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I N D E X

DEPOSITION OF JOHN SPENCER

SEPTEMBER 12, 2007

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1 P R O C E E D I N G S

2 - - - - -

3 THE VIDEOGRAPHER: Good morning. This is
4 the video deposition of John Spencer, M.D., taken by
5 counsel for the plaintiff in the matter of Charles
6 Wilson versus Rycoline Products, Incorporated in the
7 United States District Court for the Eastern
8 District of Texas, Marshall Division, Civil Action
9 2:06-CV-286, held in the offices of
10 Baltimore-Washington International Hilton, 1739 West
11 Nursery Road, Linthicum Heights, Maryland, on this
12 date, September 12th, 2007, and at the time
13 indicated on my video screen, which is 9:36 a.m.

14 My name is David Voigtsberger. I'm the
15 video specialist. The court reporter today is
16 Tim Yancey with the firm of M.A.R. Reporting Group.

17 Counsel will please introduce yourselves
18 and who you represent.

19 MR. PATTON: Keith Patton for Plaintiffs.

20 MR. PARKS: Kevin Parks for Ashland, Inc.

21 THE VIDEOGRAPHER: The court reporter will
22 please swear in the witness.

1 Whereupon --

2 JOHN SPENCER,

3 a witness, called for examination, having been first

4 duly sworn, was examined and testified as follows:

5 EXAMINATION

6 BY MR. PATTON:

7 Q. Please introduce yourself for the record.

8 A. John Spencer.

9 Q. Mr. Spencer, you are a hired expert for
10 Ashland in this case, correct?

11 A. Yes.

12 Q. How much are you being paid by Ashland for
13 your time in this case?

14 A. \$245 an hour.

15 Q. As we sit here today, how many hours or how
16 much money have you been paid in this case?

17 A. I do not know the specific answer to that.
18 I put in a fair amount of time, but I don't know the
19 specific numbers.

20 Q. Okay. What kind of expert are you?

21 A. I'm an industrial hygiene exposure
22 assessment expert.

1 Q. What makes you qualified to be an
2 industrial hygiene exposure estimate expert?

3 A. Education, training and experience.

4 Q. Are you a chemist?

5 A. I do not hold myself out to be a chemist.

6 I'm worked in the National Institutes of Health in
7 laboratory chemistry. I've taken organic and
8 inorganic chemistry courses throughout my academic
9 career. I understand chemistry pretty well.

10 Q. Do you have a doctorate in any discipline?

11 A. No.

12 Q. Do you have a master's degree in any
13 discipline?

14 A. No.

15 Q. What kind of undergraduate or bachelor's
16 degree do you hold?

17 A. Biological sciences.

18 THE VIDEOGRAPHER: Could you raise your
19 microphone about two inches.

20 THE WITNESS: (Complies.)

21 BY MR. PATTON:

22 Q. Are there any specific biological

1 science -- sciences that your undergraduate degree
2 was in?

3 A. General biological sciences.

4 Q. Is that biology?

5 A. Biology. There was toxicology, chemistry.

6 Q. You've testified in benzene cases before,
7 correct?

8 A. Yes.

9 Q. How many cases have you testified in
10 involving someone who worked as a printer?

11 A. I don't know that I can think of any
12 that -- not to say that I have not. I just cannot
13 recall any at this time.

14 Q. How many cases have you testified in on
15 behalf of Ashland?

16 A. I don't know that I've ever testified for
17 Ashland. Again, there's nothing that comes to mind.

18 Q. You testified in a case with me over a year
19 ago that involved Ashland. Do you remember that
20 case?

21 A. I don't remember the case. I only remember
22 who the defendants were in that case.

1 Q. How many cases have you testified in
2 involving Ashland solvent blends?

3 A. I think that was the question I was just
4 answering.

5 Q. I was asking you if you've ever testified
6 in cases involving Ashland and you said you didn't
7 recall, correct?

8 A. Correct.

9 Q. Okay. And my question is a separate one,
10 and I understand you don't recall working for
11 Ashland before, but my question is this: Do you
12 remember working on any cases that involved Ashland
13 blends, solvent blends?

14 A. I mean, I don't have a specific
15 recollection. I know that I have worked with
16 Ashland. I don't know that I've ever testified and
17 I don't know what the product was.

18 Q. What do you consider to be a safe level of
19 exposure to benzene?

20 A. As an industrial hygienist, I rely upon the
21 Occupational Health Standards, and currently it's
22 set at one part per million. It's an eight-hour,

1 time-weighted average for 45 years of exposure.

2 Q. So you believe that as long as someone is
3 exposed to benzene below one part per million a
4 year, less than 45 years, then they've been exposed
5 to a safe level --

6 MR. PATTON: Let's take a break.

7 (Pause in the proceedings.)

8 BY MR. PATTON:

9 Q. Mr. Spencer, what do you believe to be a
10 safe level of exposure to benzene?

11 A. Again, as an industrial hygienist, I rely
12 on the Occupational Health Standards to define that
13 level.

14 Q. And what level do the Occupational Health
15 Standards define as being a safe level of exposure
16 to benzene?

17 A. It is one part per million averaged out
18 over an eight-hour day for a working lifetime of
19 45 years.

20 Q. Is it your opinion then that as long as a
21 person works with less than one part per million,
22 averaged over an eight-hour day of benzene, less

1 than 45 years, then they have not been exposed to
2 any unsafe levels of benzene?

3 A. Well, you're asking me more of a medical
4 question and I'm not here to testify as a medical
5 expert. I mean, the number, I understand there's an
6 argument.

7 Some people believe the number is higher
8 than that and there are those who believe it's
9 somewhat lower than that, but as an industrial
10 hygienist, I will stick to the health standards as
11 my guides on that since I'm not a medical doctor or
12 a toxicologist.

13 Q. Do you consider yourself a safety
14 professional?

15 A. Yes. I'm a certified safety professional.

16 Q. How much benzene would I -- would a person
17 have to be exposed to, on a given day, to be exposed
18 to a dangerous level of benzene?

19 A. Well, I don't know the answer to that.
20 "Dangerous" implies a variety of things. There are
21 dangers associated with flammability hazards,
22 explosion hazards. There's acute hazards that could

1 be dangerous in the hundreds or thousands of parts
2 per million.

3 So -- so if you're asking me what's
4 dangerous, there's a safety issue, then there's a
5 health issue, both of which impart danger at certain
6 levels.

7 Q. What do you understand to be your function
8 or purpose in this case as an expert?

9 A. One, to evaluate the likely exposures that
10 Mr. Wilson would have experienced, when working with
11 the Ashland products, to benzene, and to comment on
12 the assessments done by other experts.

13 Q. Which other experts?

14 A. The plaintiff industrial hygiene experts.

15 Q. Dr. Nicas, whom you're familiar with,
16 correct?

17 A. Yes.

18 Q. Any other experts?

19 A. No.

20 Q. Okay. Any other functions that you have in
21 this case besides the two you've just told me about?

22 A. I believe that -- I would also include --

1 basically, what is defined in my report basically
2 lays out the areas of my opinions, but that would
3 also include product warnings, employer
4 responsibilities, how information is conveyed in a
5 workplace such that worker health and safety is
6 adequately protected.

7 Q. You agree with me that aromatic petroleum
8 distillates contain benzene, correct?

9 A. I would certainly say yes, they can and
10 have, yes.

11 Q. You agree with me that Stoddard solvents
12 contain benzene, correct?

13 A. They can, yes. I have measured some
14 Stoddard solvents in other work that I've done and
15 not been able to find detectable levels. It doesn't
16 mean that it's not there in some trace level, but
17 there are circumstances which I was not able to
18 detect it.

19 Q. Are you talking about this case
20 specifically that you were detecting benzene?

21 A. No. I'm talking about my experience over
22 the last 30 years as an industrial hygienist and

1 doing a lot of evaluations in a variety of
2 workplaces and looking at Stoddard solvents, mineral
3 spirits, Naphtha, mixed hydrocarbons and looking for
4 benzene exposures.

5 Q. You agree with me that VM&P Naphtha that
6 contains benzene, correct?

7 A. I -- I would agree that it certainly can.
8 I can't say that it does in every case, but
9 certainly that it can.

10 Q. You agree with me that xylene contains
11 benzene, correct?

12 A. I think the same answer.

13 Q. And you agree with me that toluene contains
14 benzene, right?

15 A. Again, yes, it can, and I think it's been
16 well understood that there was benzene in these
17 products as they -- as they have been used over the
18 last several decades.

19 Q. How much benzene was in Ashland Solvent
20 Blend 3078C through time period 1978 through 1995?

21 A. Based on the testimony of Ashland's
22 chemist, Mr. Whitlock, he believes it was in the

1 part-per-million range, single-digit

2 part-per-million range.

3 Based on other literature that I have
4 reviewed, it appears to me, if the detectable at
5 all, it was in the tens of parts per million or
6 less.

7 Q. Okay. First of all, I want to -- when we
8 talk about time frame with -- with respect to
9 Ashland Solvent Blends 3078C, I'm really only
10 interested in discussing the years that my client,
11 Charles Wilson, worked, and you understand it was
12 1978 or 1979 to the year 2005; do you understand
13 that?

14 A. Yes.

15 Q. Okay. And my question for you was, how
16 much benzene was in 3078C? And you said that you
17 would point to the testimony of Mr. Whitlock. He's
18 an Ashland chemist, right?

19 A. Yes.

20 Q. And you said "other literature," correct?

21 A. Yes.

22 Q. And that leads you to the conclusion that

1 the benzene in 3078C, during the relevant time
2 frame, was always in the tens of PPM or less. Is
3 that to say less than a hundred?

4 A. Yes.

5 Q. Okay. So your conclusion is that Ashland
6 solvent Blends 3078C, at all relevant times,
7 contained less than 100 PPMs?

8 A. Based on what I described as a foundation,
9 yes.

10 Q. Okay. What did Mr. Whitlock testify as to
11 the solvent or the benzene content of Ashland
12 solvent blend?

13 A. I don't remember the specific numbers, but
14 I believe it was single-digit part-per-million
15 numbers.

16 Q. He said less than ten; not less than a
17 hundred but actually less than ten?

18 A. Correct.

19 Q. Okay. Do you believe he is correct?

20 A. I have -- again, based on the literature, I
21 have no reason to doubt it in that regard.

22 Q. Okay. Well's let's put aside --

1 A. He would be the one in the best position to
2 know what the composition of the products were at
3 that time frame.

4 Q. You would agree with me that Ashland would
5 be in the best position to know the benzene content
6 of Ashland's solvent blend, right?

7 A. Yes.

8 Q. Okay. When Mr. Whitlock was deposed, what
9 documents from Ashland did he point us to or can you
10 point us to, as Ashland's expert in this case, which
11 show Ashland Solvent Blend 3078C, relevant years, X
12 amount of benzene? What pieces of paper can we look
13 at in that regard?

14 A. Well, with regards to Mr. Whitlock's
15 testimony, I don't know that he had any pieces of
16 paper. I know that there were some subsequent
17 documents that were provided to me from Ashland that
18 talked about or that defined the amount of -- at
19 least aromatics that were in the product.

20 Q. You have two boxes of documents that
21 consist of your file in this case; is that right?

22 A. Yes.

1 Q. Okay. I'd like you to look through your
2 two boxes of documents and pull out every piece of
3 paper in there from Ashland which tells us how much
4 benzene was in the Solvent Blend 3078C through the
5 relevant time frame.

6 If you want us to go off the record, we
7 can.

8 A. No. I don't think there's any need to do
9 so.

10 What I would provide to you, one, is a
11 stack of literature that defines what was the level
12 of benzene found in solvents within these relevant
13 time periods that we're discussing.

14 Q. Let me stop you right there for a second.
15 Before we go on to relevant literature, because I
16 have that on the list here, I want to go through
17 documents from Ashland that you have that show X
18 amount of benzene, a given amount of benzene,
19 wherever that blank number is, during the relevant
20 years.

21 A. Well, none of the Ashland documents I have
22 look at benzene. They look at total aromatics, and

1 it goes from 1977 through 1988 or later and it shows
2 the total aromatic content going down significantly.
3 Actually, to less than .1 percent, and that's for
4 total aromatics.

5 So obviously the benzene content is going
6 to be much less than that. So these particular
7 Ashland documents, if you want to look at these, are
8 what I relied on.

9 Q. You have no documents from Ashland which
10 tell you how much benzene is in 3078C?

11 A. Correct.

12 MR. PARKS: Objection to the form. I think
13 it's misleading.

14 THE WITNESS: No, it's not correct. Those
15 documents were provided me in the context of this
16 case for the products at issue in this case.

17 BY MR. PATTON:

18 Q. Okay. Well, this group of documents that
19 you showed me marked 380 -- Ashland/Wilson 3835
20 through 3942, these talk about -- these are
21 technical data sheets for given ingredients of some
22 of the Ashland products, correct?

1 A. Yes.

2 Q. Okay. Are any of these specific to 3078C?

3 A. Well, yes. In the aspect that they are
4 related to the constituents that make up that
5 product.

6 Q. So these documents, 3835 through 3942, they
7 talk about the general technical data or chemical
8 information for certain ingredients of Ashland
9 Naphtha or Ashland Quick Dry or Ashland MEK, Ashland
10 Xylene, right?

11 A. Yes.

12 Q. Okay. But these don't tell us for certain
13 how much benzene is in 3078C after you blend these
14 ingredients, correct?

15 A. Well, I think that goes back to
16 Mr. Whitlock's testimony, the chemist who was there
17 with Ashland at this relevant time period, and his
18 experience and knowledge in regard to the
19 application of this information.

20 Q. This group of documents that you handed me,
21 does this reflect an actual sample of, for instance,
22 VM&P Naptha?

1 A. Can I see that?

2 That's what this is, yes, the technical
3 information based on analytical data.

4 Q. And how was that sample of VM&P Naptha
5 analyzed?

6 A. I don't know if it's -- to me. I haven't
7 looked to see if -- it's a -- and here it defines an
8 ASTM method. I'm not sure which analytical method
9 that they used.

10 Q. So those pages --

11 A. Mr. Whitlock, yeah, is probably the best
12 one to define that for you, which specific
13 analytical technique they used at the time to ask --
14 say their ingredients.

15 Q. So those documents indicate to you that at
16 one time Ashland performed some type of test, and we
17 don't know the analytical method from the face of
18 that document, just to look at the general chemical
19 composition of those given family of solvents or
20 ingredients. Fair statement?

21 MR. PARKS: Objection. Vague.

22 THE WITNESS: Well, it was more than that.

1 It also included the physical properties of the
2 material. I suspect when they purchased these from
3 their vendors or when they were defining the
4 product, they had -- there's generally physical
5 characteristics as well as chemical characteristics
6 to define the product.

7 BY MR. PATTON:

8 Q. Ashland did not look at benzene content
9 when specifically examining those samples or
10 specifications there, did they?

