

18 As we already talked about, it  
19 evolved into this comprehensive expert panel,  
20 and it was not ghostwritten. It was written  
21 by the experts themselves.

22 Q. Well, let's see what you wrote  
23 in 2015. "An option would be to add Greim  
24 and Kier or Kirkland to have their names on  
25 the publication, but we would keep the cost  
00124:01 down by us doing the writing, and they would  
02 just edit and sign their names, so to speak."

03 That was the proposal in 2015,  
04 right?

05 A. No. As I just said, that  
06 was -- this is something that came out in a  
07 brainstorming mode of thinking. It was just  
08 something that came out at that point in time  
09 as a possibility to consider.

10 It didn't get considered very  
11 long, and obviously as I've said now, it's  
12 not what happened. Same answer as I gave  
13 previously.

14 Q. Well, you go on to say here,  
15 "Recall, that is how we handled Williams,  
16 Kroes and Munro in 2000."

17 Do you see that?

18 A. Yeah, I see that.  
19 Apparently I didn't have good  
20 recollection, because that's not what  
21 happened with Williams, Kroes and Munro in  
22 2000.

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23 Q. Dr. Heydens, the truth is, you

 -KE0362-002 - Clear Attached Exhibit 0362-002



24 ghostwrote the Williams article in 2000, and  
25 you ghostwrote the Intertek article in 2016,  
00125:01 correct?

48. PAGE 125:05 TO 125:08 (RUNNING 00:00:08.674)

05 THE WITNESS: That's absolutely  
06 false. Did not ghostwrite the 2000  
07 paper and did not ghostwrite this 2016  
08 paper.

49. PAGE 125:19 TO 126:05 (RUNNING 00:00:22.296)

19 Q. All right, Dr. Heydens, how are  
20 you?  
21 A. Doing good.  
22 Q. All right, sir.  
23 Just before our break, your  
24 answer was, in part, that it's absolutely  
25 false that you ghostwrote any of the Intertek  
00126:01 reports, right, sir?  
02 A. That's correct.  
03 Q. All right, sir. The truth is  
04 you wrote a draft introduction chapter for  
05 those reports, didn't you?

50. PAGE 126:08 TO 128:02 (RUNNING 00:02:04.805)

08 THE WITNESS: That's consistent  
09 with what I said, really. So a couple  
10 hours ago, whenever it was, when we  
11 talked about it, I said that I  
12 contributed some information that was  
13 historical.  
14 What you're referring to there,  
15 again, reflects how the project  
16 changed. So very early in the  
17 process, kind of the model that we  
18 were thinking of was that there was  
19 actually going to be an introductory  
20 chapter which really talked primarily  
21 about the history of everything that  
22 had happened leading up to the panel  
23 because, again, as I explained  
24 earlier, nobody knows better than  
25 Monsanto, you know, what that history  
00127:01 was and really has the only records of  
02 that.  
03 So it was conceived that there  
04 would be an introductory chapter. We  
05 really -- never really talked about  
06 what the appropriate authorship for  
07 that one was, and it just kind of hung  
08 there as a draft while the panel was  
09 doing their work.  
10 And then when it got later in  
11 the process, I don't remember exactly  
12 when it was, but later in the process  
13 when Ashley was communicating with the  
14 journal, it was -- the journal made  
15 the decision that there was not  
16 enough -- excuse me, there was not  
17 enough information to make an  
18 introductory chapter interesting

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19 enough to be a standalone.  
20 So what the journal decided to  
21 do instead was they instructed Ashley  
22 to take the -- what would be  
23 appropriate history, extract it from  
24 that article, which never happened,  
25 and put it in the overall review  
00128:01 document which turned out being  
02 Exhibit 3.4.

**51. PAGE 128:06 TO 128:09 (RUNNING 00:00:11.678)**

06 Q. Let's take a look at some  
07 e-mails from that period of time from you,

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08 sir. These have been marked as Exhibit 3:15,  
09 produced by Monsanto in this litigation.

**52. PAGE 128:10 TO 129:20 (RUNNING 00:01:35.760)**

10 A. Okay.  
11 Q. Yes, sir. So Exhibit 3:15 is a  
12 series of e-mails between you and Ashley  
13 Roberts about these expert panel manuscripts  
14 written in January of 2016, right?  
15 A. Yes, that's correct.  
16 Q. All right, sir. Now let's go

 0363-002 -

17 to the second page of -- and then we see an  
18 e-mail from you to Ashley Roberts, and it's  
19 an update on the animal bioassay and summary  
20 chapters.  
21 You go, "I'm not surprised at  
22 the challenges with the summary chapter,  
23 exclamation point," right?  
24 A. Yes, that's correct. It's a  
25 very complex and complicated document.  
00129:01 Q. Yes, sir.  
02 That you wrote, right?  
03 A. That's not correct.  
04 Q. Here's what it says in  
05 January 2016. You said then, sir, "I had  
06 already written a draft introductory chapter  
07 back in October/November."  
08 That's what happened, right,  
09 sir?  
10 A. Yeah, that's exactly what I was  
11 just talking to in the previous -- in my  
12 previous response.

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13 Q. Yet when we go to Exhibit 3:4  
14 that you just pointed out, page 16, it says,  
15 "Neither Monsanto" -- "neither any Monsanto  
16 Company employees nor any attorneys reviewed  
17 any of the expert panel manuscripts prior to  
18 submission to the journal."  
19 You didn't just review them;  
20 you wrote them.

**53. PAGE 129:24 TO 129:25 (RUNNING 00:00:04.247)**

24 Q. Wrote parts of the expert panel

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25 report; you wrote them, right, sir?

**54. PAGE 130:04 TO 131:09 (RUNNING 00:01:24.182)**

04 THE WITNESS: I'll answer  
05 again: I wrote a draft introductory  
06 chapter for possible use back at the  
07 beginning, really, when the panel  
08 concept was coming together. That --  
09 and that -- the information that was  
10 in there, again, was historical. It  
11 had nothing to do with the panel  
12 deliberations. Didn't even deal with  
13 the data at all because, again, it was  
14 historical.

15 Subsequently it was -- like I  
16 said in the previous -- my previous  
17 response, you know, moving forward and  
18 getting later in time, the journal  
19 editor didn't think it was even  
20 appropriate to have the chapter, so he  
21 had Ashley extract what would be  
22 relevant historical information to  
23 include in that publication, and  
24 that's what Ashley did.  
25

00131:01 QUESTIONS BY MR. MILLER:

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02 Q. So you went back, and let's see  
03 what you said in 2016, January.

04 "But I wanted to go back and  
05 re-read it to see if it could benefit from  
06 any 'refreshing' based on things that have  
07 transpired over the last 10 to 12 weeks."

08 How much refreshing did you do,  
09 Dr. Heydens?

**55. PAGE 131:12 TO 131:18 (RUNNING 00:00:12.185)**

12 THE WITNESS: I don't recall  
13 doing any refreshing.

14 QUESTIONS BY MR. MILLER:

15 Q. It says, "I will do that in the  
16 next few days."

17 Did you do that the next few  
18 days?

**56. PAGE 131:21 TO 132:19 (RUNNING 00:00:59.315)**

21 THE WITNESS: I don't recall  
22 what was done. I might have gone back  
23 and read it. I don't -- I don't  
24 recall having doing that, and I don't  
25 recall having modified anything.

00132:01 QUESTIONS BY MR. MILLER:

02 Q. You write in January of 2016,  
03 "Then I was thinking I would run it by you  
04 for your comments/edits."

05 That's what happened, right?

06 A. No. I said that's -- you're  
07 taking that out of -- you know, out of  
08 context. I'm suggesting that I was going to  
09 take a look and see if it needed any  
10 refreshing. And then what that sentence is  
11 saying, if there was going to be any  
12 refreshing, I would send it back to him.