11 A. Well --

12 MR. PARKS: Objection. Misleading.

13 THE WITNESS: I cannot say that they did
14 not look at benzene. It is not reported here. In
15 fact, in 1977, given the trace levels of benzene
16 present in these products, they probably wouldn't
17 have been able to detect it by the methods of the
18 time because it's such a small amount of benzene in
19 the product.

20 BY MR. PATTON:

21 Q. So how much benzene would -- is there an
22 exact number of benzene that one would expect to

1 find in a given sample of, say, are VM&P Naptha
2 during a given year, a precise amount, or is there a
3 range?

4 A. Oh. I think there's a range and that range
5 is dependent on many variables as to what that
6 actual content would be.

7 Q. So VM&P Naptha isn't going to have a
8 precise number of percentage of benzene or amount of
9 benzene in it. It's going to fall within a range
10 depending on how it was refined. Fair statement?

11 A. Yes, and where it was refined, who refined
12 it, what the source material was. Yes. There's
13 many things that go into it. Generally, the boiling
14 point helps define that as well and that's what
15 defines the type of product that it is. That is,
16 the type of solvent that it is. So yes, there's a
17 range of values.

18 Q. Okay. Can you tell us what that range of
19 likely benzene content would be for VM&P Naptha
20 during the relevant years?

21 A. Well, the -- again, the data that I have
22 reviewed would indicate that it was within the tens

1 of parts per million, less than a hundred parts per
2 million.

3 Q. 99 or less?

4 A. Yes.

5 Q. Okay. Did you review data or have you seen
6 any data which would indicate to you that the
7 benzene content of VM&P Naptha during the relevant
8 years was above 100 PPM?

9 A. I have not seen anything from any relevant
10 literature or information, no.

11 Q. Okay. So you're unaware of any relevant
12 literature or information which would indicate to us
13 a, perhaps, higher than 100 PPM benzene content in
14 VM&P Naptha?

15 A. Well, let me clarify. I'm aware that there
16 is -- there are documents or literature or -- or
17 evaluations that would indicate higher than a
18 hundred parts per million, but I am talking about
19 specific literature related to the Ashland product.

20 Q. Okay.

21 A. And within the time frame.

22 Q. What specific literature do you have about

1 the Ashland product for the relevant time frame for
2 the 3078C that tells us how much benzene?

3 A. It's what we just looked at.

4 Q. But that doesn't have a benzene-specific
5 number on it, does it?

6 A. No. They -- again, I don't know that they
7 looked for benzene. These questions are probably
8 better for Mr. Whitlock, who was there doing the --
9 involved in the analysis of these products.

10 I'm simply going by his testimony, these
11 documents that look at total aromatics, and they may
12 have analyzed for benzene. It just didn't report
13 it. It wasn't of consequence. And then relating
14 that to the literature that's available from that
15 relevant time period.

16 Q. Well, Mr. Whitlock doesn't say 99 or less.
17 He says less than ten PPM of benzene in all of these
18 products, right?

19 A. Well, he's reporting a lower number, yes.
20 That's my recollection, and again, he would
21 probably -- he would know better than I for the
22 specific Ashland product.

1 Q. But besides that little group of Ashland
2 specifications that you handed me, you can't point
3 us to any other Ashland documents supporting that,
4 right?

5 MR. PARKS: Objection to form.

6 THE WITNESS: Correct. There's no other
7 specific Ashland documents. There's other
8 literature that's out there, but it's no other
9 specific Ashland documents.

10 BY MR. PATTON:

11 Q. Okay. Is it possible that the Ashland
12 ingredients used in blend 3078C contain more than a
13 hundred PPM benzene?

14 A. You know, I -- I can't say that in an
15 infinite universe that there isn't some set of
16 circumstances that would cause that to happen.

17 The best I have to go on is Mr. Whitlock's
18 testimony, these Ashland documents that define the
19 total aromatics and then relating that to the
20 literature that's out there that defines benzene
21 levels in a variety of different solvents, and my
22 own experience in the last 30 years of collecting

1 samples of Naptha and Stoddard solvents, mineral
2 spirits and looking for benzene in those products.

3 Q. So you've taken those products before,
4 Naptha, Stoddard solvent, xylene and what have you,
5 and you sampled them for benzene content?

6 A. Yes.

7 Q. That's to say you took a little bit of the
8 liquid, put it into some type of machine and it gave
9 you some type of readout with numbers that said,
10 okay, X amount of benzene in this product; you've
11 done that before?

12 A. Yes. Generally it's a GC Mass Spec
13 Analysis.

14 Q. A gas chromatography analysis?

15 A. Yes.

16 Q. And that's a machine that is used to tell
17 you the chemical content of certain -- of different
18 products, right?

19 A. Well, I'd like to think that the analyst
20 actually tells you. It gives you peak readouts
21 based on certain times using specific types of
22 columns. It gives you an area under a -- basically

1 a curve or a peak.

2 Q. So for instance, you've taken Naptha
3 before, poured into a glass or other type of
4 measuring, holding device, had it analyzed and it
5 told you, okay, X amount of benzene in it, right?

6 A. Yes.

7 Q. What documents from Ashland have you seen
8 that tell us that Ashland took one of its raw
9 materials, put it in a glass or a beaker or what
10 have you, put it in a gas chromatography machine,
11 got a readout from it and it said whatever amount of
12 benzene; what documents have you seen in that
13 regard?

14 MR. PARKS: Objection to form.

15 THE WITNESS: Again, I haven't seen those
16 specific documents you described. I don't know if
17 they still have those documents. I don't -- it's
18 not typical to keep that type of information, but
19 that's something -- that's why I'm relying more on
20 Mr. Whitlock's testimony, these documents, the
21 literature and my experience all pulled together.

22 BY MR. PATTON:

1 Q. How many times have you sampled various
2 aromatic hydrocarbons like Stoddard solvents or VM&P
3 Naptha or xylene? How many different occasions --
4 have you had occasion to actually perform that, that
5 GC test for benzene?

6 A. Oh, gosh. I suspect hundreds of times, you
7 know, that I've sampled. I've done probably
8 thousands of air samples for hydrocarbons, but --
9 and as part of that, you collect a bulk sample and
10 have that analyzed.

11 Q. So you've taken bulk samples of given
12 chemicals, be they out of a 55-gallon drum or a
13 gallon container or a bucket or what have you,
14 you've taken those samples, put them in a gas
15 chromatography machine and obtained readings of
16 benzene content? You've personally done that?

17 A. Yes.

18 Q. Okay. Is that a machine you have, like, at
19 home in your garage or in a lab or where is that?

20 A. It's -- it's in a laboratory.

21 Q. Do you have a laboratory?

22 A. I do not.

1 Q. Okay. Ashland has a laboratory, right?

2 A. I would -- I have not seen it. I would
3 suspect that they do.

4 Q. Did you talk to anyone at Ashland to say,
5 Hey, do you all have a gas chromatography machine?
6 Have you ever asked that question?

7 A. I have never asked that question, no.

8 Q. When you want to know more about Ashland or
9 about the benzene content of Ashland solvent blends,
10 besides the little specification or technical data
11 sheets, isn't that a question that -- one of the
12 questions that you might ask Ashland?

13 MR. PARKS: Objection to form.

14 THE WITNESS: Sure, and I did ask for
15 documentation, analytical documentation to
16 demonstrate the -- well, to show what the levels
17 were. Again, to my understanding of things, Ashland
18 did not maintain those records and there's no
19 requirement to maintain those records.

20 BY MR. PATTON:

21 Q. Have you seen any documentary evidence --
22 I'm not talking about what Whitlock said, but have

1 you ever seen any documents indicating that Ashland
2 did, in fact, at any time during the relevant time
3 frame use a GC machine to test for benzene content?

4 A. I don't know the specific analytical tool
5 that they used, but apparently some sort of analysis
6 like GC analysis was being done to determine the
7 composition of these products.

8 Q. Yes or no, you have or have not seen
9 evidence from Ashland in paper that proves to you
10 that they actually used a GC machine to test for
11 benzene content? Yes or no.

12 A. There's no paper that I've seen that
13 defines other than the compositional data. So they
14 did some analysis. I can't tell you how they did
15 that analysis.

16 Q. So the answer is no, you haven't seen any?

17 MR. PARKS: Objection to form.

18 THE WITNESS: Not as you've described it,
19 no.

20 BY MR. PATTON:

21 Q. What about -- you mentioned that there's
22 some type of analytical testing method that goes

1 into the technical data sheets, correct?

2 A. They use some method, yes.

3 Q. Okay. Which method did they use?

4 A. It's -- it's not defined here. They talk
5 about an ASTM test procedure and I'm not sure that's
6 for testing the physical properties or the
7 analytical properties. So again, it's a better
8 question for Mr. Whitlock that would have -- could
9 define which specific analytical technique they
10 used.

11 Q. But as an expert in this case hired by
12 Ashland to evaluate likely exposures that
13 Charles Wilson experienced while using Ashland
14 product, didn't it interest you in how they arrived
15 at these general aromatic numbers and other
16 information set forth in their technical data sheet?

17 A. Yes, and that's why I read Mr. Whitlock's
18 testimony.

19 Q. Okay. And what method did he use or did
20 Ashland use?

21 A. I'd have to go back and look at his
22 testimony. I don't know that he described that or

1 was asked that question.

2 Q. When you were personally performing GC
3 machine tests for benzene -- and you've done that
4 specifically for benzene or for aromatic
5 hydrocarbons?

6 A. No, much broader than that. Just for total
7 hydrocarbons.

8 Q. How many times have you taken a sample of a
9 given chemical, put it into a GC machine and looked
10 for benzene specifically, not total aromatics but
11 benzene?

12 A. Well, it's when you're looking for total
13 aromatics, part of that is looking for individual
14 constituents, so, you know, each time if I'm doing a
15 test looking at aromatics in a solvent, benzene is
16 just one of, perhaps, 50 different constituents I'm
17 looking at.

18 Q. And every time you did that the benzene
19 content was less than 99 PPM?

20 A. I can't remember except for looking at
21 gasoline. I know that that would have exceeded that
22 number. It may have been a thousand or -- no, more

1 than that -- 10,000 parts per million.

2 Q. You've seen Dr. Kopstein's report in this
3 case?

4 A. Yes.

5 Q. On page 5 of his report he indicates,
6 Representative benzene content of product
7 ingredients. And he says, VM&P Naptha can contain
8 anywhere from less than 1,000 PPM up to 10,000 PPM.
9 Ashland says it's less than 10. You say it's less
10 than 99?

11 A. Where is Dr. Kopstein --

12 Q. Well, first of all, do you believe
13 Dr. Kopstein is wrong?

14 A. Yes, I do.

15 Q. Okay.

16 A. Well, let me put it this way. He -- for
17 that particular reference -- tell me what reference
18 he's relying on in the statement you just read.
19 He's using some very old references. He's using
20 tertiary references. He's not putting it in the
21 context of the products that were at issue in this
22 case in the time frame that these products were at

1 issue.

2 Q. Well, does the Ashland product
3 specification sheets, do they put the benzene
4 content in the context of the products at issue?
5 For instance, the full blend, 3078C?

6 MR. PARKS: Objection to form.

7 THE WITNESS: Well, they are looking -- it
8 is more reliable and is more accurate to look at the
9 individual constituents which is, from what I can
10 see, that they were doing here.

11 Ashland is looking at the full blend as
12 you've defined it because it's so hard to see
13 benzene in a mixed hydrocarbon. The analytical
14 techniques in particular, in the '70s and early
15 '80s, even through the 90s, I had difficulty with
16 that.

17 In a mixed hydrocarbon environment where
18 there are trace levels of benzene, it's very
19 difficult to see it.

20 BY MR. PATTON:

21 Q. Okay. What is a trace level of benzene?

22 A. Well, I'll use the definition, essentially,

1 that OSHA uses, and that's less than one-tenth of
2 one percent.

3 Q. .1 percent?

4 A. Correct.

5 Q. Less than .1 percent would mean -- would be
6 a trace amount?

7 A. Yes.

8 Q. Okay. And .1 percent equals how many part
9 per million?

10 A. A thousand.

11 Q. Okay. So .1 percent equals 1,000 --

12 A. PPM.

13 Q. Okay. And when Mr. Whitlock says that
14 Ashland -- all the blends at issue in this case had
15 less than ten PPM, what percentage is that?

16 A. It's .01. That would be a hundredth.

17 Q. Would it be .001?

18 A. You said 100 -- I'm sorry. You said 10?

19 Q. Yes.

20 A. Yes, .001. Sorry.

21 Q. Okay.

22 A. Yes, you're right.

1 Q. So according to Mr. Whitlock, not only do
2 these products have trace amounts of benzene, but
3 they have a hundred times less than a trace amount?

4 A. Well, they have --

5 MR. PARKS: Objection to form.

6 THE WITNESS: I'm sorry. They have a
7 hundred times less than the cutoff for what -- what
8 I had just defined as trace amount. It's still a
9 trace amount.

10 BY MR. PATTON:

11 Q. Do you know where the Ashland -- where the
12 ingredients for the Ashland solvent blends came from
13 during the relevant years? Do you know which
14 refineries they came from?

15 A. I don't know if I saw it. I can't cite
16 that for you. I'm not clear whether that was in the
17 testimony of Mr. Whitlock or -- or I think Keenan
18 was the other Ashland individual deposed.

19 Q. We've already established that you don't
20 have any documents from Ashland that specifically
21 indicate benzene, 10 PPM or less.

22 Now, I understand what you're saying about

1 ingredient specification, technical data sheets, but
2 my next question for you is, what peer-reviewed
3 literature do you have that indicates to us that
4 these given ingredients have less than 10 PPM?

5 MR. PARKS: I object to the first part of
6 that question as misleading and misrepresenting his
7 testimony.

8 BY MR. PATTON:

9 Q. Let me ask my question again. Which
10 documents can you point us to from other sources
11 outside of Ashland, peer-reviewed literature, what
12 have you, that says these -- this family of
13 hydrocarbons, as far as Ashland was concerned, had
14 less than 10 PPM benzene?

15 A. Well, there are several, and do you want me
16 to just list them all?

17 Q. Yep.

18 A. Okay. One is the ATSDR.

19 Q. What is the ATSDR?

20 A. Agency for Toxic Substances and Disease
21 Registry, part of the Public Health Service and this
22 is a tox profile on xylene.

1 Q. Okay. And what does that say about how
2 much benzene is in xylene?

3 A. Current formulations of mixed xylene are
4 relatively free, less than .001 percent, of benzene
5 contamination.

6 Q. Okay. So that ATSDR document tells you
7 that xylene can contain less than 10 percent. That
8 matches up with what Buddy Whitlock said, right?

9 A. Correct.

10 Q. Okay. Can I see that document, please.

11 A. (Complies.)

12 Q. And this is dated 2005, right?

13 A. Yes.

14 Q. And that said, Current mixtures of xylene;
15 is that right?

16 A. Yes.

17 Q. Okay. I'm sorry.

18 A. Can I see that, have that back just one
19 moment?

20 Q. (Complies.)

21 A. Yes, and -- but that's based on a paper
22 that was published in 1984.

1 Q. Okay. So this ATSDR document says that
2 current formulations of mixed xylene -- is mixed
3 xylene -- is that what was used in the Ashland
4 solvent blends?