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13 I don't recall that any  
14 refreshing -- as I said previously, I don't  
15 recall that that happened.  
16 Q. You next write, "And then comes  
17 the question of who should be the ultimate  
18 author - you or Gary?"  
19 Did you write that?

**57. PAGE 132:22 TO 133:14 (RUNNING 00:00:39.122)**

22 THE WITNESS: Yes, I did, and  
23 it's -- that sentence there is  
24 referring back to this introduction  
25 chapter which ultimately was not  
00133:01 included in the paper.  
02 QUESTIONS BY MR. MILLER:  
03 Q. I was --  
04 A. Or excuse me. Was not included  
05 in the publication. There were -- as I said,  
06 there was actually five papers that were  
07 published around this. That introductory was  
08 meant to be -- in its initial phases was  
09 meant to be -- the sixth one actually would  
10 have been the first one, and like I said, it  
11 was subsequently dropped. And so five went  
12 forward, and this one did not.  
13 Q. The introductory chapter was  
14 put in the ones that were published?

**58. PAGE 133:17 TO 134:10 (RUNNING 00:00:42.511)**

17 THE WITNESS: So I think I  
18 previously explained, Ashley took the  
19 relevant -- information that he  
20 thought was relevant from the  
21 introductory paper, and it was put  
22 into Exhibit 3.4, which is the overall  
23 review document. None of it was put  
24 in the other documents, the other  
25 four -- excuse me, not documents,  
00134:01 publications: the exposure, the gene  
02 tox, the bioassay and the  
03 epidemiology.

 -KE0363-002 - Clear Attached Exhibit 0363-002



04 QUESTIONS BY MR. MILLER:  
05 Q. And that Exhibit 3:4 that you  
06 just pointed to is where that information was  
07 put in.  
08 To be clear, you're not an  
09 author. You're not a listed author on that  
10 document, are you?

**59. PAGE 134:13 TO 134:18 (RUNNING 00:00:20.106)**

13 THE WITNESS: So which question  
14 would you like me to answer?  
15 MR. MILLER: The one I just  
16 asked. You can read it back, ma'am.  
17 (Court Reporter read back  
18 question.)

**60. PAGE 134:21 TO 134:23 (RUNNING 00:00:04.903)**

21 THE WITNESS: So, no, I'm not  
22 listed as an author on this paper. I  
23 think we've established that.

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61. PAGE 144:21 TO 145:02 (RUNNING 00:00:16.826)

21 Q. And you remember as he's  
22 preparing his exposure piece, he was  
23 concerned about the formulation, that is to  
24 say glyphosate added with its surfactant, as  
25 being toxic.  
00145:01 Do you remember that  
02 conversation?

62. PAGE 145:09 TO 145:12 (RUNNING 00:00:07.632)

09 THE WITNESS: I don't really  
10 recall. You'd have to let me see  
11 something that gives me a little bit  
12 more information.

63. PAGE 145:16 TO 145:24 (RUNNING 00:00:40.061)

16 Q. Let's take a look at the

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17 documents. Exhibit 3:18, produced by  
18 Monsanto in this litigation, a series of  
19 e-mails between you, Donna Farmer and Ashley  
20 Roberts at Intertek in August of 2007 -- I'm  
21 sorry, '15. '15.  
22 Look it over. I only have a  
23 few questions.  
24 A. Okay.



64. PAGE 145:24 TO 146:16 (RUNNING 00:00:41.242)

24 A. Okay.  
25 Q. All right. So there's a few  
00146:01 questions based on this series of e-mails.  
02 Best if we start at the back where -- on

 0366-003 -

03 page 3935.  
04 This is an e-mail from, again,  
05 Ashley Roberts to you and Donna Farmer,  
06 right?  
07 A. That's correct.  
08 Q. Okay. And it's the subject  
09 "Keith." That's Keith Solomon, right?  
10 A. Yes, that would be correct.  
11 Q. "Just received a question from  
12 Keith in response to my e-mail on the  
13 exposure piece this morning."  
14 We're talking about the  
15 exposure piece for the Intertek report,  
16 right?



65. PAGE 146:20 TO 147:01 (RUNNING 00:00:26.259)

20 Q. Is that right, sir?  
21 A. It's -- he's talking about  
22 exposure.  
23 Would you repeat the question?  
24 MR. MILLER: Sure.  
25 (Court Reporter read back  
00147:01 question.)

66. PAGE 147:05 TO 148:01 (RUNNING 00:00:47.778)

05 THE WITNESS: Yes, this

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06 sentence was -- it's not exactly what  
07 the sentence says. Close.  
08 But I can say that what we  
09 are -- what he was talking about there  
10 is the exposure component that's part  
11 of the expert panel review.  
12 QUESTIONS BY MR. MILLER:  
13 Q. Right. Okay. So let's go back  
14 and look at what was said then.  
15 Ashley Roberts is talking to  
16 you and Donna Farmer, and he says, "He" --  
17 now, you and I can agree "he" means Keith,  
18 right?  
19 A. Here it means Keith.  
20 Q. Yes, sir.  
21 "He has asked if we need to  
22 give any consideration to exposure of  
23 formulants."  
24 Now, so we understand,  
25 formulants means the glyphosate combined with  
00148:01 the surfactant, right?

**67. PAGE 148:04 TO 148:18 (RUNNING 00:00:30.518)**

04 THE WITNESS: So this is  
05 something that he's writing. When I  
06 look at the sentence, my  
07 interpretation of what he's saying  
08 there is -- or he would be -- anything  
09 that would be in the jug that you buy  
10 would be a formulant.  
11 QUESTIONS BY MR. MILLER:  
12 Q. Okay.  
13 A. That's my interpretation of  
14 what he's saying.  
15 Q. All right. "He has asked if we  
16 need to give any consideration exposures of  
17 formulants in the commercial product, at  
18 least in applicators."

**68. PAGE 148:22 TO 149:08 (RUNNING 00:00:36.066)**

22 Q. Let's do it again. Quote --  
23 from Ashley Roberts to you and Donna Farmer  
24 on August 6, 2015. Quote, "He has asked if  
25 we need to give any consideration to  
00149:01 exposures of formulants in the commercial  
02 product, at least in the applicators? I was  
03 under the impression that these were inert,  
04 but reading a response in this morning in the  
05 Ecologist makes it sound like it is the  
06 combination that is toxic, exclamation point,  
07 exclamation point, exclamation point."  
08 Did I read that correctly?

**69. PAGE 149:13 TO 149:15 (RUNNING 00:00:04.110)**

13 Q. Doctor, you can answer now. We  
14 appreciate the answer from counsel, but it's  
15 your turn.

**70. PAGE 149:22 TO 150:03 (RUNNING 00:00:13.026)**

22 Q. I got an idea, Doctor. You  
23 read that sentence for me, please.  
24 A. Which sentence would you like  
25 me to read?  
00150:01 Q. Starting at "he has asked" till

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02 the end of where it says "toxic, exclamation  
03 point, exclamation point, exclamation point."

71. PAGE 150:07 TO 152:03 (RUNNING 00:02:12.590)

07 THE WITNESS: "He has asked if  
08 we need to give any consideration to  
09 exposures of formulants in the  
10 commercial product, at least in  
11 applicators? I was under the  
12 impression these were inert, but  
13 reading a response this morning in the  
14 Ecologist makes it sound like it is  
15 the combination that is toxic, three  
16 exclamation points."

17 QUESTIONS BY MR. MILLER:

18 Q. So you write back in response  
19 to that e-mail, don't you?

20 A. I did respond.

21 Q. Yes, sir. And your response at  
22 the top of that page, "Ashley" --

23 Why don't you read your answer  
24 for us, Doctor?

25 A. Sure.

00151:01 Do you want me to read the  
02 entire?

03 Q. Please.

04 A. "Ashley, I think the short  
05 answer is no. The focus of this is what is  
06 the carcinogenic potential of glyphosate.  
07 That said, the surfactant in formulation will  
08 come up in the tumor promotion skin study  
09 because we think it played a role there."

10 Q. And one more point before we

 0366-002 -



11 leave this document. If we could, sir, go to  
12 Bates stamp 934, an e-mail from Donna Farmer  
13 copied to you and Ashley Roberts at Intertek.

14 Do you see where I am, sir?

15 A. Yes.

16 Q. Subject "Keith."

17 A. Yes, I see that.

18 Q. So Donna Farmer is, according  
19 to this e-mail, I quote, "I am pulling  
20 together the background info for the animal  
21 section and will send it to you later today  
22 or tomorrow."

23 Do you see that?

24 A. Yes, I see that.

00152:01 Q. So it's fair to say not only  
02 you are helping get this Intertek expert  
03 panel report prepared, but Donna Farmer is  
04 working on it, too?

72. PAGE 152:06 TO 152:18 (RUNNING 00:00:41.462)

06 THE WITNESS: No, this is --  
07 this -- what Donna is talking about  
08 here, this is the point in time when  
09 we're getting ready to do the panel.  
10 And so what Donna is talking about

 -KE0366-002 - Clear Attached Exhibit 0366-002



11 is -- if you recall, I said earlier

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12 that Monsanto made any documents  
13 available that the experts may want to  
14 review, and so that's what Donna is  
15 talking about here, is she was pulling  
16 together studies and information for  
17 the expert panel members to read and  
18 evaluate.

**73. PAGE 158:01 TO 158:08 (RUNNING 00:00:20.442)**

00158:01 The question is, sir: Are you  
02 aware of Gary Marsh or Douglas Weed or David  
03 Garabrant or Thomas Sorahan ever getting  
04 ahold of the Critical Reviews in Toxicology  
05 and saying, "Hey, we know Monsanto saw this  
06 as a draft report"?  
07 Are you aware of that or not?  
08 That's all I'm asking.

**74. PAGE 158:12 TO 158:13 (RUNNING 00:00:04.183)**

12 THE WITNESS: I don't know what  
13 conversations they might have had.

**75. PAGE 158:17 TO 158:19 (RUNNING 00:00:08.714)**

17 Q. Let's take a look at whether  
18 you, in fact, did edit this draft report, all

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19 right, sir? Let's look at Exhibit 3-20.

**76. PAGE 158:20 TO 158:23 (RUNNING 00:00:14.250)**

20 3-20, an e-mail from you with a  
21 summary article. I have a copy for you and a  
22 copy for counsel, produced by Monsanto in  
23 this litigation.

**77. PAGE 160:05 TO 160:06 (RUNNING 00:00:02.451)**

05 Q. Let me know when you're ready,  
06 Doctor.

**78. PAGE 160:07 TO 160:23 (RUNNING 00:00:37.180)**

07 A. Okay.  
08 Q. Yes, sir.  
09 And starting at the bottom of  
10 the page there, it's an e-mail from Ashley  
11 Roberts to you regarding the summary  
12 articles, right?  
13 "Hi, Bill, please take a look  
14 at the latest from the epi group, four  
15 exclamation points."  
16 Do you see that?  
17 A. Yes, I see.  
18 Q. "Call me once you have digested  
19 this."  
20 Do you see where he says that?  
21 A. Yes, I do.  
22 Q. And you tell him in your  
23 response that you edited it, right?

**79. PAGE 161:03 TO 161:18 (RUNNING 00:00:32.536)**

03 Q. Right, Doctor?  
04 A. That's what's stated there.  
05 Q. Okay. Let's take a look at

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06 exactly --  
07 A. And this is -- this is really  
08 what we've already covered, but go ahead.  
09 Q. Thank you.  
10 This is from William Heydens,  
11 February, to Ashley Roberts: "Ashley, I have  
12 gone through the entire document and  
13 indicated what I think should stay, what can  
14 go, and in a couple spots did a little  
15 editing."  
16 So those are three of the  
17 things you did to that Intertek epi report,  
18 right?

80. PAGE 161:21 TO 166:16 (RUNNING 00:05:34.596)

21 THE WITNESS: So this is --  
22 I'll go back, and we'll talk about  
23 this again. This is what we had  
24 talked about previously.  
00162:01 So this is very late stage in  
02 the process. Recall that I had  
03 mentioned that when we first -- when  
04 this project started that there was  
05 going to be four reports, and at that  
06 point in time it was not envisioned  
07 that there would be a summary document  
08 and much less what the authorship  
09 might be.  
10 So as the project progressed,  
11 the concept for the summary article  
12 progressed as well. And what I mean  
13 by that is it was decided that the  
14 summary -- the overall summary article  
15 would be authored by all -- was it  
16 16? -- of them.  
17 And so what we're looking at  
18 here, this is a point in the process.  
19 So initially they were reviewing their  
20 own sections, and so they very easily  
21 could agree amongst themselves. What  
22 I mean by that is the epidemiologists  
23 could agree amongst themselves what  
24 they thought they should say about the  
25 epidemiology, the gene tox folks, so  
00163:01 on and so forth.  
02 So now we've gone through that  
03 whole process and they're at the point  
04 where, as I just described, they're  
05 all going to be authors on this paper.  
06 So then they start reviewing each  
07 others' -- another -- you can think of  
08 it as another level of peer review, if  
09 you will, where they were reviewing  
10 what the others had written.  
11 So in these e-mail  
12 communications, the epidemiologists  
13 did a very hard look at the animal --  
14 from the animal bioassay group, and  
15 they're actually critiquing -- the  
16 epidemiologists are actually  
17 critiquing some of the things that  
18 were said in the other; most notably,  
19 one of them that I'm looking at right  
20 here talking about Hill's criteria.  
21 So the epidemiologists didn't  
think that the toxicologists should be

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22 talking about Hill's criteria when --  
23 and they're just flat out wrong, quite  
24 honestly, because if you go read, for  
25 instance, EPA's cancer risk assessment  
00164:01 guidelines, which they used on  
02 glyphosate and use on other things as  
03 well, they very clearly say that  
04 there's a modified form of Hill's  
05 criteria. So anyway, there was  
06 questions amongst -- around them about  
07 that.  
08 Another thing that sticks out  
09 in here, as I look at this, where  
10 there was some disagreement -- and I  
11 think we actually touched on this  
12 earlier in the day, where the  
13 different panels took somewhat  
14 different approaches. So I think I  
15 mentioned how the epidemiologists,  
16 when they did their review, they  
17 didn't really want to do it from the  
18 standpoint of here's what IARC got  
19 wrong. They did it just, what is all  
20 the data, what does the data tell us,  
21 here's our conclusions.  
22 The animal people -- when I say  
23 "the animal," I mean the animal  
24 bioassay group, because they worked in  
25 their sections in isolation  
00165:01 previously. They did do some  
02 criticisms, some direct criticisms,  
03 of founded -- well-founded criticisms  
04 of IARC, and some reference of that  
05 made it into their publication. When  
06 the -- and some of that drained over  
07 into the overall review publication.  
08 So when the epidemiologists saw  
09 that, they didn't think that it was  
10 appropriate. So there was some dialog  
11 back and forth about that.  
12 So when you look at this  
13 document here and you see some  
14 editing, what was going on at that  
15 point in time. John, being the good  
16 soul that he is, he stepped in and was  
17 trying to make it easy for Ashley --  
18 he was trying to be kind of a  
19 go-between, I guess, if you will,  
20 between the epidemiologists and Ashley  
21 and the animal people to try and bring  
22 this to some resolution.  
23 And so John, as part of that,  
24 he suggested a number of edits which  
25 are reflected in this document. You  
00166:01 can see some of them; you can't see  
02 others. I don't know why that is.  
03 There appears to be some problem with  
04 picking up the editing function.  
05 But anyway, that's what  
06 happened. And then -- so Ashley --  
07 that's what Ashley sent to me and  
08 basically said, "Hey, look what John  
09 did."  
10 And I went through his  
11 comments. And that's what we talked  
12 about earlier this morning where I

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13 said I made some comments about John's  
14 comments, sent them back to Ashley,  
15 and then Ashley dealt with them as  
16 he -- as he saw appropriate.