5 A. Yes.

6 Q. And when I talk about blends, I mean 3078A,
7 3078B, 3078C and 7650, and I understand they contain
8 different hydrocarbons, but for simplicity
9 purposes --

10 A. I don't remember an A. I thought there was
11 a B and a C at a later time.

12 Q. First of all, do you know what Ashland
13 solvent blends Charles Wilson used?

14 A. It was my understanding it was the 3078 and
15 a 7056. I'll look up the number.

16 Q. Did Ashland tell you which solvent blends
17 it sold to Frankston Box from 1978 to 2005?

18 A. I don't recall what -- specifically where
19 that information came from. I think that was more
20 from -- a lot of that was from Dr. Nicas' report. I
21 know he and Mr. Wilson's testimony --

22 Q. Can you please answer my question yes or

1 no? Did Ashland tell you which blends it sold to
2 Frankston Box Company from 1978 to 2005?

3 MR. PARKS: Objection to form. He said he
4 did not recall and explained why he might not have
5 recalled where that came from. He doesn't have to
6 answer it yes or no.

7 THE WITNESS: They may have. I don't
8 recall specifically Ashland telling me that. I was
9 relying more on testimony of Mr. Wilson and your
10 industrial hygiene expert's description of the
11 products he used and when.

12 BY MR. PATTON:

13 Q. Okay. This citation you have from the
14 ATSDR, it talks about xylene content, current
15 formulations of mixed xylene have 10 PPM or less of
16 benzene contamination, and it cites a Goslin article
17 from 1987 -- I'm sorry -- Goslin 1984 and Werhamaki
18 (phonetic) and Hannon in 1987; is that right?

19 A. Yes.

20 Q. Doesn't it say right after that, though,
21 that the exact composition of mixed xylene depends
22 on the manufacturing method used?

1 A. Sure. It's what we described.

2 Q. Okay.

3 A. Or what we talked about earlier, yes.

4 Q. What manufacturing method was used for the
5 xylene that was used in the Ashland solvent blends?

6 A. You'll have to ask Mr. Whitlock. He has --
7 I suspect that's part of the basis for him of
8 defining to you that it was less than 10 parts per
9 million.

10 I know he talked about hydrotreated and
11 that may have been for the Naptha products or the
12 Stoddard solvent. I don't recall which but it was
13 hydrotreated. When you hydrotreat, you further
14 reduce benzene content.

15 Q. Did Ashland hydrotreat its solvent blends,
16 the ingredients?

17 A. Yes. Based on the testimony of
18 Mr. Whitlock, yes.

19 Q. What documents have you seen from Ashland
20 that prove that Ashland used hydrotreating?

21 A. Mr. Whitlock's deposition testimony.

22 Q. What documents -- not testimony, what

1 documents have you seen from Ashland that indicate
2 that they hydrotreated?

3 A. I was simply going by Mr. Whitlock, who was
4 there at the time that these products were being
5 worked with.

6 Q. You can direct us to zero documents from
7 Ashland proving they hydrotreated, correct?

8 A. Well, that's kind of a -- I can't do a
9 double negative. I can't direct you to zero, but I
10 do not have a specific document. I'm relying on the
11 testimony of Mr. Whitlock who was there at the time.

12 Q. What is hydrotreating?

13 A. I don't know that I can define that
14 chemically for you. It's another step in the
15 process that further refines the product. That's a
16 better question for Mr. Whitlock.

17 Q. Is it a significant step in the process?

18 A. I don't know that it's significant. It's
19 my understanding and based on data from -- I think
20 it's World Health Organization that looked at
21 solvents as well. It's that hydrotreated products
22 have an even lower -- another order of magnitude

1 lower level of benzene present.

2 Q. The hydrotreating process, that's something
3 that happens as chemicals are moved through pipes
4 and streams and at different boiling points and
5 things like that; isn't that what hydrotreating kind
6 of is?

7 A. Yes.

8 Q. Okay. And is that the type of thing that
9 happens at an Ashland facility without having
10 documents to prove it would be in place?

11 MR. PARKS: Objection to form.

12 THE WITNESS: Again, a better question for
13 Mr. Whitlock.

14 BY MR. PATTON:

15 Q. I'm asking you, though. Do you know?

16 A. I don't know the answer one way or the
17 other.

18 Q. So as far as you know, if an Ashland
19 blending facility had hydrotreating equipment going
20 on, you don't know if it would be documents for that
21 at all?

22 A. I -- I just don't know that they would --

1 if they had documents, whether they would still have
2 documents 10, 20 years later or whether their
3 vendors did it, whether they would have their
4 vendors' documents, I don't know the answer to the
5 question you're asking. And those records may have
6 existed, don't exist today, but it's a better
7 question for Mr. Whitlock.

8 Q. Did you ask Mr. Whitlock or otherwise ask
9 anybody at Ashland for information about their
10 hydrotreating process?

11 A. No, not specifically about hydrotreating.

12 Q. What year did Ashland first start
13 hydrotreating its chemicals?

14 A. I don't know the answer to that. I know it
15 was asked of Mr. Whitlock and I don't recall from
16 his testimony --

17 Q. Okay.

18 A. -- what he said, but -- or if he was clear
19 on when that started. Actually, I think he said
20 that as far as he knew that they had always
21 hydrotreated, but I need to refer to his testimony
22 to give you a completely accurate answer.

1 Q. But in any event, you haven't seen any
2 documents from Ashland indicating when or how they
3 hydrotreated?

4 A. No, I wouldn't expect to see that.

5 Q. Is there only one method of hydrotreating?

6 A. I do not know the answer to that.

7 Q. What other manufacturing methods play into
8 the benzene content of aromatic hydrocarbons?

9 A. Boiling point temperature.

10 Q. What boiling point?

11 A. Source material.

12 Q. Okay. What source material, boiling points
13 and temperature, were in the underlying process of
14 the aromatic hydrocarbons used in the Ashland
15 solvent blends at issue in this case?

16 A. I -- I have not reviewed those materials.

17 Q. You haven't seen any documents from Ashland
18 telling you about their refining methods or the
19 source of their raw materials, have you?

20 A. I did not look at their manufacturing
21 process. I looked at the -- Mr. Whitlock's
22 testimony as to what the bottom line was in the

1 benzene content and how it matches up to my
2 experience and how it matches up to the literature.

3 MR. PATTON: All right. I will mark this
4 ATSDR Draft Toxicological Profile for Xylene dated
5 2005 as Exhibit 1.

6 (Spencer Deposition Exhibit Number 1 was
7 marked for identification.)

8 BY MR. PATTON:

9 Q. Is there a final version of this or was the
10 draft all of this the ATSDR put out?

11 A. No. That's just what I happened to have in
12 my file. There may be a final version. You can go
13 online and look.

14 Q. Okay. What other documents do you have
15 that would indicate to us less than 10 PPM benzene
16 content in the raw materials used in these Ashland
17 solvent blends?

18 A. I know this is for --

19 MR. PARKS: I'm going the object to the
20 form of the question in that -- I think it's
21 confusing in the way you've limited it to less than
22 10 PPM.

1 BY MR. PATTON:

2 Q. Mr. Spencer, I just want to make sure we're
3 clear. I want to -- I want to know what other
4 documents you have that would indicate to us that
5 Ashland solvent blends contain less than 10 PPM
6 benzene.

7 A. Okay. The next one is a document from
8 World Health Organization. It defines what is
9 called white spirit which is essentially a Stoddard
10 solvent and it defines the total aromatics by weight
11 and then the benzene content by weight from less
12 than .1 percent to less than .002 percent. So let
13 me see that document.

14 Q. So this World Health Organization document
15 talks about white spirits, which you say are very
16 similar to Stoddard solvents?

17 A. It's another term for Stoddard solvents or
18 mineral spirits.

19 Q. Okay. And this indicates that benzene
20 percent by weight would be .1 percent?

21 A. No. You're reading that wrong. Less than.

22 Q. Okay. Less than .1 percent. So less than

1 a thousand PPM, right?

2 A. Yes.

3 Q. Okay. So and then .02, that would be
4 200 PPM, right?

5 A. Less than.

6 Q. Okay.

7 A. And then the next page is .002 where it's
8 hydrotreated.

9 Q. Got it. Okay. Page 17 of this World
10 Health Organization document tells us that
11 hydrodesulphurized white spirits contain less than
12 .1 percent. So they have 999 PPM or less, correct?

13 A. Yes. I suspect that was from the date they
14 relied on is just a function of the analytical
15 procedures and that was probably the limit of
16 detection and that's why they report it that way.
17 So for all intents and purposes, they are saying
18 zero.

19 Q. They are saying 999 PPM or less, aren't
20 they?

21 A. No. They are saying less than .1, which is
22 generally an analytical limit of detection. There

1 may have been .0001. We just don't know is the
2 final answer.

3 Q. So even the World Health Organization just
4 doesn't know exactly how much benzene is in white
5 spirits or Stoddard solvents?

6 MR. PARKS: Objection to form.

7 THE WITNESS: Well, no. They know that
8 it's less than 0.1 percent.

9 BY MR. PATTON:

10 Q. Okay. So it's 1,000 PPM -- less than 1,000
11 PPM?

12 A. Yes.

13 Q. Okay. The World Health Organization says
14 that hydrodesulphurized white spirits, as of the
15 time of this publication, 1996, is going to have
16 less than a thousand PPM benzene, correct?

17 A. Yes.

18 Q. Okay. And then it also says, Solvent
19 extracted, white spirits, and that would have less
20 than .02 percent, right? So that would have less
21 than 200 PPM?

22 A. Correct.

1 Q. Okay. And then on next page, page 18 at
2 the top it talks about hydrogenated or hydrotreated
3 white spirits or Stoddard solvent and that gets us
4 down to .002. So that would be 20 PPM or less,
5 right?

6 A. Yes.

7 Q. Okay. So according to the World Health
8 Organization -- a division of the UN, right?

9 A. Yes.

10 Q. Okay. The United Nations or the World
11 Health Organization acknowledges that there -- for
12 it's purposes that the composition of the various
13 types of white spirit or Stoddard solvent depends on
14 the production process.

15 So if it's hydrodesulphurized Stoddard
16 solvent, it could have a -- less than a thousand
17 PPM. If it's solvent extracted, it would have
18 200 PPM or less, and if it is hydrotreated, it would
19 have 20 PPM, correct?

20 A. Yes.

21 Q. Okay. This document tells us that Stoddard
22 solvent could contain more than ten PPM, right?

1 A. Sure. It could, but we don't know because
2 obviously they are reporting at some limit of
3 detection there. In any regard, they are below what
4 we defined as trace levels of benzene in a product.

5 Q. But you say "limit of detection." The
6 World Health Organization was able to figure out as
7 of 1996, they were able to detect 20 PPM or less,
8 right?

9 A. They were able -- I don't know -- I don't
10 think they were collecting the samples. They
11 probably did a literature review. That's typically
12 how they collect information.

13 Q. But in any event, the World Health
14 Organization indicates that Stoddard solvent, as of
15 1996, certainly can contain anywhere from less than
16 20 PPM up to 999 PPM of benzene, true?

17 A. Yes, less than .1 to non-detect levels.
18 That's what they are saying.

19 Q. Up to a thousand PPM, essentially?

20 A. Well, less.

21 Q. Or 999?

22 A. Less than, yes.

1 Q. Okay.

2 A. Generally, when you have a less than
3 symbol, the scientific convention is to take
4 one-half of the limit of detection.

5 Q. Okay. So the World Health Organization
6 acknowledges less than 20 PPM of benzene up to,
7 essentially, 999 PPM of benzene in Stoddard solvent
8 as of 1996, true?

9 A. Well, not true as you've just put it.
10 What -- I don't want to confuse folks here. It's
11 just saying that they did not detect any levels at
12 .1 and above, but there was probably a limit of
13 detection there and whatever number, if there was
14 benzene present, it was less than .1 percent.

15 Q. When someone in 1996 tests white spirits or
16 Stoddard solvent for benzene content, they can
17 detect it down to 20 PPM, true?

18 A. In that particular case in the literature
19 they looked and relied on, that is correct.

20 Q. Okay. The range of possible benzene
21 content for Stoddard solvent as of 1996, according
22 to the World Health Organization, is less than

1 20 PPM up to 999 PPM. That's a range, right?

2 MR. PARKS: Objection to form.

3 THE WITNESS: It's less than -- not 20.

4 It's less than 20 PPM, and yes, up to 999 PPM, trace
5 level.

6 BY MR. PATTON:

7 Q. But Buddy Whitlock says it had -- that
8 Ashland's Stoddard solvent had less than 10 PPM?

9 A. Okay.

10 Q. Is that true?

11 A. And that comports -- yes. That comports to
12 what they are saying. They are less than 20 PPM.

13 Q. He's on the lower -- according to
14 Buddy Whitlock, Ashland Stoddard solvent is at
15 the -- pretty much at the absolute bottom of the
16 range of possible benzene content?

17 MR. PARKS: I'm going to object. This is
18 very misleading. You're mischaracterizing what's in
19 the document. The document contains no numbers
20 saying they found benzene at a specific number.

21 It says they didn't detect it below a
22 certain number or above a certain number, I should

1 say. It never says, here's the number that we found
2 in there. And so I think this entire line of
3 questioning is misleading and mischaracterizes the
4 document.

5 MR. PATTON: Well, if you could just show
6 me some Ashland documents that say how much benzene
7 they found in their product, we wouldn't have this
8 issue, would we?

9 MR. PARKS: Objection to the sidebar.

10 MR. PATTON: Well, I object to your --
11 everything you said after objection to form.

12 BY MR. PATTON:

13 Q. Was Ashland Stoddard solvent
14 hydrodesulphurized from 1978 to 2005?

15 A. I don't recall a specific date. As I
16 recall Mr. Whitlock's testimony, I believe he felt
17 that was being done through the time period that he
18 worked there which was for a very long time.

19 Q. But you didn't see any documents indicating
20 whether or how Ashland, between '78 to 2005 either
21 hydrodesulfurized solvent extracted or hydrogenated
22 Stoddard solvent, true?

1 A. I have not seen any documents. That's
2 correct. I was relying -- other than the testimony
3 of Mr. Whitlock --

4 Q. Okay.

5 A. -- who was there during the relevant time
6 period.

7 Q. I want to keep going through the
8 information that you have to support Mr. Whitlock's
9 contention of 10 PPM or less benzene content and all
10 of the ingredients used in the Ashland solvent
11 blends at issue during the relevant time period.

12 Exhibit 1 --

13 MR. PARKS: Just for the purposes of the
14 record, I have to object to that as
15 mischaracterizing Mr. Whitlock's testimony.

16 (Spencer Deposition Exhibit Number 2 was
17 marked for identification.)