81. PAGE 166:25 TO 167:04 (RUNNING 00:00:15.976)

25 Q. Let's look at Exhibit 3-20.  
00167:01 You decided on this draft after report what  
02 you thought should stay, what can go, and in  
03 a couple of spots did a little editing.  
04 That's true, isn't it, sir?

82. PAGE 167:11 TO 167:17 (RUNNING 00:00:11.762)

11 A. Should we go through the  
12 document --  
13 Q. I would like you to answer my  
14 question, Dr. Heydens. I don't think that's  
15 unreasonable. Let me ask the question again.  
16 You decided, sir, what I think  
17 should stay; is that true, sir, or not true?

83. PAGE 167:20 TO 168:10 (RUNNING 00:00:41.689)

20 THE WITNESS: I did not decide.  
21 I -- as I just gave in my previous  
22 testimony, I made my suggestions about  
23 John's suggestions. I didn't decide  
24 anything. Ashley decided everything.  
25  
00168:01 QUESTIONS BY MR. MILLER:  
02 Q. You indicated what could go,  
03 didn't you, Dr. Heydens?  
04 A. Okay. For the third time, I  
05 will say that I gave my opinion, my  
06 suggestions, about John's suggestions. I  
07 gave that information to Ashley, and Ashley  
08 resolved it the way he saw fit.  
09 Q. And you did a little editing;  
10 isn't that true, Dr. Heydens?

84. PAGE 168:13 TO 169:04 (RUNNING 00:00:39.630)

13 THE WITNESS: I previously  
14 indicated that there was some minor  
15 editing that was offered. It is not  
16 substantial -- it's not about -- it's  
17 really just minor editing. It has  
18 nothing to do with the conclusions or  
19 the evaluations that the expert panel

 0883-015 -



20 did.  
21 QUESTIONS BY MR. MILLER:  
22 Q. And let's go back then to  
23 Exhibit 3:4, page 16 -- you have a copy  
24 there, sir -- where it says, "Neither any  
25 Monsanto Company employees nor any attorneys  
00169:01 reviewed any of the expert panel manuscripts  
02 prior to submission to the journal."  
03 Can't you now at least agree  
04 that's a lie?

85. PAGE 169:08 TO 170:01 (RUNNING 00:00:51.910)

08 THE WITNESS: So we talked  
09 about that earlier this morning, and I

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10 gave you my thoughts on that. And I  
11 recall that my thoughts were that,  
12 first of all, that is something that  
13 was written -- that came from the  
14 Intertek panel. Those are not my  
15 words.  
16 I gave you my interpretation of  
17 what I thought it might mean, and my  
18 interpretation of what it might mean  
19 is they didn't really take anything  
20 from anybody that -- it's the expert  
21 panel, it's what they wrote, it's  
22 their thoughts, their conclusions.  
23 Did not -- Monsanto, myself, did not  
24 influence any of that. So perhaps

 -KE0883-015 - Clear Attached Exhibit 0883-015



25 that was what they were thinking when  
00170:01 they wrote that same statement.

86. PAGE 170:14 TO 170:18 (RUNNING 00:00:09.708)

14 Q. Let's talk now -- it wasn't  
15 just the epidemiology section that you  
16 reviewed before publication and chose to  
17 edit. You looked at the genotox section,  
18 too, didn't you?

87. PAGE 170:21 TO 170:24 (RUNNING 00:00:09.149)

21 THE WITNESS: So again, you  
22 said I chose to edit. I offered  
23 suggestions, and Ashley did what he  
24 wanted with them.

88. PAGE 171:03 TO 171:07 (RUNNING 00:00:16.730)

03 Q. Let's look at a document  
04 quickly to show your receipt of the genotox

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05 report. Exhibit 3-21, produced by Monsanto  
06 in this litigation. I have a copy for you,  
07 sir.

89. PAGE 171:08 TO 171:22 (RUNNING 00:00:35.125)

08 A. Yes.  
09 Q. Yes, sir.  
10 So in this e-mail it shows,  
11 fair to say, sir, that in fact you did  
12 receive the genotox report prior to  
13 publication, right?  
14 A. He sent this to me and he said  
15 for your review, but I probably -- I did not  
16 review it, and I'm not qualified to review  
17 it, quite honestly. I mean -- yeah.  
18 Q. So --  
19 A. I saw it, that's true. I did  
20 see it.  
21 Q. But you put it in the corner,  
22 didn't read it; is that your testimony?

90. PAGE 172:02 TO 172:05 (RUNNING 00:00:08.440)

02 Q. Is that your testimony?

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 -KE0369 - Clear Attached Exhibit 0369



03 A. I might have opened -- I'm sure  
04 I opened it up and took a look at it, and I  
05 doubt very much that I offered anything.

91. PAGE 172:06 TO 172:08 (RUNNING 00:00:06.653)

06 Q. You also saw the exposure  
07 section of the Intertek report before it was  
08 published, right, sir?

92. PAGE 172:11 TO 172:20 (RUNNING 00:00:24.896)

11 THE WITNESS: Yeah, can we see  
12 it, please?  
13 QUESTIONS BY MR. MILLER:  
14 Q. Do you remember seeing it  
15 without looking at documents?  
16 A. I'm sure I had a look at some  
17 point, but, again, I'm not an exposure  
18 person. I don't recall that I would be even  
19 in a position to offer any meaningful review  
20 of that document.

93. PAGE 174:09 TO 174:11 (RUNNING 00:00:06.675)

09 Q. Okay. Now, Monsanto sent this  
10 Intertek report to the Environmental  
11 Protection Agency, right?

94. PAGE 174:14 TO 174:20 (RUNNING 00:00:20.598)

14 THE WITNESS: I would have  
15 to -- that would not be mine to do, so  
16 I'm not sure. It's possible.  
17 QUESTIONS BY MR. MILLER:  
18 Q. Well, if Monsanto sent it to  
19 the EPA as the work of independent  
20 scientists, would that be a true statement?

95. PAGE 174:24 TO 176:06 (RUNNING 00:01:30.080)

24 THE WITNESS: So my answer  
25 would be yes. Again, what we have  
00175:01 been going through is you are showing  
02 records that the expert panel work  
03 product came my direction.  
04 But I will say it again: Other  
05 than the historical information that  
06 we've already discussed and the  
07 suggested edits on somebody else's  
08 edits, which I have no idea what  
09 Ashley actually did with them, other  
10 than that, this is the expert panel's  
11 conclusions.  
12 What's really important about  
13 these five papers and their work  
14 product is that they reviewed the  
15 data, they came to their conclusions,  
16 and it's their conclusions and it's  
17 their document.  
18 So the fact that these  
19 documents at some point in time may  
20 have come to me or did come to me have  
21 nothing to do with what they concluded  
22 and the validity of their evaluation.  
23 QUESTIONS BY MR. MILLER:

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24 Q. Well, what's really important  
25 about the IARC review is 17 independent  
00176:01 scientists spent eight days reviewing the  
02 data, publicly available data, and concluded  
03 that Roundup, glyphosate, was a probable  
04 human carcinogen for non-Hodgkin's lymphoma.  
05 That would be important,  
06 wouldn't it?

**96. PAGE 176:12 TO 177:07 (RUNNING 00:00:53.838)**

12 A. The IARC group did meet. I'm  
13 not sure if it was exactly eight days. They  
14 did meet, and they evaluated during that  
15 period of time -- I think it's important to  
16 note that during that period of time they  
17 evaluated glyphosate and, I believe it was,  
18 four other chemicals. I believe there were  
19 five chemicals.  
20 So their eight days was diluted  
21 down, if you will, over five chemicals, so  
22 they didn't spend all that time talking about  
23 glyphosate. They spent about one-fifth of  
24 their time. That's the first point that I  
25 would make.  
00177:01 And the second point that I  
02 would make is, you know, for reasons which  
03 we've not discussed yet, I believe that the  
04 IARC evaluation was not a proper evaluation  
05 of the glyphosate database.  
06 Q. Do you have stock options in  
07 Monsanto?

**97. PAGE 177:10 TO 177:10 (RUNNING 00:00:01.866)**

10 THE WITNESS: I do.

**98. PAGE 178:24 TO 179:03 (RUNNING 00:00:08.952)**

24 QUESTIONS BY MR. MILLER:  
25 Q. Do you know who Jim Parry is?  
00179:01 Was?  
02 A. Yes. If it's the person I'm  
03 thinking of, yes.

**99. PAGE 190:21 TO 190:24 (RUNNING 00:00:20.501)**

21 Q. All right. Let me show you

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22 what we're marking as Exhibit 3:25, an e-mail  
23 from you in the year 2010 with a PowerPoint  
24 attached. A copy to you and counsel. Here

**100. PAGE 190:25 TO 190:25 (RUNNING 00:00:02.112)**

25 you go, sir.

**101. PAGE 191:13 TO 192:19 (RUNNING 00:00:57.152)**

13 THE WITNESS: Okay.  
14 QUESTIONS BY MR. MILLER:  
15 Q. Yes, sir.  
16 Now, this is an e-mail exchange  
17 between you and David Saltmiras?  
18 A. Yes.  
19 Q. And David --  
20 A. David Saltmiras.  
21 Q. Excuse me, David Saltmiras.

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22 And David Saltmiras is also an  
23 employee at Monsanto?  
24 A. That is correct.  
25 Q. Also a toxicologist?  
00192:01 A. That is correct.  
02 Q. And fair to say, correct me if  
03 I'm wrong, that this is an e-mail exchange  
04 about a slide deck that he was working on and  
05 you looked at; is that fair?  
06 A. This deck appears to be a deck  
07 that he put together for a presentation.  
08 Q. Yes, sir.  
09 And he sent to you in 2010, and  
10 you reviewed it; is that fair?  
11 A. It's attached to the e-mail, so  
12 I assume it's the one that I reviewed.  
13 Q. Yes, sir.  
14 And I just have a few  
15 questions, and I don't think -- well, that's  
16 fine.  
17 If you could turn to the

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18 publications page. And it's not marked, so I  
19 don't know what page that is.

**102. PAGE 192:20 TO 193:09 (RUNNING 00:00:23.098)**

20 Do you see that, sir, the  
21 publications page?  
22 A. I have a slide up, yes, I see  
23 that slide.  
24 Q. Yes, sir.  
25 And so it says "Williams, et  
00193:01 al., 2000." That's the paper we've been  
02 discussing, right?  
03 A. That is correct.  
04 Q. And it says, "An invaluable  
05 asset," right, sir?  
06 A. That's what he has written  
07 there, yes.  
08 Q. And that's a fair  
09 characterization, you would agree?

**103. PAGE 193:12 TO 194:03 (RUNNING 00:00:44.825)**

12 THE WITNESS: So the Williams  
13 paper, the way I would characterize  
14 the Williams paper -- I think we  
15 talked a little bit about it this  
16 morning -- that was the first time  
17 that -- all the glyphosate toxicology  
18 data that existed for regulatory  
19 purposes in the publications, the  
20 first time that it was compiled  
21 together and reviewed by basically  
22 international experts. So that was a  
23 very important paper.  
24 QUESTIONS BY MR. MILLER:  
25 Q. And what David Saltmiras says  
00194:01 is that Monsanto responses to agencies? Is  
02 that one of the things the Williams paper was  
03 used for?

**104. PAGE 194:06 TO 194:11 (RUNNING 00:00:07.981)**

06 THE WITNESS: I'm not sure I

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07 know what he means by that.  
08 QUESTIONS BY MR. MILLER:  
09 Q. Do you know if the Williams  
10 paper was used for scientific affairs  
11 rebuttals?

**105. PAGE 194:14 TO 195:02 (RUNNING 00:00:28.212)**

14 THE WITNESS: Yeah, again,  
15 you'd have to let me see some  
16 document. I don't know what, you  
17 know, he'd be talking about there.  
18 QUESTIONS BY MR. MILLER:  
19 Q. I didn't write this.  
20 A. I didn't either.  
21 Q. Do you understand -- let me ask  
22 my question then.  
23 Do you understand what David  
24 Saltmirus meant when he said in the slide  
25 panel that you reviewed in 2010 that it was  
00195:01 going to be used for scientific affairs  
02 rebuttals?

**106. PAGE 195:05 TO 195:11 (RUNNING 00:00:09.248)**

05 THE WITNESS: Yeah, I don't  
06 know. I mean, I'm looking at it now,  
07 and I don't know exactly what David  
08 meant by that.  
09 QUESTIONS BY MR. MILLER:  
10 Q. Do you know what the word  
11 "rebuttals" means?

**107. PAGE 195:14 TO 196:15 (RUNNING 00:01:05.896)**

14 THE WITNESS: I know what the  
15 word "rebuttals" means to me in this  
16 context.  
17 QUESTIONS BY MR. MILLER:  
18 Q. Is what?  
19 A. Well, to me it's scientific  
20 affairs assessments or reviews. We do a  
21 number of those where publications come out.  
22 I think we probably talked about some of  
23 them. Publications come out, and we have  
24 those papers -- we will review those papers,  
25 either ourselves and/or with other experts,  
00196:01 to understand what those papers are saying,  
02 to understand if it's really -- if it's an  
03 example of good science or if there's perhaps  
04 some problems with the paper. And maybe  
05 there's not problems with the paper. And  
06 then maybe we need to understand more why the  
07 results were there, and we may need to do  
08 some work to do that.  
09 So I look at it as a process of  
10 assessing other people's scientific  
11 information. That's what I see when I look  
12 there.  
13 Q. Do you understand also that the  
14 publication Williams was going to be used for  
15 regulatory reviews?

**108. PAGE 196:18 TO 196:23 (RUNNING 00:00:17.358)**

18 THE WITNESS: Yeah, I don't  
19 know if it was. You'd have to -- we'd  
20 have to look at that.

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21 QUESTIONS BY MR. MILLER:  
22 Q. Go to the page of the deck that

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23 starts with political science.

109. PAGE 196:24 TO 197:08 (RUNNING 00:00:27.545)

24 Do you have that page, sir?  
25 A. Yes, I do.  
00197:01 Q. Dr. Saltmiras writes in that  
02 section that "Williams has served us well in  
03 toxicology over the last decade."  
04 Do you see that, sir?  
05 A. I do see that.  
06 Q. Did you have any questions  
07 understanding what that meant when he  
08 e-mailed that to you in 2010?

110. PAGE 197:11 TO 197:17 (RUNNING 00:00:12.314)

11 THE WITNESS: I don't recall  
12 what I might have thought when I saw  
13 this in 2010.  
14 QUESTIONS BY MR. MILLER:  
15 Q. Would it be fair to say now  
16 that Williams has served Monsanto well in  
17 toxicology over the last decade?

111. PAGE 197:20 TO 198:12 (RUNNING 00:00:46.597)

20 THE WITNESS: What I would say  
21 is really what I said before: This  
22 was -- it was a very important paper  
23 because it was the first of its kind,  
24 it was comprehensive of everything  
25 that was out there up to that point in  
00198:01 time, and it was a very, like I said,  
02 important paper for glyphosate.  
03 So if people wanted to  
04 understand what the science of  
05 glyphosate says, that they had in one  
06 place a full review. That paper had  
07 not only the toxicology -- I failed to  
08 mention previously toxicology of  
09 glyphosate -- but it also looked at  
10 surfactant. It looked at everything.  
11 It looked at some formulations. So it

 -KE0373A-015 - Clear Attached Exhibit 0373A-015



12 was a very important document.