18 BY MR. PATTON:

19 Q. Mr. Spencer, I have marked as Exhibit 1 the
20 Draft Toxicological Profile for Xylene. That's the
21 2005 report which references some earlier years
22 about benzene content, Xylene, from your file.

1 And I marked as Exhibit 2 this World Health
2 Organization UN document essentially from 1986 which
3 talks about the benzene content of Stoddard solvent.
4 And I want to go onto the next piece of information
5 you have to support Mr. Whitlock's contention that
6 all of these ingredients contain less than 10 PPM.

7 A. The next document is the preamble to the
8 Asbestos Standard from OSHA. Basically, it defines
9 that most of the solvents out there contained less
10 than -- already contained at the time they were
11 developing the benzene standard, less than
12 0.1 percent benzene in those products.

13 Q. Can you show me the pages in that -- in
14 that large document which says that the types of
15 ingredients we're talking about here today have less
16 than a thousand PPM?

17 A. Yes. You want me to show you?

18 Q. Please.

19 A. It's the third column in the first
20 paragraph where it reads, The data supplied to the
21 record show that 86 percent of the solvents used by
22 the rubber industry, for example, are now below

1 0.2 percent benzene.

2 Q. That would be 2,000 parts per million,
3 right?

4 A. That's correct. Let's see. And I know
5 they have .1 percent.

6 Yeah. I believe I was using this document.
7 Let's see. I was using this document more to
8 reflect that -- why the .2 percent number used by
9 your industrial hygienist wasn't reflective of
10 the -- the real-world situation. So this was less
11 than .2 percent. I'm sorry. Not less than .1.

12 Q. Can I see that document, please?

13 A. Okay. Just a second.

14 Also this document defines that there --
15 there -- this report identified there a number of
16 processes technically available now to reduce
17 benzene contamination to below 0.1 percent in
18 solvents.

19 Q. That document indicates that there are ways
20 to bring benzene content down to below 1,000 PPM,
21 right?

22 A. Correct. Those processes already existed.

1 So that doesn't define what you're asking for, the
2 specific thing you're asking for. That was more to
3 demonstrate that -- your industrial hygiene expert
4 was basically wrong.

5 Q. Did my industrial hygiene expert say that
6 any of these products contain above 2,000 PPM of
7 benzene?

8 A. I'm sure he was pointing -- he was relying
9 on another paper which was relying on very old data
10 that pointed to much higher numbers and he -- I
11 believe he used the number of .2 as his -- at least
12 in his modelling to determine exposure.

13 Q. Dr. Nicas estimated that some of these
14 products could contain 2,000 PPM benzene?

15 A. Yes.

16 Q. And according to the federal government per
17 29CFR, Part 1910, 86 percent of the solvents used by
18 the rubber industry, for example, are below
19 2,000 PPM benzene, right?

20 A. Yes. So his assessment is not fair and
21 using the .2 number, it should have been a number
22 less than that if you're looking at the law of

1 averages just from that one document, not even
2 looking at the specific testimony from the Ashland
3 technical people in this case.

4 Q. Doesn't it also indicate in this OSHA
5 document, though, that consequently, OSHA concluded
6 that production processes can be changed to achieve
7 .3 percent or 3,000 PPM in one year and .1 percent
8 in two years from the effective date of this
9 standard?

10 So sometime in the late '90s -- late '80s,
11 OSHA believes that production can be changed to
12 achieve 3,000 PPM or less?

13 A. Yeah. They were having -- for those
14 processes still had elevated levels. They were
15 providing for a rolling reduction in benzene content
16 throughout time.

17 Q. The federal government was acknowledging
18 that there was a need to adjust production processes
19 to get the benzene content below 3,000, right, and
20 doesn't that imply that the benzene content could be
21 3,000 PPM?

22 MR. PARKS: You mean in relation to these

1 solvents being discussed here?

2 MR. PATTON: Correct.

3 THE WITNESS: I think what you're missing
4 there and need to clarify is they are saying the 86
5 percent of the production of these chemicals is
6 already below .2 percent. So yes, they are probably
7 some that were still above that number, but they
8 were providing a sliding scale for reduction over
9 time for those that did not meet that.

10 BY MR. PATTON:

11 Q. So as of 1987, the federal government is
12 indicating a possible ceiling of 3,000 PPM or down
13 to 2,000 PPM and down to 1,000 PPM of benzene
14 content possible in these solvents?

15 A. No. I don't get that from -- from that
16 document. What that indicates is most of the
17 solvents at that time, that is, 1986, were already
18 below less than .2, that it was not going to require
19 industry a significant change in their processes to
20 reduce the values such that most, if not all, the
21 solvents were less than .1.

22 Q. So you're indicating that page 34,526 of

1 the Federal Register by the government says that
2 solvents are pretty much already below 2,000 PPM or
3 1,000 PPM, right?

4 A. Yes.

5 Q. Okay. But that wasn't a problem for
6 Ashland, was it, because they already had their
7 solvents down to 10 PPM?

8 A. Well, according to Mr. Whitlock, that's
9 correct and -- I know you're referring to the 10 PPM
10 number. I mean, that's your number. I don't -- I
11 just don't recall the specific number that he used.
12 I know it was a low number but I don't recall the
13 exact number.

14 MR. PATTON: I don't think that's my
15 number. It's Mr. Whitlock's number, but here's what
16 I'd like to do. Let's take a break and go off the
17 record, and if you could review Mr. Whitlock's
18 testimony and point me to the pages where he talks
19 about the benzene content, I think that would make
20 sure that we're still on the same page.

21 Let's take a break and go off the record.

22 THE VIDEOGRAPHER: We're off the record at

1 10:35.

2 (A recess was taken from 10:35 a.m. until
3 10:41 a.m.)

4 THE VIDEOGRAPHER: We're back on the record
5 at 10:41.

6 BY MR. PATTON:

7 Q. Mr. Spencer, we took a short break to -- so
8 that both you and your attorney and I could take
9 another look at Mr. Whitlock's deposition and
10 Mr. Keenan's deposition just to make sure we're
11 talking about the same thing.

12 On page 55 to 56 of Mr. Whitlock's
13 deposition -- do you have that in front of you?

14 A. I have the deposition here. 55. Okay.

15 Q. Okay. And you see where I asked
16 Mr. Whitlock, Xylene contains benzene, correct. And
17 he says, Parts per million, less than 5 parts per
18 million level, typically.

19 Do you see that?

20 A. Yes.

21 Q. Okay. And then if you can turn to
22 Mr. Keenan's deposition, page 7.

1 A. Okay.

2 Q. And do you see between pages 72 to 75 that
3 Ashland concluded that the 3078B blend has less than
4 10 PPM benzene in that product, correct?

5 A. Yes. Well, actually -- yes, based on what
6 their specifications were and what the suppliers
7 were providing to them.

8 Q. Okay.

9 A. That was their understanding of those
10 specific solvent constituents that they were
11 receiving from suppliers in order to meet their
12 specs.

13 Q. What documents have you seen from Ashland
14 that would indicate that the solvent suppliers --
15 well, first of all, what documents have you seen
16 from Ashland that indicates a specific benzene level
17 as a specification for these solvents?

18 A. I haven't seen any other documents that
19 weren't already described today.

20 Q. And those don't talk about benzene
21 specifically, correct?

22 A. Correct. They talk about total aromatics.

1 Q. And what documents have you seen from
2 outside suppliers to Ashland, not Ashland
3 specifications, but outside supplier documents which
4 tell you how much benzene is in these solvent raw
5 materials?

6 A. I have not seen those documents.

7 Q. Okay. Would you like to see those
8 documents?

9 A. Well, I think -- sure. It would be helpful
10 if they existed, but, again, you're going back in
11 time and asking for a document that wasn't required
12 to be kept. I just -- it just -- I'm sure it wasn't
13 an issue there because there was such a trace level
14 of benzene.

15 Q. Okay. Before we took the short break, we
16 went through the Federal Register and we talked
17 about page 34,526, and I'm not going to mark this as
18 an exhibit because it's so big and because I've
19 already referenced the two pages, but let's move on
20 to the next piece of literature that you have that
21 indicates to us the benzene content of the solvent
22 raw material ingredients in the Ashland solvent

1 blends.

2 A. Another document that I was relying on was
3 Carpenter, et al. This was one particularly on
4 toluene and it had a mass spec analysis of .06
5 percent benzene in the toluene product.

6 Q. So you have a document there that shows
7 that toluene had 600 PPM benzene, right?

8 A. Yes. Now, that's the toluene and remember
9 we're talking about a mixture here. So that's
10 going -- that number will further be diluted in the
11 ultimate product composition of the 3078.

12 Q. What do you have next?

13 A. The next is the same author and this has to
14 do with Stoddard solvent and this document is
15 showing, again, in a mass spec analysis, benzene is
16 0.1 percent.

17 Q. 1,000 PPM?

18 A. Yes.

19 Q. For what? Stoddard solvent?

20 A. Stoddard solvent.

21 Q. What does Dr. Nicas estimate? What -- what
22 estimate of benzene content or Stoddard solvent does

1 he use in his calculations?

2 A. I'd have to look specifically. What I
3 recall is he was using 0.2 or 2,000 parts per
4 million.

5 Q. The Stoddard solvent?

6 A. The Stoddard solvent, he may have used
7 less. Can we look at his report, please?

8 Q. Sure.

9 A. Okay.

10 Q. What does he use for the estimated benzene
11 content of Stoddard solvent?

12 A. He says, I assumed a 0.2 percent.

13 Q. Okay. In this document your reference
14 indicates .1 percent?

15 A. Well, for that particular form of Stoddard
16 solvent which I don't know that's the hydrotreated
17 product that Ashland was using.

18 Q. How do you know --

19 A. Again, my point here is that it's less than
20 the number that's being used by your industrial
21 hygiene expert.

22 Q. Okay.

1 A. That's why I have this. This is referenced
2 literature showing the numbers aren't nearly what's
3 being presented by your experts in this case. They
4 overstate the levels of benzene that are
5 typically -- that were typically found in these
6 products.

7 Q. Is your position that's there's no
8 literature that would support my expert's
9 conclusions of higher benzene content than what this
10 given study you say?

11 A. No. You asked me that same question
12 earlier and my response was that there is
13 literature. There are individual data points from
14 data taken out of the relevant time frame for this
15 case, and so yes, there is data showing high
16 numbers. There were higher numbers historically.

17 Q. You agree --

18 A. -- but not within the relevant time frame.

19 Q. You agree with me that historically there's
20 been a variable range of benzene content in Stoddard
21 solvent, agreed?

22 A. For some manufacturers under some

1 processes, I agree. That may have been the case.

2 However, it may not be the case where -- from the
3 beginning of time, if they hydrotreated the product,
4 it was probably always very low. So it depends on
5 the process.

6 Q. And we don't know what process Ashland
7 used, correct?

8 A. Not correct.

9 Q. Have you ever met Buddy Whitlock?

10 A. Mr. Whitlock indicated since the 1970s that
11 they were -- they were using hydrotreated product.

12 Q. Then that's enough for you? You wouldn't
13 want to see anything to back that up?

14 A. Well, yes. More information is better but
15 where it -- we're dealing in a litigation case that
16 is -- that, you know, asks for things that don't
17 exist anymore and that doesn't make it -- that --
18 that side of the argument correct because the
19 documents don't exist.

20 So then you have to rely upon an individual
21 who was there who was knowledgeable about the
22 processes, and that's where I am with this and I am

1 backing that up with literature.

2 Q. So you believe Buddy Whitlock was
3 knowledgeable about the hydrotreating processes,
4 correct?

5 A. I don't know if he was knowledgeable about
6 the processes. He indicated that that process --
7 that product was treated in that fashion since the
8 1970s.

9 Q. What's the problem with the literature that
10 my expert, Dr. Nicas, relies on to support his
11 estimate of 2,000 PPM?

12 A. It is out of context.

13 Q. Why is it out of context?

14 A. It's not -- doesn't fall within the
15 relevant time period. It's not necessarily -- it's
16 not reflective of the type of solvent that
17 Mr. Whitlock said they used in terms of how it was
18 manufactured or produced.

19 He -- he's relying on a -- a very wide
20 range of values and incorporates data from decades
21 in which are not relevant to this case.

22 Clearly, the benzene content of solvents

1 has decreased over time and it decreased
2 dramatically in the late '70s.

3 Q. How much benzene was in the Ashland
4 Stoddard solvent used in Ashland Blend in 1978?

5 A. According to Mr. Whitlock, I believe it was
6 less than five parts per million.

7 Q. How about in 1979?

8 A. Same answer.

9 Q. Same answer for every year forward to 2005?

10 A. Well, according to Mr. Whitlock, since the
11 1970s, and he wasn't more specific than that.

12 Q. Is it your testimony there's just no way
13 there was more than five PPM benzene in those
14 products during the relevant time frame?

15 A. No. You know -- no. I wouldn't say -- I
16 could not ever be that absolute. I don't think five
17 parts per million is -- five parts per million is an
18 extraordinarily low number.

19 Q. Do you know --

20 A. A thousand parts per million is an
21 extraordinarily low number.

22 Q. In this Carpenter 1975 paper about Stoddard

1 solvent, do you know what kind of refining method
2 they used?

3 A. I don't know if that's defined there. I
4 didn't really read it for that.

5 Q. All right. What's the next document you
6 have for us?

7 A. The next is also a Carpenter article.

8 Q. Who is this Mr. Carpenter fellow?

9 A. Let me see if I can find his information
10 here. It might be at the bottom of the previous
11 papers I gave. Some of this --

12 Q. Doesn't it say in footnote 1, Supported by
13 the API?

14 A. Yes, that's -- yes, it does say that.

15 Q. Okay. What is the API?

16 A. These -- it looks like University of
17 California.

18 Q. What is the API?

19 A. It's American Petroleum Institute.

20 Q. And is Ashland a member of the American
21 Petroleum Institute?

22 A. I don't know the answer to that.

1 Q. So the chemical industry or the petroleum
2 industry funded this paper by Mr. Carpenter,
3 correct?

4 A. At least they supported this paper, sure.

5 Q. Okay.

6 A. Publicly supported this type of research,
7 yes.

8 MR. PATTON: I'll mark this one as
9 Exhibit 3.

10 (Spencer Deposition Exhibit Number 3 was
11 marked for identification.)

12 BY MR. PATTON:

13 Q. Another paper by Mr. Carpenter. What does
14 this paper tell us to support your opinions?

15 A. They analyzed xylenes for various
16 constituents and they found no benzene present.
17 This was from a product in 1975.

18 Q. And they were using gas chromatography in
19 1975, correct?

20 A. I didn't look at the analytical method
21 there. Is that what it says? Yes. Correct.

22 MR. PATTON: Okay.

1 I'll mark this paper as Exhibit 4.

2 (Spencer Deposition Exhibit Number 4 was
3 marked for identification.)

4 BY MR. PATTON:

5 Q. In 1975, the time of Carpenter's paper is
6 again supported by the API. It says it in
7 footnote 1.

8 A. Sure.

9 Q. Do you know what the detection -- the
10 detectable, so to speak, the lower limit of
11 detection that's possible for benzene during that
12 time?