112. PAGE 219:12 TO 219:15 (RUNNING 00:00:12.188)

12 Q. Well, two months before that  
13 you wrote an e-mail where you said you would  
14 manage your experts as authors.  
15 Do you remember that, sir?

113. PAGE 219:18 TO 220:02 (RUNNING 00:00:24.143)

18 THE WITNESS: I don't remember  
19 that.  
20 (Heydens Exhibit 3-30 marked  
21 for identification.)  
22 QUESTIONS BY MR. MILLER:  
23 Q. Let's take a look at it.

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24 Exhibit 3-30, an e-mail you sent in May  
25 of '79. I have a copy for you and counsel.  
00220:01 A. '79 or '99?  
02 Q. Excuse me, '99. My fault.

114. PAGE 220:03 TO 220:22 (RUNNING 00:00:52.717)

03 A. Okay.  
04 Q. Yes, sir.  
05 This is an e-mail that you  
06 wrote in May of '99, right, sir?  
07 A. That appears to be correct,  
08 yes.  
09 Q. And you wrote it to a William  
10 Graham, also a Monsanto employee?  
11 A. Yes, that is correct.  
12 Q. And I just want to go over a  
13 few points in it. Your point number 2:  
14 "Outside scientific experts who are  
15 influential at driving science, regulators,  
16 public opinion, et cetera, we would have  
17 them" -- I think you meant "the," but I'll  
18 ask you -- "we would have the people directly  
19 or indirectly behind the scenes work on our  
20 behalf."  
21 Was that part of your strategy  
22 in May of 1999?

115. PAGE 221:01 TO 221:13 (RUNNING 00:00:33.966)

00221:01 THE WITNESS: Those words are  
02 written there. I don't remember this  
03 e-mail.  
04 QUESTIONS BY MR. MILLER:  
05 Q. Was one of your jobs to --  
06 quote, "Monsanto people who are responsible  
07 for dissemination and coordination of  
08 scientific information within and outside of  
09 Monsanto. They will play a role in  
10 establishing and, quote, managing  
11 relationships with outside experts."  
12 My question to you, sir, is:  
13 Why did you put "managing" in quotes there?

116. PAGE 221:17 TO 222:10 (RUNNING 00:01:00.763)

17 THE WITNESS: So as I said just  
18 a moment ago, I don't remember this  
19 e-mail. As I look at it now, I would  
20 interpret that as just meaning who has  
21 the contact relationship.  
22 Usually with -- quite often,  
23 anyway, with -- different scientists  
24 would have perhaps different key  
25 contact points. So, for instance, if  
00222:01 an external scientist was a genetic  
02 toxicologist, then we might have one  
03 of our own genetic toxicologists be  
04 the contact person for that. So  
05 that's what I think I meant by that.  
06 QUESTIONS BY MR. MILLER:  
07 Q. And number 4 you write, "As far  
08 as how we get, quote, people to get up and  
09 shout glyphosate is nontoxic," end quote.  
10 Was that one of your jobs?

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**117. PAGE 222:15 TO 222:15 (RUNNING 00:00:02.046)**

15 Q. Was that one of your jobs, sir?

**118. PAGE 222:17 TO 222:25 (RUNNING 00:00:20.614)**

17 THE WITNESS: No. As I stated  
18 this morning, it really -- my job is  
19 to make sure that the best science  
20 gets conducted on glyphosate and the  
21 best science using sound principles is  
22 communicated. That's always been my

 -KE0378 - Clear Attached Exhibit 0378

23 role in glyphosate.  
24 QUESTIONS BY MR. MILLER:  
25 Q. Have you been media trained?

**119. PAGE 223:04 TO 223:07 (RUNNING 00:00:08.203)**

04 THE WITNESS: Certainly not in  
05 the last 20 years that I can remember.  
06 I didn't go out on the speaking  
07 circuit.

**120. PAGE 223:09 TO 223:09 (RUNNING 00:00:02.182)**

09 Q. That was Donna Farmer's job?

**121. PAGE 223:12 TO 223:14 (RUNNING 00:00:05.905)**

12 THE WITNESS: Donna certainly  
13 plays a role in communication of  
14 science.

**122. PAGE 223:16 TO 223:18 (RUNNING 00:00:12.391)**

16 Q. By 2014 you knew that  
17 glyphosate was vulnerable in the area of  
18 epidemiology, didn't you, sir?

**123. PAGE 223:21 TO 224:08 (RUNNING 00:00:28.936)**

21 THE WITNESS: So in 2014, I was  
22 aware that there were -- and I think  
23 we discussed some of them this  
24 morning. I was aware that there were  
25 epidemiology studies out there, most  
00224:01 of which believed to have serious and  
02 significant flaws.  
03 QUESTIONS BY MR. MILLER:  
04 Q. Epidemiology wasn't the only  
05 area of vulnerability, right?  
06 You were concerned about  
07 exposure, genotox and mode of action, weren't  
08 you?

**124. PAGE 224:11 TO 224:20 (RUNNING 00:00:29.595)**

11 THE WITNESS: And I think we  
12 covered some of these this morning as  
13 well, but much like there was -- we  
14 knew in 2014 that there were  
15 some tox -- excuse me, epidemiology  
16 studies that had serious problems with  
17 them. We know that there were also  
18 some gene tox and, I would say  
19 loosely, mode-of-action studies that  
20 had serious flaws with them as well.



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125. PAGE 224:24 TO 225:02 (RUNNING 00:00:09.190)

0294 -



24 Q. Let's look at Exhibit 3:31, an  
25 e-mail produced by Monsanto in discovery  
00225:01 here, prepared by you. And I have a copy for  
02 you and counsel.

126. PAGE 225:03 TO 226:11 (RUNNING 00:01:33.473)

03 A. Okay.  
04 Q. Do you remember this e-mail?  
05 A. This one is closer in time, so  
06 I do have some familiarity with this.  
07 Q. This is an e-mail from you to  
08 others within Monsanto, including Donna  
09 Farmer, right?  
10 A. It was principally aimed at  
11 Richard Garnett, who was the single person in  
12 the "to" category.  
13 Q. Copied to Donna Farmer then,  
14 fair enough?  
15 A. Others were copied, including  
16 Donna.  
17 Q. And it was to Richard Garnett.  
18 He was an employee located in Europe?  
19 A. Yes, he is an employee in  
20 Europe.  
21 And my reason for sending it to  
22 him is going on in the background during this  
23 time frame -- actually, gosh, starting  
24 approximately 2009, glyphosate was going  
25 through re-registration in the European  
00226:01 Union, and there's -- I forget the exact  
02 number, but there's approximately 25  
03 registrants that formed a task force to  
04 re-register glyphosate. And at this point in  
05 time, Richard was the chair of that task  
06 force.  
07 Q. Yes, sir.  
08 And to put this in context, by  
09 October of 2014, you knew that in 2015 IARC  
10 was going to do their review of glyphosate,  
11 true?

127. PAGE 226:14 TO 228:12 (RUNNING 00:02:16.404)

14 THE WITNESS: It was sometime  
15 in the fall of 2014. I would need  
16 documentation to know exactly when we  
17 became aware of that.  
18 QUESTIONS BY MR. MILLER:  
19 Q. Yes, sir.  
20 So here we are now in October  
21 of 2014. You send this e-mail out to Richard  
22 Garnett, copied Farmer and others, and the  
23 bottom line of the call was that there really  
24 was no meaningful publication that we can  
25 complete prior to the February submission to  
00227:01 positively impact the epidemiological -- I'm  
02 sorry, the epidemiology discussion outcome in  
03 March.  
04 Now, March is -- of 2015 is  
05 when IARC met, right?  
06 A. IARC did meet in March of 2015.  
07 Q. Yes, sir.

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08                   You go on to write, quote, "One  
09 has to consider that this situational timing  
10 did not happen by chance and that more than  
11 just pure bad luck is working against  
12 glyphosate," end quote.