13 A. I do not know offhand. I mean, it's
14 certainly higher than it is today but I don't know
15 what the number is.

16 Q. Okay. So Exhibit 4 tells us there's no
17 detectable amount of benzene in the Stoddard
18 solvent, whereas --

19 A. I'm sorry. That was xylene.

20 Q. Xylene. Okay. And Exhibit 3 tells us that
21 there is a thousand PPM or less of benzene in
22 Stoddard solvent, right?

1 A. In that particular product, that is
2 correct.

3 Q. Okay. What do you have next?

4 A. That's -- that's it.

5 Q. These are all the documents you have to
6 support your contention that Dr. Nicas' ranges are
7 wrong and that the benzene content is below a
8 thousand PPM for these Stoddard solvents and xylene?

9 A. That's all I brought with me. I mean,
10 there is more data and literature out there, but I
11 had to have some stopping point.

12 Q. Why did you have to have some stopping
13 point beyond five studies?

14 A. Because I felt that was sufficient. I felt
15 the OSHA record, which is reflective of a very broad
16 range of studies, is reflective of many studies.
17 The UN World Health Organization document is
18 reflective of many studies.

19 (Spencer Deposition Exhibit Number 5 was
20 marked for identification.)

21 BY MR. PATTON:

22 Q. Okay. I have marked as Exhibit 5 the 1976

1 Carpenter paper which you used to support your
2 contention of the benzene content in toluene. So as
3 I have it, the body of literature that you find
4 representative and supportive of your opinions and
5 contrary to my experts' opinion or Plaintiffs'
6 experts' opinions are these five studies plus the
7 Federal Register, right?

8 A. Well, and there's probably one more here.
9 This has to do specifically with press cleaning
10 solvent, vapors in printing industry and what they
11 found was that benzene, when present, usually
12 appeared as a contaminant below a concentration of
13 0.1 percent in solution.

14 Q. Where was that at again?

15 A. I think it's page 331. It's up in there.

16 Q. Benzene, when present, usually appears as a
17 contaminant below a concentration of .1 percent.
18 Usually appeared. So does that mean that it might
19 have appeared as a contaminant above .1 percent?

20 A. Well, that's not the way I read that. They
21 say "when present," which means they probably didn't
22 detect it most of the time.

1 (Spencer Deposition Exhibit Number 6 was
2 marked for identification.)

3 BY MR. PATTON:

4 Q. I'll mark this as Exhibit 6, and this is a
5 Crouch study in 1999, right?

6 A. Yes.

7 Q. So as of 1999, the Crouch study
8 acknowledged on page 331, in the upper left-hand
9 side corner, that benzene, when present, usually
10 appeared as a contaminant below a concentration of
11 .1 percent, below 1,000 PPM, right?

12 A. Yes. And I'm sorry. Can I see that when
13 you're done?

14 Q. (Complies.)

15 A. Yeah. The article is 1999, but I know a
16 lot of the data was collected well before that and I
17 was looking for a specific date because these are --
18 I think this was data collected at the National
19 Institute of Occupational Safety and Health. They
20 did that study.

21 Q. Okay. Are there any other documents you
22 have which support Mr. Whitlock's or Mr. Keenan's

1 testimony about the benzene content of the raw
2 materials used in the Ashland solvent blends at
3 issue?

4 A. Those are the only documents I have with
5 me.

6 Q. Okay. What other documents do you not have
7 with you that support your opinions in this case?

8 A. Well, I don't know. I'd have to look.
9 Those are just the ones I pulled. I mean, if you
10 want more, there is more. There is all the source
11 documents from the OSHA investigation during the
12 development of the standard.

13 There's all the source documents that are
14 reflected in the ATSDR document. So I would do a
15 tree search based on those base references.

16 MR. PATTON: Let's take a short break.

17 Off the record.

18 THE VIDEOGRAPHER: Off the record at 11:02.

19 (Pause in the proceedings.)

20 THE VIDEOGRAPHER: We're back on the record
21 at 11:05.

22 BY MR. PATTON:

1 Q. Mr. Whitlock -- I'm sorry. Mr. Spencer, if
2 you have any other documents which support your
3 contentions that the benzene content of the Ashland
4 solvent blends is low as -- in the ranges that
5 you've been testifying to, will you provide that
6 information to your attorney?

7 A. Yes.

8 Q. Okay. Have you reviewed any quantitative
9 exposure data concerning Charles Wilson's benzene
10 exposure in forming your opinions in this case?

11 A. Yes.

12 Q. What have you reviewed?

13 A. The report of your industrial hygiene
14 expert and the supporting documentation that he used
15 in establishing that report.

16 Q. An what did Dr. Nicas -- you co-authored a
17 paper with Dr. Nicas once, did you not?

18 A. Yes.

19 Q. Okay. Do you believe Dr. Nicas to be a
20 qualified expert in industrial hygiene and for these
21 matters?

22 A. Yes.

1 Q. Okay. In fact, you co-authored a report
2 from him -- with him?

3 A. Well, a study.

4 Q. A study?

5 A. A paper that we wrote, yes.

6 Q. Okay. Did you believe anything in
7 Dr. Nicas' methods to be wrong or inconsistent or
8 just poor judgment or bad methodology?

9 A. From a modelling aspect -- I mean, the
10 methodology, no. Some of the input parameters,
11 certainly, I take some issue with.

12 For some of the data that he used on from
13 the NIOSH health hazard evaluations, some of the
14 data I could decipher the origins of his data
15 points. Some of it, I could not.

16 It appeared to me he was using either data
17 that were area samples or was using data from a
18 particular type of worker that was not relevant
19 toward the activities Mr. Wilson conducted.

20 Q. Did you review Dr. Nicas' deposition?

21 A. Yes.

22 Q. Okay. First of all, let me go back. Do

1 you have any criticisms of Dr. Nicas' qualifications
2 to serve as an expert in this type of case?

3 A. No.

4 Q. Do you have any criticisms of Dr. Nicas'
5 methodology in this case? I understand you have
6 some professional disagreement with a few things,
7 but his methodology in general, do you have any
8 criticisms of?

9 A. Not for the modelling but for his selection
10 of data points that he derived from the NIOSH HHES.

11 Q. Okay. Let's talk about selection of data
12 points. In estimating Charles Wilson's benzene
13 exposure, you would agree with me that we don't
14 have -- we simply don't have industrial hygiene data
15 for Charles Wilson, right?

16 A. To the best of my knowledge -- I understand
17 that there are some depositions that may be going on
18 with his employer, and perhaps still looking for --
19 or there's still a potential for information from
20 the employer's carrier, insurance carrier, workers'
21 comp carrier or from the consulting group, as I
22 understand it, Texas Workers' Comp Board or some

1 group came in there.

2 So I can't say that none exists. I have
3 not seen any, but I understand that there are -- is
4 a possibility there is some information.

5 Q. As we sit here today, you are not aware of
6 any data that you can point to that would indicate
7 to us that Charles Wilson wore a badge that
8 monitored for benzene during his career, correct?

9 A. Yes.

10 Q. Okay. It's possible. Anything is possible
11 in the future that we might get additional
12 information but as we sit here today, there's no
13 indication that he was specifically, personally
14 measured for benzene exposure, right?

15 A. Correct. I've seen no information from his
16 employer.

17 Q. Okay. Have you seen any other information
18 for anyone working at Frankston Paper Box Company or
19 factory, like Mr. Wilson, which would indicate what
20 a printer doing Mr. Wilson's job at Mr. Wilson's
21 workplace would have experienced? You didn't see
22 any benzene monitoring there, did you?

1 A. I'm sorry. At that particular facility?

2 Q. Let me start over.

3 Just as we are all presently unaware of any
4 specific monitoring done for Mr. Wilson's exposure
5 to benzene, we are likewise unaware of any data for
6 other -- for his co-workers at Frankston Box being
7 monitored for benzene, correct?

8 A. Correct.

9 Q. Okay. So if we really wanted to know how
10 much benzene Charles Wilson was exposed to, in a
11 perfect world, we'd have monitoring data specific to
12 him for the years at issue, right?

13 A. Yes.

14 Q. Okay. And we don't have that nor do we
15 have it for his co-workers?

16 A. I have not seen that data.

17 Q. Okay. So then to estimate Mr. Wilson's
18 benzene exposure, what would be the next step that
19 we would go to?

20 A. To look for relevant data that has already
21 been collected.

22 Q. Outside of Frankston Box and Mr. Wilson and

1 his co-workers?

2 A. Yes.

3 Q. Okay. And to do that Dr. Nicas looks at
4 some research that NIOSH did, health hazard
5 evaluations if you will, at other printing
6 facilities, right?

7 A. Yes.

8 Q. Okay. And did all of those printing
9 facilities or all of those NIOSH HHEs, did all of
10 those look specifically for benzene?

11 A. No.

12 Q. Okay. Some of them did look for benzene,
13 though, correct?

14 A. As one of many substances, yes.

15 Q. Okay. But we're talking about benzene in
16 this case, right?

17 A. Well, you were talking about it. As an
18 industrial hygienist, I look at this as it's an
19 exposure to Naptha, toluene, xylene, other
20 constituents which we understand have trace levels
21 in it.

22 But these are mixtures that at some point

1 in time may have contained some small amounts of
2 benzene, but I know you're calling it a benzene case
3 but it's really -- it's an other solvent exposure
4 case in my view.

5 Q. Does benzene cause bone marrow diseases?

6 A. It certainly can, at sufficient dose,
7 would. Again, toluene, to my knowledge, does not.
8 Xylene does not. Stoddard solvent does not. Naptha
9 does not and all of these products have been tested
10 in animal and human studies, and to my knowledge,
11 doesn't cause that bone marrow disease as you
12 described it.

13 Q. But the ingredients of benzene causes bone
14 marrow disease, correct?

15 A. Sure. And we -- I think we also agree that
16 benzene is a constituent in all of those products
17 and all the early testing that was done never
18 associated any of these products with that disease
19 process.

20 Q. So by virtue of simply being an ingredient,
21 as opposed to a hundred percent pure chemical, then
22 your position is benzene is an ingredient of these

1 products -- it has never been shown to cause bone
2 marrow disease?

3 A. As it -- well, it depends on the level of
4 the ingredient, and therefore, the ultimate level of
5 exposure and dose that one receives from the
6 products, but what I'm saying, there are health
7 standards for toluene, xylene, Stoddard solvent.
8 None of those health standards are based on
9 benzene-related effects.

10 Q. Okay. What is your criticism of Dr. Nicas'
11 selection of data used in forming his opinions in
12 calculating his estimates of Charles Wilson's
13 exposure?

14 A. The -- well, it's hard for me to say at
15 this point. I, frankly, am still trying to figure
16 it out.

17 He developed a specific -- he came up with
18 a number of 1.25 parts per million benzene based on
19 these two studies and based on what he believed were
20 similar work environments that Mr. Wilson worked in
21 and I understand it. I agree at least with that
22 thought process in developing and collecting that

1 data.

2 I have gone through various iterations here
3 and I cannot determine where he got some of his
4 higher data points. The higher data points in one
5 study in particular from 1981 at Dittler Brothers,
6 it appears to me that the data points that he's
7 relying on came from an operation that Mr. Wilson
8 would not have been involved in.

9 Q. What operations were Mr. Wilson involved
10 in?

11 A. Well, he was cleaning presses, working on
12 the inkwells, using blank roller solvents in the
13 print room. From what I could tell, he was not in a
14 composing room.

15 Q. Okay.

16 A. It was a different environment and there
17 are different levels of exposure of benzene reported
18 in this NIOSH document.

19 Q. That NIOSH document reports benzene
20 exposure experienced by printers, correct?

21 A. Yes. Some of -- most of which is very low
22 except for in the composing room.

1 Q. Are printers exposed to benzene, generally
2 speaking?

3 A. I guess it depends on the time frame and
4 the types of solvents they were using. So the
5 answer to that question is yes and no.

6 Q. Have you seen any data from Ashland where
7 it evaluated benzene exposures that would be
8 experienced by printers using the solvent blends at
9 issue in this case?

10 A. Not the specific -- you're talking about
11 the Ashland products?

12 Q. Yes.

13 A. Specifically, no.

14 Q. Okay. Just so I'm clear. You have no
15 documents from Ashland indicating that they ever
16 performed any type of testing to determine, via
17 industrial hygiene monitoring, the level of benzene
18 exposure that would be experienced by a printer
19 using these solvents in the normal and anticipated
20 use of those products?

21 A. No, nor would I have expected to see that.

22 Q. Why wouldn't you have expected to see that?

1 A. Due to the trace levels of benzene in the
2 product would not have presented an exposure that
3 exceeded even today's occupational health standards.

4 Q. Trace level being below a thousand PPM?

5 A. Yes.

6 Q. Is it your testimony that someone using a
7 solvent which contains, let's say, 900 PPM of
8 benzene, would never experience an exposure above
9 the PEL or TLV?

10 A. Well, I wouldn't -- I would not use
11 absolute terms, but in the normal course of the use
12 of these products, I would not expect there to be an
13 exceedance. If there is an exceedance to benzene,
14 you have overwhelmed the individual with the primary
15 constituents of that product, and for all intents
16 and purposes, made that environment unbearable for
17 the individual.

18 Q. Would you agree with me that someone using
19 a solvent which contains 900 PPM of benzene could
20 experience exposures to benzene above the TEL or
21 PLV, yes or no?

22 A. You mean the TLV and the PEL?

1 Q. Yes.

2 A. Again, it's not a yes or no answer. It
3 could occur but in those situations, you would have
4 exposures to xylene or toluene or Stoddard solvent
5 at enormous levels. It would be preventative of the
6 individual continuing to work in that environment.

7 Q. So yes, someone could experience excess
8 exposure above the TLV or PEL?

9 MR. PARKS: Objection. Asked and answered.

10 THE WITNESS: Only under very extreme
11 conditions that would have overexposed him to the
12 primary constituents of that product.

13 BY MR. PATTON:

14 Q. What kind of extreme conditions are you
15 talking about?

16 A. Well, it would have exceeded the
17 occupational health standards for toluene or for
18 xylene or for the Stoddard solvent.

19 Q. So an excess exposure to benzene would mean
20 that there was an excess exposure to Stoddard
21 solvent or toluene or xylene?

22 A. Most likely, yes.

1 Q. What data can you point us to? What pieces
2 of paper do you have to support your opinion in that
3 regard?

4 A. The Federal Register. The OSHA preamble
5 pretty well defines that and was the basis for
6 establishing the 0.1 percent or a thousand parts per
7 million cutoff for benzene and calling it a benzene
8 containing substance.

9 Q. Doesn't the Hazard Communication Act --
10 you're familiar with that, right?

11 A. The HAZCOM standard?

12 Q. Yes.

13 A. 1910.1200?

14 Q. You're familiar with the HAZCOM standard?

15 A. Yes.

16 Q. Okay. And doesn't the HAZCOM Standard
17 acknowledge that benzene exposures below .1
18 percent -- benzene exposures when using products
19 with less than .1 percent benzene could still happen
20 above the PEL or TLV?

21 A. No.

22 Q. Okay. You don't read it that way?

1 A. It doesn't say anything about benzene.

2 There is a specific benzene standard which addresses
3 labeling and warnings.

4 Q. HAZCOM --

5 A. HAZCOM does not apply to benzene because
6 there is a specific standard for benzene. So you
7 can't -- you're, you're using HAZCOM in a context
8 which is not relevant.

9 Q. I started to talk about HAZCOM in the wrong
10 context, but let me clear it up a little bit.

11 Is it your testimony that HAZCOM, the
12 Hazard Communication Standard doesn't apply to
13 benzene?

14 A. Correct. There's a specific benzene
15 standard which addresses the warnings issues.

16 Q. So HAZCOM doesn't require benzene warnings?

17 A. No. The Benzene Standard, 1910.1028
18 requires warnings under certain conditions.

19 Q. What conditions does the Benzene Standard
20 require warnings for?

21 A. If you have a product that has greater than
22 one-tenth of one percent, then you list benzene as

1 an ingredient. If you are in an area that produces
2 airborne exposure values at greater than 0.5 parts
3 per million or I should say 0.5 or greater, you put
4 a -- you demarcate the area as a benzene area.

5 Q. But the HAZCOM Standard says that even if a
6 product contains less than .1 percent of a
7 carcinogen, someone can still experience harmful
8 exposures above the PEL or TLV, then you still have
9 to supply or provide a warning for that carcinogen,
10 correct?

11 A. That's the HAZCOM Standard. That's not for
12 benzene. There is a specific benzene standard that
13 addresses that issue and that was weighed out in the
14 preamble to the Benzene Standard.

15 Q. What other criticisms of Dr. Nicas'
16 selection of data do you have? You mentioned what
17 you quarreled with on the 1981 study. What else?

18 A. Well, the other issue in the modelling -- I
19 mean the two parameters. One we've already
20 discussed. He uses basically a 0.2 percent number
21 of benzene in these products and then 2. He uses
22 12 feet per minute as an air flow rate, as an input

1 variable in the model for Mr. Wilson's workplace.

2 Q. What was that measurement again?

3 A. 12 feet per minute.

4 Q. What should he have used?

5 A. Well, I think at a minimum, I mean, you
6 have to consider -- well, two things: If you -- if
7 you consider generally -- general movement in a room
8 or a space, you're looking at 30 to 50 feet per
9 minute. That's by people moving around. You have
10 machinery and hot processes. You have equipment
11 rolling through there.

12 My experience -- I've been in many printing
13 operations -- is that you feel air movement from
14 equipment processes moving. So you're looking at a
15 minimum 30 to 50 feet per minute of air movement.

16 Q. What printing operations have you been in?

17 A. I mean, small, large, medium around the
18 country. I was with NIOSH when I worked for the
19 Coast Guard. Just in my private practice, been
20 inside doing air monitoring and assessments of these
21 facilities.

22 Q. How many times have you done air monitoring

1 or assessments at printing facilities?

2 A. Well, I've forgotten more than I remember.

3 There's been at least two that I recall having done.

4 I guess three. I just thought of another one.

5 Q. Which ones are they?

6 A. One was a Coast Guard Resource Training

7 Center. I did an assessment.

8 Q. And there were printing machines in there?

9 A. Yes.

10 Q. Okay. So the Coast Guard assessment.

11 Where was that at?

12 A. I think that was in Yorktown, Virginia.

13 Q. What year was that?

14 A. That would have been between '85 and '87.

15 I think it was 1986.

16 Q. What were you doing there?

17 A. I was the industrial hygienist for the

18 Coast Guard.

19 Q. Okay. And --

20 A. I was evaluating exposures to printing

21 solvents and I think I did noise monitoring as well.

22 Q. What kind of printing solvents were you

1 evaluating exposure for?

2 A. Best I can recall was the blanket roller
3 solvents, other cleaning solvents that they were
4 using to remove dried ink from rollers and other
5 aspects of the machinery.

6 Q. Similar to the solvents Mr. Wilson used?

7 A. Yes.

8 Q. And did those solvents contain benzene?

9 A. I don't know. I think one of them was an
10 Naptha-based product. I would suspect there were
11 trace levels in there.

12 Q. Did you monitor for benzene?

13 A. No, I monitored for Naptha.

14 Q. And what was the number two printing shop
15 you'd been in?

16 A. It was the -- it was a trade organization
17 for building contractors.

18 Q. Where at?

19 A. It was here in Maryland, the northern part
20 of Baltimore.

21 Q. What year?

22 A. Gosh. That was sometime in the late '80s

1 or early '90s.

2 Q. And they were doing printing in there?

3 A. Yes.

4 Q. Did they use products similar to what
5 Mr. Wilson used?

6 A. Yes.

7 Q. Were there benzene -- what was the benzene
8 content of those solvents?

9 A. I don't know. I just, you know -- again, I
10 didn't look for it. I looked at the main
11 constituents that were at issue and benzene may have
12 been a trace contaminant, but it wasn't of
13 consequence from an exposure standpoint.

14 Q. And then what's the number three print
15 shop?

16 A. It was a facility that made high-end
17 posters and other prints and that was here in the
18 Baltimore area, and again, I looked at the solvents
19 that were in the inks. I looked at the cleaning
20 solvents in particular.

21 Q. Did you monitor for benzene?

22 A. No. Not that -- I do not recall having

1 monitored for benzene.

2 Q. Okay. You were -- before we talked about
3 those, you were talking about your criticism that
4 Dr. Nicas used 12 feet per minute as an air flow
5 rate?

6 A. Yes.

7 Q. Okay. What air flow rate, if not 12,
8 should he have used, and what is the basis of your
9 opinion that he should have used whatever rate it is
10 you decide on?

11 A. Sure. What I mentioned a minute ago was
12 about 30 to 50 feet, and it's based on my own
13 monitoring, air speed in general workplaces.

14 Q. What is the source of Dr. Nicas' basis that
15 he decided to use 12 feet per minute?

16 A. Good question. I don't know that there was
17 one.

18 Q. Okay. And what's -- can I see the
19 documents supporting your opinion that it should be
20 30 to 50?

21 A. That's not these documents. What I'm
22 describing is based on my own experience in taking

1 measurements in multiple environments of people
2 moving around, of equipment operating.

3 Q. So in your experience you think 30 to
4 50 feet per minute should be used?

5 A. That's based on the measurements that I've
6 done, yes.

7 Q. Do you always use 30 to 50 feet per minute
8 for an air ventilation rate or an air flow rate?

9 A. No.

10 Q. Have you ever had occasion to use 12 feet
11 per minute?

12 A. Not unless there was a -- no. I mean, I've
13 never done that type of modelling for a static
14 environment like that. No. I mean, that means
15 there is -- for all intents and purposes, nothing
16 going on in the space.

17 Q. 12 feet per minute indicates very little
18 air flow?

19 A. Correct. It means basically no activity.

20 Q. Did you see any indication from
21 Mr. Wilson's testimony or other information that
22 indicates that there was a higher air flow?

1 A. Well, based on the description of the
2 equipment and the -- and the temperatures, you know,
3 it was hot. That indicated to me that certainly
4 there -- by convection, there's going to be
5 substantial amounts of air movement.

6 Q. I'm sorry. What did you just say about
7 what factors indicate that would be substantial
8 amounts of air movement?

9 A. By convection.

10 Q. What do you mean by that?

11 A. Heat rises, causes air to move. That's why
12 we have wind outside.

13 Q. Did you see that Mr. Wilson testified that
14 the printing room had no mechanical supply or
15 exhaust air ventilation other than a few
16 air-conditioning units?

17 A. Well, I saw that by -- Mr. Wilson -- yes.
18 Oh. But it was my understanding, I think, from one
19 of the managers there, and I know he was there at a
20 later time and I think you're deposing another one
21 of the managers there who was there for a longer
22 period of time, but there was some sort of

1 air-conditioning there, but I don't have the details
2 on that, that air-conditioning.

3 Q. Dr. Nicas indicates -- indicates in his
4 report that the door openings were covered with
5 transparent plastic strips that ran from the top to
6 the floor. The strips limited air flow into and out
7 of the room. Wouldn't that tend to bring you down
8 from a higher air flow assumption?

9 A. No. I mean, even -- like in this room with
10 the closed doors, everything is closed up in here,
11 but you can still feel the air flowing. We're
12 probably getting 40 or 50 feet per minute right now
13 just from the air-conditioning in here.

14 Q. And that air conditioner is blowing right
15 on you?

16 A. Well, it's blowing on me here, but if I
17 measure over there, I'm going to -- and I'm moving
18 around, I'm going to get more than 12 feet per
19 minute.

20 Q. Have you ever visited Frankston Box
21 Company?

22 A. No, not that I'm aware of.

1 Q. All right. What other selection of data
2 criticisms do you have of Dr. Nicas?

3 A. One of the other parameters in his model
4 where he uses 0.5 air changes per hour. Again, as
5 representative of -- it's essentially a static
6 environment and I just -- I don't believe that to be
7 the case.

8 Q. How could we describe an environment, as
9 far as you said, static? What would you use to
10 describe Mr. Wilson's work environment if not the
11 word static?

12 A. Well, based on Mr. Wilson's testimony,
13 limited ventilation. Obviously, there's some
14 ventilation or they all would have died in there of
15 acute exposures to the primary constituents of the
16 solvents or their own carbon dioxide.

17 There has to be some change-over in air,
18 and particularly using all these solvents.
19 Otherwise, you're going to have such extraordinarily
20 high levels of the primary constituents that no one
21 would be able to work in there.

22 Q. What is an ideal air flow rate for someone

1 using a -- using the Ashland solvent blends at
2 issue?

3 A. Generally, according to the ASHRAE
4 Standards, you're looking at approximately .5 cubic
5 feet per square foot or 2.5 liters per second per
6 square meter.

7 Q. Let me ask a slightly different question.
8 What documents from Ashland have you seen which talk
9 about what the appropriate air flow rate should be
10 in an environment where these products are being
11 used? What documents from Ashland have you seen?

12 A. I haven't seen any documents from Ashland
13 nor would I expected there to be.

14 There is a standard building code for
15 printing operations that defines the ventilation
16 rates for those buildings. So you wouldn't see that
17 from Ashland. That's a -- that's a building code
18 requirement and there are specific codes for
19 printings operations.

20 Q. And do those codes indicate -- well, if
21 someone is working within those codes using Ashland
22 solvent blends, would they be safe from harmful

1 exposures to benzene?

2 A. That's the -- yes. That's the intent and
3 that's the purpose.

4 Q. Did Ashland ever check if their printing
5 solvents could be used, consistent with the print
6 shop's building codes, in a safe manner?

7 A. I don't know if Ashland ever checked.
8 These particular solvents that Ashland was using,
9 the toluene, xylene, Naptha and Stoddard solvent
10 have been around for a hundred years. I mean, and
11 used in printing operations and many other
12 operations. So this is not a unique situation that
13 Ashland -- they may have done that testing. I don't
14 know.

15 Q. I'll object to the nonresponsive portion of
16 your answer. My question is simple and it's clear,
17 I think.

18 Have you seen any documents from Ashland
19 reflecting whether or not they evaluated if their
20 printing solvents could be used safely in an
21 environment which is consistent with the print shop
22 standards that you're mentioning?

A. I've not seen specific documents as you described. I haven't seen those, if they exist, nor would I expect to see them.

Q. Okay. Let's see what you're looking at there. What are these documents?

A. That's ash -- ASHRAE.

Q. What is ASHRAE?

A. It's the organization that defines the air flow standards, ventilation rates for commercial -- primarily commercial and some industrial buildings, schools based on occupancy and based on processes.

Q. And what does this have to do with your opinions in this case?

A. Well, I guess, in fact, they go to the point you asked earlier, what should the numbers have been. And that defines what the numbers should have been in that building. That was, again, the employer's responsibility to ensure that in its printing operation, using any solvents, let alone the Ashland solvent, that they had a ventilation rate that met these guidelines.

It was designed to be protective of the

1 occupants of that building, of that process.

2 Q. Okay. And what does these ASHRAE studies
3 say the ventilation rate should have been?

4 A. I believe I read it earlier, but I believe
5 it's for printing operations it's at .5.

6 If I could see that again, I just want to
7 make sure I have the units correct and what's the --
8 .5 cubic feet per minute per square foot of area.

9 Q. .5 cubic feet per minute for what?

10 A. Per square feet of the facility.

11 Q. And that's the ventilation rate?

12 A. That's how much ventilation that you're
13 providing.

14 Q. Okay.

15 A. I'm sorry. That's the outdoor air
16 requirements. That's the fresh air that you're
17 providing because they recognize that there are lot
18 of solvents in this process and that you need to
19 properly ventilate the solvents.

20 Q. What was the fresh air -- what's the unit I
21 should be talking about here?

22 A. Are we talking about ventilation rates?

1 Q. Yes.

2 A. Okay.

3 Q. What is the ventilation rate -- what was
4 the ventilation rate of the air at Frankston Box?

5 A. I have not seen that information.

6 Q. Okay. What does Dr. Nicas estimate
7 ventilation rates to be in forming his opinions in
8 this case?

9 A. Essentially nil. Essentially none. I
10 mean, he's got -- I think he uses .5 air changes per
11 hour.

12 Q. And how does that differ from .5 cubic feet
13 per minute per square foot?

14 A. It's about one-fourth of that number.

15 Q. But again, you haven't seen any data that
16 would -- that would render Dr. Nicas' opinions or
17 estimations in that regard simply wrong, right?

18 Other than there's a standard that says the
19 ventilation rate should be X, Dr. Nicas assumes it
20 is Y and you can't show us anything else besides
21 those two numbers, correct?

22 MR. PARKS: Object to the form.

1 He -- before you all got into the standard,
2 he talked about that at length.

3 THE WITNESS: In terms -- yes. I think --
4 you have to apply some common sense here at some
5 point. If you have someone or a group of people in
6 a static environment using solvents, operating
7 machinery with -- at high temperatures, you have to
8 have sufficient ventilation. Otherwise, you would
9 not be able to operate in that environment.

10 BY MR. PATTON:

11 Q. What other criticisms do you have of
12 Dr. Nicas' selection of data?

13 A. I think we've touched on the primary ones.

14 Q. Did you perform an exposure assessment in
15 this case?

16 MR. PARKS: Objection. Form.

17 MR. PATTON: What's the basis?

18 MR. PARKS: Vague.

19 MR. PATTON: All right.

20 BY MR. PATTON:

21 Q. Mr. Spencer, did you perform any type of
22 calculations or estimations of what Charles Wilson's

1 exposures to benzene would be using the Ashland
2 products at issue in this case would have been while
3 working at Frankston Box?