13                   What did you mean by that?

14           A.       What I meant by that was the  
15 timing when we found out about this. Like as  
16 we talked about in the previous question, my  
17 recollection is that it was very late in  
18 September. For some reason the 29th of  
19 September comes to mind.

20                   And we've already talked that  
21 the IARC review actually took place in March  
22 of the following year. That's a real short  
23 span of time.

24                   If you go and read the --  
25 what -- how IARC says they do their  
00228:01 procedures, they say that they generally take  
02 a year of time. From the time they decide  
03 to -- that they're going to actually review a  
04 compound to the time they actually review it  
05 is a year.

06                   The fact that it happened very,  
07 very quickly and very, very quietly suggests  
08 that there perhaps was some -- there was a  
09 reason why that happened. That didn't happen  
10 by accident.

11           Q.       Well, why do you think it  
12 happened?

**128. PAGE 228:16 TO 229:16 (RUNNING 00:01:03.751)**

16                   THE WITNESS: You would have to  
17 ask IARC why that happened.

18           QUESTIONS BY MR. MILLER:

19           Q.       All right. Well, what we know  
20 from looking at your e-mail is that, quote,  
21 "And while we have vulnerability in the area  
22 of epidemiology, we also have potential  
23 vulnerabilities in other areas that IARC will  
24 consider, namely, exposure, genotox and mode  
25 of action, paren, David has the animal onco  
00229:01 studies under control."

02                   What did you mean by that?

03           A.       Which part of that sentence  
04 would you like me to respond to?

05           Q.       Well, that's fair. Let's break  
06 it down.

07                   You agree, sir, that you had  
08 vulnerabilities in the areas of epidemiology,  
09 right?

10           A.       I told you previously that  
11 there was some flawed studies out there.

12           Q.       Yes, sir.

13                   And you agree you have  
14 vulnerabilities in other areas that IARC will  
15 consider. Exposure means how much the person  
16 is exposed to the product, right?

**129. PAGE 229:22 TO 230:05 (RUNNING 00:00:20.098)**

22           A.       So for that one, as I look at  
23 the sentence there, I'm naming some of the  
24 areas that they look at. Because really for  
25 exposure, there's really no vulnerabilities.  
00230:01 The exposure is what the exposure is, and

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02 it's just a matter of documenting that.  
03 Q. And by genotox, the  
04 vulnerability in genotox, explain to us what  
05 genotox is.

130. PAGE 230:09 TO 230:16 (RUNNING 00:00:16.674)

09 THE WITNESS: Genotoxicity  
10 refers to whether or not -- it's the  
11 study of whether or not a chemistry  
12 can alter or impact DNA.  
13 QUESTIONS BY MR. MILLER:  
14 Q. What did you mean by  
15 exposure -- I'm sorry, vulnerability in mode  
16 of action? What is mode of action?

131. PAGE 230:22 TO 231:22 (RUNNING 00:01:01.759)

22 A. So mode of action refers to --  
23 basically it's answering the question if a  
24 chemical does produce an adverse effect.  
25 Mode of action investigation would ask the  
00231:01 question: How does the chemical do that, and  
02 is it relevant to humans.  
03 Q. Yes, sir.  
04 And when you say "David" here,  
05 you're referring to David Saltmiras, aren't  
06 you?  
07 A. I am referring to David  
08 Saltmiras.  
09 Q. Saltmiras.  
10 And you said that "David has  
11 the animal onco," meaning oncology?  
12 A. Onco meaning oncogenicity.  
13 Q. Oncogenicity.  
14 Explain to us lay folks what  
15 oncogenicity refers to.  
16 A. Oncogenicity refers to does  
17 the -- studying if the chemical has the  
18 potential to produce tumors.  
19 Q. And you say in paren, "David  
20 has the animal oncogenicity studies under  
21 control."  
22 What do you mean by that?

132. PAGE 232:01 TO 233:23 (RUNNING 00:02:25.135)

00232:01 THE WITNESS: So what I meant  
02 by that is at that point in time we  
03 had already made the decision that --  
04 so recall that I told you a few  
05 minutes ago that as part of this  
06 overall review process that we found  
07 out -- well, we say found out. It  
08 came up that there was other --  
09 several other oncogenicity studies  
10 that had been conducted by other  
11 registrants.  
12 And so the task force that's  
13 referred to here made the decision  
14 that it would be a good idea to  
15 publish the results of those  
16 oncogenicity studies in the  
17 peer-reviewed literature, complete  
18 with individual data tables so that  
19 other scientists could see the data  
20 for themselves.  
21 And so David was working with

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22 experts to make sure that that  
23 information got published.  
24 QUESTIONS BY MR. MILLER:  
25 Q. The next sentence you write  
00233:01 here, sir, is, quote, "If there is a force  
02 working against glyphosate, there is ample  
03 fodder to string together to help the cause,  
04 even though it is not scientifically  
05 justified in its purest form."  
06 What did you mean by "ample  
07 fodder to string together to help the cause"?  
08 What do you mean by that?  
09 A. Well, I've talked about --  
10 several times today I have talked about that  
11 there are -- in the areas that we've talked

 -KE0294 - Clear Attached Exhibit 0294



12 about, so epidemiology -- primarily  
13 epidemiology and genotoxicity -- that there  
14 were a number of studies out there in the  
15 literature that were poorly conducted. And  
16 if not put in the proper light, if not  
17 understood how they are studies that have the  
18 problems, someone could use that information  
19 to try and come to a different conclusion.  
20 Q. So by February of 2015, about a  
21 month before IARC reaches their decision, you  
22 were part of a team that was to orchestrate  
23 an outcry against IARC, right?

133. PAGE 234:01 TO 234:02 (RUNNING 00:00:03.025)

00234:01 THE WITNESS: Yes, I'm not sure  
02 what you're referring to.

134. PAGE 234:06 TO 234:09 (RUNNING 00:00:19.028)

 0379 -



06 Q. Let's look at the document.  
07 Exhibit 3-32, an e-mail and attachment  
08 produced by Monsanto in this litigation to  
09 you and others. A copy for you and counsel.

135. PAGE 234:10 TO 234:17 (RUNNING 00:00:18.747)

10 A. Okay.  
11 Q. Yes, sir.  
12 This is an e-mail sent to you,  
13 that is Exhibit 3-32, from a Monsanto  
14 employee concerning a revised IARC reactive  
15 messaging.  
16 And this is in February  
17 of 2015; is that fair? Is this?

136. PAGE 234:22 TO 236:04 (RUNNING 00:01:17.788)

22 THE WITNESS: -- February. I  
23 didn't hear the number you said, but  
24 it's dated February 12 of '15, yes.  
25  
00235:01 QUESTIONS BY MR. MILLER:  
02 Q. Yes, sir.  
03 And attaches glyphosate key

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04 points on IARC decision 2B.  
05 Do you see that?  
06 A. That's how she refers to it in  
07 her attachment.  
08 Q. Yes, sir.  
09 And so everyone has the time  
10 frame, this is a couple of weeks before IARC  
11 actually voted and reached the conclusion  
12 they reached, right, sir?  
13 A. That's correct.  
14 Q. And in fact, IARC did not reach  
15 2B as a conclusion, which would be possibly  
16 associated, but elected to use 2A, probably  
17 associated, right?  
18 A. That's correct.  
19 Q. Okay. But on this key points  
20 on the IARC decision 2B, I just want to go  
21 over a few things, and then we'll go on.  
22 "This component represents the  
23 orchestrated outcry that could occur  
24 following the March 3-10 IARC monograph  
25 expert meeting."  
00236:01 Would it be fair to say you  
02 were part of the orchestrated outcry that was  
03 supposed to come after IARC reached their  
04 decision?