4 A. I -- yes, in a form. I looked at the NIOSH
5 Health Hazard Evaluations that your industrial
6 hygienist utilized, in addition to other health
7 hazard evaluations that were conducted of printing
8 operations, and I think there was another paper that
9 we referred to earlier which you've already marked
10 to at least give me some idea of the range of values
11 that Mr. Wilson would have been exposed to with
12 regards to benzene.

13 Q. Okay. Dr. Nicas estimates -- how does
14 Dr. Nicas estimate Mr. Wilson's exposure to benzene?
15 What amount does he conclude?

16 A. I believe his total -- you mean in terms of
17 his dose that he provided?

18 Q. Yes.

19 A. I think he had a little over 18 PPM years.

20 Q. Okay. How many PPM years do you believe
21 Mr. Wilson was exposed to?

22 A. I did not calculate a PPM-year value. I

1 simply looked as his range of values that were
2 reported in the literature and compared that to
3 Mr. Wilson's testimony, his description of his
4 activities.

5 Q. You did not calculate a cumulative dose for
6 Mr. Wilson?

7 A. True. Correct.

8 Q. Did you accumulate any short-term exposure
9 that Mr. Wilson would have experienced?

10 A. I don't think I understand your question.

11 Q. Did you make any -- okay. If you did
12 not -- let's clear it up.

13 You testified that you did not calculate
14 cumulative dose for Mr. Wilson, correct?

15 A. Correct. I did review what your industrial
16 hygienist did in terms of evaluating that cumulative
17 dose.

18 Q. But you did not perform any of your own
19 calculations to arrive at a cumulative dose
20 estimate, true?

21 A. Well, I -- I did that in the sense and that
22 is basically taking the dose calculated by your IH

1 expert and looking at applying other parameters,
2 other values that we've discussed, changing those
3 values, and as a result, those values were dropped
4 by about anywhere from four to ten times.

5 Q. Object to the nonresponsive portion of your
6 answer.

7 Why don't you answer questions yes or no or
8 correct or true or false? Why can't you answer
9 simply like that?

10 MR. PARKS: Objection to the form of that
11 question.

12 THE WITNESS: Well, because I think I have
13 an opportunity to explain the answer and all things
14 in life are not yes or no answers and I want to be
15 as completely accurate as possible.

16 MR. PATTON: Let's change the tape.

17 Off the record.

18 THE VIDEOGRAPHER: Off the record at 11:39.

19 (Pause in the proceedings.)

20 THE VIDEOGRAPHER: Beginning tape 2. We're
21 back on the record at 11:45.

22 BY MR. PATTON:

1 Q. Mr. Spencer, did you perform any
2 calculations to estimate the level of benzene
3 exposure that Charles Wilson would have experienced
4 while using any of the Ashland blends in the way he
5 describes his use of those products?

6 A. I did not calculate exposure. I looked --
7 I relied upon the NIOSH Health Hazard Evaluations,
8 another study which was a NIOSH summary of studies
9 done at printing operations and determined, in
10 essence, a range of values.

11 Q. I'll object to the nonresponsive portion of
12 your answer.

13 Do you have any opinions as to what range
14 of exposure Mr. Wilson would have experienced by
15 using the Ashland solvent blends in this case?

16 A. Yes.

17 Q. What is that estimate -- estimated range of
18 benzene exposure?

19 MR. PARKS: Objection. Form.

20 That's not the same question as what you
21 had just asked him if he had opinions about.

22 MR. PATTON: Can you read back the

1 question? Just the last question I asked right
2 before he objected.

3 (The reporter read the record as
4 requested.)

5 MR. PATTON: Okay. Let me try to ask the
6 question again.

7 BY MR. PATTON:

8 Q. Mr. Spencer, do you have any opinions as to
9 the range of exposure that Mr. Wilson would have
10 experienced to benzene by using the Ashland products
11 at issue in this case?

12 A. Yes.

13 Q. Okay. What is that range?

14 A. Non-detect to less than 1 -- less than 1
15 PPM. It's an eight-hour time-weighted average,
16 probably much less than 1 PPM.

17 Q. Can you give us that range any better than
18 less than 1 PPM? Can you specify it a little more
19 for us?

20 A. No. There's a lot of variables and
21 criteria to consider. So that's why I'm giving that
22 range of value. I can't give it specifically for

1 Mr. Wilson, but the data supports my experience. It
2 would have been well below 1. -- or below one part
3 per million as an eight-hour, time-weighted average.

4 Q. So you acknowledge that he could have
5 experienced exposures to benzene by using the
6 Ashland products to up to 1 PPM even though you
7 think it's below that; true?

8 A. It would have been less than, and as I
9 said, I think much less than that.

10 Q. What is much less?

11 A. An order or two magnitude less than that.

12 Q. So half?

13 A. You may have been looking at, you know,
14 parts per billion levels.

15 Q. But you acknowledge and admit that he could
16 have experienced exposures of benzene from use of
17 the Ashland products to up to 1 PPM, true?

18 A. Again, I think, as I said, it's much less
19 than 1 PPM and when asked what do I mean by that,
20 it's probably an order of magnitude less than 1 part
21 per million.

22 Q. Did you perform any mathematical modelling

1 in this case?

2 A. I did not.

3 Q. Why not?

4 A. I was simply using and relying on the
5 modelling done by your industrial hygiene expert.

6 Q. And you chose to just criticize that rather
7 than -- rather than calculate your own estimates?

8 A. No. I think I explained earlier. It's not
9 just a function of criticizing it, but I believe and
10 I've -- that there are -- there are variables that
11 go into that model, and ultimately, determining the
12 level of exposure and when you correct some of the
13 input variables that we discussed earlier, that
14 those numbers -- the number comes down an order or
15 two magnitude from what your expert had put forth.

16 Q. So what you're saying is that if you, as
17 John Spencer, were to estimate, okay, there's less
18 benzene than what Dr. Nicas said and if the fresh
19 air ventilation rate is different than what
20 Dr. Nicas says and if the temperature is different
21 than what Dr. Nicas says then the exposure is going
22 to be less than Dr. Nicas says, true?

1 A. Yes.

2 Q. But you didn't necessarily perform any
3 independent math to arrive at that conclusion other
4 than to make general assumptions about the
5 differences between numbers and input variables,
6 right?

7 A. Well, no. I did -- I mean, I sat at the
8 computer with a spreadsheet and plugged in some
9 numbers, but I didn't -- I didn't keep any of it. I
10 just ran through a standard spreadsheet. Same type
11 of model that your IH expert uses.

12 Q. So you did perform some calculations but
13 you threw them away?

14 A. Yeah. I just didn't keep it but it was on
15 the computer. I guess the reason I did not do so is
16 my hope to further validate input parameters with
17 some upcoming depositions.

18 Q. So for you to do the math, you'd like to
19 see some more specific information, wouldn't you?

20 A. I want to be -- I feel like I have a --
21 there's a range of input variables and I want to
22 reduce -- you're always going to have some range and

1 I want to reduce that range to be as accurate as
2 possible. It's not going to be exact but you're
3 going to have a range and as long as you can reduce
4 that range of input variables --

5 Q. Well, the range of input variables that
6 Dr. Nicas uses for benzene content of these Ashland
7 solvent blends --

8 A. I don't see where he uses any range.

9 Q. Well, he picked a number within the range,
10 didn't he?

11 A. He did. He did pick a number, yes.

12 Q. Okay. And without having information
13 directly from Ashland which would tell us how much
14 benzene is in Ashland's solvent blends, he has no
15 choice but to look -- an expert doing this type of
16 work has no choice but to look at a range and pick a
17 number within that range to perform some
18 calculations. Fair?

19 A. Absolutely incorrect. There was -- that
20 data could have been much more refined as I've
21 provided documentation to help to do that today.
22 You could also consider -- and I believe the

1 testimony of the chemist from Ashland who was there
2 during the relevant time period looking at these
3 products should have been considered.

4 Q. Given the totality of Mr. Whitlock's
5 testimony, can you really with a straight-face today
6 tell us that -- do you believe that that testimony
7 is reliable as to the numbers that Whitlock seems to
8 think there are for benzene content?

9 MR. PARKS: Objection. Form.

10 THE WITNESS: I would certainly, with a
11 straight-face, tell you that I would find that much
12 more credible than relying upon another plaintiff's
13 expert who wrote one paper and used data that was
14 totally taken out of context.

15 BY MR. PATTON:

16 Q. Are you --

17 A. So I still have a straight-face and I think
18 that is much more reliable data and I think the
19 literature that I've provided you today further
20 supports that.

21 Q. You criticized Dr. Nicas as being a
22 plaintiff's expert?

1 A. No. I'm talking about his reliance
2 materials.

3 Q. What are his reliance materials?

4 A. A -- a paper from another plaintiff's
5 expert that relies on outdated -- I shouldn't say
6 outdated -- but data from an inappropriate time
7 frame.

8 Q. You characterized Dr. Kopstein as a
9 plaintiff's expert?

10 A. Well, that's the only way I -- I know of
11 him, yes. I think you all hired him in this case;
12 isn't that correct?

13 Q. You know the answer to that so please don't
14 ask me questions. I get to ask the questions.

15 A. So at least in this context of this case, I
16 know him as a plaintiff's expert since you all hired
17 him.

18 Q. Okay. Are you a defense expert?

19 A. I am in this case.

20 Q. Okay. Is Dr. Carpenter or Mr. Carpenter,
21 whether he's a doctor or not, his studies that you
22 used, as reflected in Exhibits 5, 4, and 3, he was

1 funded by the API. That would be the chemical
2 industry, correct? Petroleum industry?

3 A. Yes. I think he worked for a University.

4 Q. So it's true?

5 A. That's what the paper says. You're
6 supposed to list who your -- who supports you in
7 your work.

8 Q. Okay. If we were to take the data in your
9 Exhibits 1 through 4, which tell us about benzene
10 content generally from the literature and we were
11 going to take the references from Dr. Kopstein's
12 paper that also helped give us a range of those
13 benzene contents, it's your opinion that all the
14 estimates and the ranges in Dr. Kopstein's paper
15 should just be thrown out?

16 A. You can do whatever you want with them.
17 They are not relevant to the time period that we're
18 discussing here.

19 Q. None of them cover the likely benzene
20 content of materials between 1978 and 2005?

21 A. Not for these particular products.

22 Q. Okay. So besides the five exhibits or six

1 exhibits that you have here today, what other
2 reliable data would you direct us to that we should
3 be using or Dr. Nicas should be using for his
4 benzene content inputs?

5 A. Well, again, I have -- we've forgotten
6 about the OSHA preamble to the Benzene Standard,
7 which is a collection of a lot of different data and
8 I also mentioned the ATSDR document which, again, is
9 a collection of most of the literature that was out
10 there.

11 Q. Do you intend -- strike that.

12 Wouldn't you agree with me that the best
13 indication of benzene content of these Ashland
14 solvent blends would come directly from Ashland?

15 A. Not necessarily. I believe the testimony
16 of Mr. Whitlock also Ashland provided specifications
17 to their suppliers. So that information would
18 probably come from their suppliers as well.

19 Q. So you think Ashland -- well, has Ashland
20 told you of any information or testimony by its
21 suppliers which would indicate likely benzene
22 content in these products?

1 A. I have not seen that information.

2 Q. And you'd agree with me that Ashland would
3 be in the best position to give us the correct
4 inputs when estimating benzene content or benzene
5 exposure from using its own solvents, right?

6 A. Well, yes. I think Ashland is in the best
7 position and Mr. Whitlock was in that position.

8 Q. Have you ever met Mr. Whitlock?

9 A. I have not.

10 Q. Did you talk to Mr. Whitlock in forming
11 your opinions or in the course of your review of
12 this case?

13 A. No.

14 Q. Did you talk to anyone from Ashland in the
15 course of your review of this case?

16 A. No.

17 Q. Did you look at any other Ashland documents
18 other than the documents produced in this litigation
19 in forming your opinions or in the course of your
20 review of this case?

21 A. No.

22 Q. Did you look at any other depositions,

1 Mr. Whitlock or any other depositions of other
2 Ashland chemists, which would give you any
3 additional input in forming your opinions or
4 reviewing this case?

5 A. Not of other Ashland chemists, no.

6 Q. Did you ask the Ashland attorneys in this
7 case to, perhaps, put you in touch with others maybe
8 at the factory level or the blending facility level
9 who would give you additional information on benzene
10 content of the Ashland solvent blends?

11 A. No. As I understood it, Mr. Whitlock was
12 put up in this case as -- as that individual to
13 discuss the specifics of their products within the
14 relevant time frame.

15 Q. I'll object as nonresponsive to everything
16 after the word no.

17 Do you think a reasonable and safe chemical
18 company would know the chemical contents of its
19 products?

20 A. Yes. I think they would have an
21 understanding of that.

22 Q. Do you think a reasonable and safe chemical

1 company should test its products from time to time
2 to determine the presence in levels of potentially
3 dangerous chemicals used or dangerous ingredients
4 used in those chemicals or present in those
5 ingredients?

6 A. It depends on the product and the
7 constituents.

8 Q. Do you think for products like these
9 Ashland solvent blends that a responsible and safe
10 chemical company should perform any type of
11 analytical testing to evaluate benzene levels?

12 A. I'm sorry. Benzene levels in the --

13 Q. The Ashland solvent blends?

14 A. In the bulk product or in the air?

15 Q. How about in the bulk product, the
16 ingredients themselves or in the air. Do you
17 think -- let me ask a clean question and start over.

18 Do you think that a reasonable -- well,
19 first of all, do you think Ashland is a reasonable
20 and safe chemical company?

21 A. From based on what I can tell, yes.

22 Q. What can you tell that tells you that?

1 What have you seen that tells you that they are a
2 reasonable and safe company?

3 A. The documents that I reviewed in this case.

4 Q. And the testimony?

5 A. And the testimony that I've seen.

6 Q. From Whitlock and Keenan, right?

7 A. Yes.

8 Q. Okay. And you would agree with me that a
9 reasonable and safe chemical company has a
10 responsibility to know of the presence of dangerous
11 chemicals such as benzene, which are present in the
12 raw materials as a contaminant or impurity, you
13 would agree with me right?

14 MR. PARKS: Objection. Form.

15 THE WITNESS: It all depends. I mean, at
16 what level? If it's trace levels, then it's not of
17 consequence. So they don't have to analyze or
18 determine what the benzene content is if we're
19 talking about trace levels.

20 BY MR. PATTON:

21 Q. Trace levels being below a thousand PPM?

22 A. Correct.

1 Q. So it's your opinion that Ashland had
2 absolutely no duty or no responsibility to determine
3 benzene content of it's Ashland solvent blends
4 because it was assuming that there was less than
5 1,000 PPM benzene in the ingredients?

6 A. No.

7 MR. PARKS: Objection. That
8 mischaracterizes his testimony.

9 BY MR. PATTON:

10 Q. Where am I disconnecting with you?

11 A. You're using the word "assuming," and based
12 on the testimony I've seen and the documents that I
13 have reviewed, that they -- Ashland had a
14 specification that required trace levels only of
15 benzene in their product specs.