137. PAGE 236:07 TO 237:03 (RUNNING 00:00:56.802)

07 THE WITNESS: No, I would say  
08 that's not the case.  
09 This is -- this document is  
10 prepared -- was prepared by another  
11 group within Monsanto about some of  
12 the things that they could consider.  
13 My job has always been -- as  
14 I've said on several occasions today,  
15 my job is about the science. My job  
16 is to make sure that the science gets  
17 done correctly and is communicated  
18 correctly.  
19 QUESTIONS BY MR. MILLER:  
20 Q. This glyphosate key points  
21 following IARC decision says in the last  
22 sentence of that first paragraph, quote, "The  
23 proposed approach suggests industry  
24 associations and credible third parties lead,  
25 and Monsanto plays a secondary role to defend  
00237:01 its Roundup brand."  
02 Isn't that what happened,  
03 Doctor?

138. PAGE 237:06 TO 237:12 (RUNNING 00:00:16.576)

06 THE WITNESS: And I'm not  
07 really sure what you're asking me  
08 there. And again, especially relative  
09 to my role, because my role is not in  
10 any of this. My role is with the  
11 science. So I'm not sure what you're  
12 asking me.

139. PAGE 237:14 TO 237:25 (RUNNING 00:00:28.514)

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 -KE0379-002 - Clear Attached Exhibit 0379-002



14 Q. We have mentioned off and on  
15 today a John Acquavella, right, sir?  
16 A. Yes, John's name has come up.  
17 Q. And he's an epidemiologist?  
18 A. That is correct.  
19 Q. Who was a full-time employee at  
20 Monsanto and later a consultant to Monsanto?  
21 A. That is correct.  
22 Q. And you have worked with him  
23 both when he was a full-time employee and as  
24 a consultant, when he was a consultant?  
25 A. That is correct.

140. PAGE 238:01 TO 239:05 (RUNNING 00:01:31.383)

00238:01 Q. All right. Do you know who  
02 Dr. Seralini is?  
03 A. I know Dr. Seralini, yes.  
04 Q. What do you know of  
05 Dr. Seralini?  
06 A. I know that Dr. Seralini really  
07 does not like biotechnology, and I know that  
08 Dr. Seralini and people from his lab conduct  
09 a lot of research that has problems with it.  
10 Q. Have any journals ever asked  
11 you or allowed you to be a reviewer on any of  
12 Dr. Seralini's papers?  
13 A. Yes.  
14 Q. And did you recommend that  
15 Dr. Seralini's paper be rejected?  
16 A. We recommended -- there's a  
17 couple of us who looked at it, and we  
18 recommended that it be rejected because the  
19 science underpinning it had a number of  
20 flaws, and it was not a scientifically valid  
21 study.  
22 Q. Which journal allowed you to be  
23 a reviewer of Dr. Seralini's paper?  
24 A. I don't remember which one it  
25 was.  
00239:01 Q. Regulatory Toxicology and  
02 Pharmacology?  
03 A. That's probably correct, yes.  
04 Q. How long were you a reviewer  
05 for Regulatory Toxicology and Pharmacology?

141. PAGE 239:08 TO 240:02 (RUNNING 00:00:57.786)

08 THE WITNESS: So I was not on  
09 the editorial board. The way  
10 journals -- journals will sometimes  
11 just reach out to other scientists.  
12 It's a tough job for editors. It's a  
13 problem they constantly have, is to  
14 have an adequate number of people  
15 reviewing studies, and so they're  
16 always reaching out to people trying  
17 to find people who will do reviews.  
18 So in this particular case,  
19 they reached out to me.  
20 QUESTIONS BY MR. MILLER:  
21 Q. Were you allowed to see other  
22 reviewers' comments concerning the paper?  
23 A. That's not -- I don't recall

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24 doing that. That's typically against journal  
25 rules. I think most journals keep those.  
00240:01 Q. Private?  
02 A. Private.

**142. PAGE 263:09 TO 263:20 (RUNNING 00:00:43.122)**

09 Q. Going back to the -- I believe  
10 you said it was the Greim paper that the --  
11 A. Greim.  
12 Q. Greim, excuse me.  
13 -- that the EPA reviewed?  
14 A. Yes.  
15 Q. That was co-authored by David  
16 Saltmiras from Monsanto?  
17 A. He was one of the authors, yes.  
18 Q. Okay. Has there been a  
19 decision to preclude the use of POEA as a  
20 surfactant with glyphosate in Europe?

**143. PAGE 263:25 TO 264:12 (RUNNING 00:00:55.710)**

25 A. So I'm aware of some places in  
00264:01 Europe where that proposal -- and, in fact,  
02 has taken place. What I will say is that is  
03 due to political reasons and is not supported  
04 by the scientific data.  
05 In fact, the risk assessments  
06 that have been done by the German BfR -- it  
07 was approximately back in 2010, 2012. That  
08 is the same organization -- or the same  
09 regulatory agency who was the rapporteur for  
10 glyphosate in the reevaluation. That very  
11 agency evaluated tallow amine and came to the  
12 conclusion that there's no unreasonable risk.

**144. PAGE 264:16 TO 264:16 (RUNNING 00:00:04.877)**

 0383 -



16 Q. Let's look at Exhibit 3-36, sir.

**145. PAGE 264:22 TO 267:16 (RUNNING 00:03:36.503)**

22 THE WITNESS: Okay.  
23 QUESTIONS BY MR. MILLER:  
24 Q. Is that your handwriting where  
25 we see on Exhibit 3-36 "reasons for defending  
00265:01 tallow amines"?  
02 A. It looks like my handwriting.  
03 Q. And this is an e-mail from you  
04 in the bottom of the first page of that  
05 document, from Bill Heydens, January 2010, to  
06 Richard Garnett.  
07 I believe he's a Monsanto  
08 employee in Europe?  
09 A. That is correct.  
10 Q. Yes, sir.  
11 A couple of comments. This is  
12 you, quote, "First, there is still a strong  
13 sentiment in STL" --  
14 Is that St. Louis?  
15 A. That is correct.  
16 Q. Which is where the Monsanto  
17 headquarters is?  
18 A. That is correct.  
19 Q. Okay. "There is still a strong

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20 sentiment in St. Louis that we need to  
21 continue to defend tallow amines, even though  
22 we prepare to switch over because of their  
23 impending demise."  
24 Did I read that correctly?  
25 A. You did.  
00266:01 Q. And what did you understand in  
02 2010?  
03 Why was there an impending  
04 demise of tallow amine?  
05 A. Well, the conversation that we  
06 were already hearing in our conversations  
07 that, as you have already said, that there --  
08 some of the regulatory agencies and some of  
09 the -- some of the politicians were starting  
10 to talk about enacting bans on tallow amines.  
11 Q. And you were responding to an  
12 e-mail that had come from you -- come to you  
13 from a Richard Garnett, the Monsanto employee

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14 in Europe, right, sir?  
15 A. Yes.  
16 Q. And he asked in his e-mail, the  
17 top of page 2, "Anyway, there are  
18 nonhazardous formulations, so why sell a  
19 hazardous one?"  
20 Do you remember him asking you  
21 that question?  
22 A. I think that's more a  
23 rhetorical question, if you will.

 0383 -



24 Q. Back to the first page. What  
25 you write, sir, is that you were very  
00267:01 worried -- excuse me. Let me get it right.  
02 "Reason to do so: Domino  
03 effect on ether amines, defend other world  
04 areas to the best of our ability. Second, I  
05 was in Brazil all last week - they are very  
06 worried about this coming across the Atlantic  
07 to their part of the American hemisphere."  
08 Those were the reasons you were  
09 defending tallow amines?  
10 A. The reason why defending tallow  
11 amines is because I believe -- we believe  
12 that the science is behind tallow amines. If  
13 the science is behind the product, then I  
14 think it's -- certainly you should be making  
15 sure that decisions are being made about your

 -KE0383 - Clear Attached Exhibit 0383



16 material based on sound science.

TOTAL: 1 CLIP FROM 1 DEPOSITION (RUNNING 01:39:06.270)