16 Q. And tell me again where in your file you
17 have that spec?

18 A. I'm going -- I think I've described
19 everything that we have.

20 Q. You don't have a piece of paper in your
21 file which tells us that spec, right?

22 A. Other than Mr. Whitlock's testimony.

1 Q. You don't have a piece of paper in your
2 file that tells us that outside suppliers were even
3 given that specification, do you?

4 A. I don't have that, no.

5 Q. And you don't have any paper in your file
6 from Ashland that indicates that outside suppliers
7 provided any type of document which would satisfy
8 any type of undocumented specification, true?

9 A. I -- correct. I don't have a lot of
10 negative things that may or may not exist. That's
11 true.

12 Q. Well, wouldn't that be a positive thing
13 that would exist? It would tell us positively that
14 there was a specification and what that benzene
15 specification was?

16 A. Well, you're asking me for what I -- what
17 you know that I don't have. So I consider that a
18 negative thing. We've talked about it. I told you
19 what I do have and that's what I'm relying on.

20 Q. Do you have Kopstein's paper in your file?

21 A. His paper or his report?

22 Q. His JOEH paper from January 2006, do you

1 have that in your file?

2 A. No.

3 Q. Do you have his report in your file?

4 A. Yes.

5 Q. Okay. Did you review all of the NIOSH
6 HEHAs which evaluated solvent exposure in print
7 shops?

8 A. I can't -- I mean, there's thousands of
9 HHEs. I believe I reviewed all the ones I could
10 find that dealt with printing operations.

11 Q. And how many of those dealt with or looked
12 specifically at benzene?

13 A. I'd have to go through and add that up for
14 you and I'm sorry. When you mean specifically
15 benzene, you mean only or as part of an overall
16 evaluation looking at other constituents?

17 Q. I mean benzene specifically.

18 A. I don't know of any that I looked at only
19 benzene.

20 Q. Okay. What if they looked at benzene in
21 addition to others? What if they looked at benzene
22 at all? How many of those looked at benzene?

1 Actually, let me ask a different question.

2 Which NIOSH HETA or HHEs are you using to support
3 your opinions in this case?

4 A. Well, I have with me one, two, three, four,
5 five, six, seven, eight that in some part or form
6 that helped me form my opinions. Not any one is in
7 total but there are parts of each.

8 Q. Okay. This first one, 81-173-1051 from
9 Georgia, what does this have to do with your
10 opinions?

11 A. This is also the paper that your industrial
12 hygiene expert relied on and if you look at the
13 relevant activities, personal samples, they -- the
14 benzene concentrations, I believe in all cases, are
15 below today's occupational health standard.

16 Q. Okay. What else does this have to do with
17 your opinions?

18 A. I mean, that's just a description of the
19 printing operations.

20 MR. PATTON: Okay, and I've marked that as
21 Exhibit 7.

22 (Spencer Deposition Exhibit Numbers 7

1 through 14 were marked for identification.)

2 BY MR. PATTON:

3 Q. I've marked as Exhibit 8 the 88-346-2030
4 HETA. If you could please look at this document and
5 tell me how that bears on your opinions.

6 A. Basically in the same fashion.

7 Q. And what is that? It tells about printing
8 operations in general?

9 A. Yes.

10 Q. I'm marking as Exhibit 9 HETA 79-119-1068.
11 What does this have to do with your opinions?

12 A. This one is -- is -- I would say not
13 significant. They are looking at many inorganic
14 substances used. This is more photo development.

15 Q. Similarly, Exhibit 10, which is HHE
16 80-103-827. That doesn't look at benzene exposure,
17 either, does it?

18 A. I believe you are correct. They are
19 looking at other constituents such as xylene,
20 toluene, yeah, that are at issue here but yet they
21 are not looking for benzene.

22 Q. Okay. So how does that bear on your

1 opinions?

2 A. Well, it kind of -- again, it shows
3 Stoddard solvents used in the printing industry such
4 as xylene and toluene yet they are not looking at
5 benzene exposures. That was of consequence simply
6 because they were using toluene and xylene.

7 Q. That study did not look at benzene,
8 correct?

9 A. Correct. They looked at the mixtures,
10 toluene and xylene.

11 Q. Exhibit 11 is HHE 80-111-826. How does
12 that bear on your opinions in this case?

13 A. Again, they are looking at standard
14 solvents, some of which are at issue in this case
15 and that those solvents, I guess, in this case, did
16 not present exposure that exceeded health standards.

17 Q. They didn't look at benzene, though, did
18 they?

19 A. No, they looked at xylene.

20 Q. Exhibit 12 is HETA 81-032-1174. How does
21 that bear on your opinions?

22 A. This one did look for benzene and the

1 exposure values were all below the OSHA PEL.

2 Q. So what does that tell you about your
3 opinions in this case?

4 A. They are correct.

5 Q. They are correct that?

6 A. For essentially using these particular
7 solvents does not present levels of exposure that
8 exceeds the OSHA permissible exposure limit.

9 Q. Do we know if those were Ashland solvents?

10 A. I don't recall having seen Ashland here.
11 Let me see if they define whose solvents they were.
12 Typically, they do not.

13 They do not define whose solvents they
14 were.

15 Q. Exhibit 13. What is this document and how
16 does it bear on your opinions?

17 A. Could I see that previous one? This may be
18 a duplicate. No, it's not.

19 Again, this was -- this was a silkscreening
20 operation as was the previous one and the -- they
21 looked for benzene and it was well below the
22 permissible exposure limit and -- but they do not

1 define, as is typical of the NIOSH HHEs, they do not
2 define the specific solvent, the manufacturer of the
3 solvent.

4 Q. Is there anything else in Exhibit 13 that
5 bears on your opinions?

6 A. No.

7 Q. What about Exhibit 14, which is HETA
8 81-289-971?

9 A. That the -- a solvent such as toluene and
10 xylene did not exceed occupational health standards
11 in this particular operation. They used the
12 solvents in this application.

13 MR. PATTON: Okay.

14 Let's take a break.

15 Off the record.

16 THE VIDEOGRAPHER: Off the record at 12:14.

17 (Whereupon, at 12:14 p.m., a lunch recess
18 was taken.)
19
20
21
22

1 AFTERNOON SESSION

2 (1:30 p.m.)

3 (Spencer Deposition Exhibit Number 15 was
4 marked for identification.)

5 THE VIDEOGRAPHER: Back on the record at
6 1:30.

7 BY MR. PATTON:

8 Q. Mr. Spencer, we took a lunch break and I
9 want to begin talking about some of the things we
10 were talking about and wrap-up your deposition.

11 First of all, I've marked as Exhibit 15 a
12 letter directed to me and my law firm of August 27th
13 from Dr. Kopstein. Do you see that?

14 A. Yes.

15 Q. Do you know of Dr. Kopstein and his work in
16 the field of chemical engineering as it pertains to
17 benzene, generally speaking?

18 A. I've only -- I've seen it in a few
19 litigation cases and that's my knowledge of him.

20 Q. Okay. And you're familiar with his article
21 in the Journal of Environmental Hygiene of 2006, I
22 believe?

1 A. I know of one article that he's written.

2 Q. Okay. First of all, do you have any
3 criticisms -- well, have you reviewed that report in
4 the course of your work for this case?

5 A. I'm sorry. This -- this letter, Exhibit
6 15?

7 Q. Yes. Have you reviewed that?

8 A. I -- I did read through it once.

9 Q. Do you have any criticisms of that letter?

10 A. I think it's just similar criticisms to
11 what I had -- had already covered previously. He is
12 relying on outdated data or data that is not
13 relevant to the products at issue here.

14 Q. Okay. First of all, what aspect of the
15 data that he relies on -- what part of it is
16 outdated?

17 A. You know, I -- I don't -- I have to go
18 back. I can't give you any specifics. I just
19 wasn't prepared to do that. I really didn't even
20 take any measure of what was presented in this
21 particular report.

22 Q. Do you have your report handy or

1 actually --

2 A. Yes, I do.

3 MR. PATTON: I can mark this copy of it as
4 the next Exhibit.

5 (Spencer Deposition Exhibit Number 16 was
6 marked for identification.)

7 BY MR. PATTON:

8 Q. Mr. Spencer, I've marked as Exhibit 16 a
9 copy of your report. If you could take a look at
10 that and tell me if it's a true and correct copy.

11 A. Yes, it appears to be.

12 Q. Okay. Can you turn to page 8 of your
13 report.

14 A. Okay.

15 Q. And that first full paragraph, As to the
16 presence of benzene. Can you read that to us.

17 A. As to the presence of benzene and toluene
18 used in the manufacture of cleaning printing
19 industry, Dr. Nicas refers only Kopstein 2006 -- I'm
20 sorry -- references only Kopstein 2006.

21 MR. PATTON: For the record, the service at
22 the Hilton BWI Airport is subpar in all aspects.

1 (Laughter.)

2 MR. PATTON: Let's resume. Let me ask that
3 question --

4 MR. PARKS: No objection.

5 MR. PATTON: No objection by defense
6 counsel.

7 THE WITNESS: Where is the case against the
8 Hilton, right?

9 BY MR. PATTON:

10 Q. Let's start over.

11 Dr. -- Mr. Spencer, you have in front of
12 you Exhibit 16 which is a copy of your report,
13 correct?

14 A. Yes.

15 Q. And page 8 of that report, could you read
16 for us the first full paragraph that starts, As to
17 the presence.

18 A. As to the presence of benzene and the
19 toluene used in the manufacture of cleaning printing
20 industry, Dr. Nicas references only Kopstein 2006.
21 Not only has Dr. Kopstein's paper been called into
22 question relative to manufacturer supplied data from

1 the relevant time period -- McKey, et al. in 2007 --
2 the data upon which Kopstein relies is not relevant
3 after 1980, if at all.

4 Q. My question for you is, your criticisms of
5 Dr. Nicas' opinions, as they relate to his reliance
6 upon the Kopstein 2006 article, is that criticism
7 only limited to toluene as referenced in that first
8 line?

9 A. Well, that's what that discusses, toluene,
10 yes.

11 Q. Okay. Do you have criticisms of Dr. Nicas'
12 reliance upon Kopstein 2006 paper go beyond toluene?

13 A. Yes.

14 Q. Okay. And that is because you -- as you
15 contend, the data upon which Kopstein relies is not
16 relevant after 1980, if at all, right?

17 A. Correct.

18 Q. Okay. And as we sit here today, can you
19 direct us to any portions of Dr. Kopstein's paper or
20 the data which you're critical of as being not
21 relevant to after 1980?

22 A. No. It's kind of the reverse of that. I

1 provided you the documents that clearly indicate
2 that -- that he was wrong. I didn't -- I didn't
3 bring his paper nor was I prepared to discuss his --
4 that 2006 paper.

5 Q. You relied on today the ATSDR reference we
6 marked as Exhibit 1 which talks about xylene,
7 correct?

8 A. Well, that and among the others, the OSHA
9 document, the other studies.

10 Q. My question is a little more specific. We
11 talked earlier about the ATSDR document which we've
12 marked as Exhibit 1 to your deposition. You find
13 that to be a reliable piece of authority which
14 instructs us or helps instruct us on likely benzene
15 content of xylene. True statement?

16 A. I'm -- I'm not sure what you mean by,
17 Reliable authority. It is -- it -- that particular
18 document is just a summary of xylene data that I
19 found useful in helping support my position.

20 Q. Okay. If there were similar ATSDR
21 documents on, say, Stoddard solvent or other
22 ingredients like we're talking about today, would

1 you similarly find that to be a reliable piece of
2 authority?

3 A. I have to look at the -- it would depend.
4 A lot of the ATSDR documents -- it's not a lot of
5 them. Some of them rely on older data such as the
6 Kopstein article, and again, it would not be
7 relevant. So you have -- ATSDR is not an -- they do
8 not produce original data. They reference data that
9 already exists. Some you have to look at the source
10 documents.

11 Q. So to the extent that ATSDR data might rely
12 upon Kopstein, you would then find it unreliable?

13 A. I don't think they would ever rely on
14 Kopstein.

15 Q. Okay. Isn't that what --

16 A. They might rely on some other older
17 literature such as that he relied upon, and so,
18 thus, it would not be relevant to the issue in this
19 case.

20 Q. Well, what about the literature that ATSDR
21 relies upon for xylene in Exhibit 1; is that
22 reliable?

1 A. Well, based on the date and time frame, I
2 consider it more reliable than -- yes.

3 Q. Do you know that Kopstein's article
4 references the ATSDR 2000 for Stoddard solvent?

5 A. I -- I don't recall specifically which one,
6 but again, you have to look at the source data in
7 that ATSDR document to determine the relevancy of
8 what he references.

9 Q. Okay. So you have a problem relying on
10 Kopstein's peer-reviewed article because you take
11 exception with some of the underlying data that he
12 relies on, correct?

13 A. Well, yes. And let me give you an example
14 why. The paper you mentioned before that Mark Nicas
15 and I and one other wrote together, is also based on
16 a mineral spirits/Stoddard solvent product and the
17 benzene content was less than 135 parts per million
18 in that product.

19 Q. And in fact, one of the references in
20 Kopstein's paper references Stoddard solvent as
21 possibly being less than 20 parts per million. Are
22 you aware of that?

1 A. I'm not. I don't recall specifically which
2 one unless it was a Fedoric (phonetic) study where
3 the benzene content was 9 and 58 parts per million.

4 Q. You rely upon data by Carpenter in drawing
5 your conclusions about likely benzene content of
6 ingredients, true?

7 A. It is one of -- one document that I rely
8 on, yes.

9 Q. Did you know that Kopstein's paper also
10 references Carpenter for benzene content of Stoddard
11 solvent? In fact, he references the same paper you
12 do.

13 A. Okay.

14 Q. Does that surprise you?

15 A. No, it doesn't surprise me because, let's
16 see, for Stoddard solvent he reports it at less than
17 a thousand parts per million to 10,000. He doesn't
18 give the lower end in his sensationalizing the
19 values.

20 Q. So you believe Kopstein sensationalizes the
21 values of these ingredients?

22 A. I think -- that's probably a good way to

1 put it. It is -- it is not an accurate presentation
2 of all forms of product that is may have contained
3 trace levels of benzene throughout time, and
4 certainly since the early '80s forward.

5 Q. He references in ATSDR as you do, correct?

6 A. I don't think he references as I do. No.

7 Q. Maybe I asked that wrong.

8 Dr. Kopstein cites the ATSDR for Stoddard
9 solvent as a piece of authority that indicates
10 Stoddard solvent can contain less than 10,000 PPM?

11 A. Oh, no. Less than a thousand.

12 Q. 10,000.

13 A. The letter that he wrote to you, he's got
14 less than 1,000 to 10,000 parts per million.

15 Q. Right. And I'm representing to you that
16 the range of less than 10,000 parts per million
17 comes from an ATSDR document and the question for
18 you is, do you find that unreliable?

19 A. I don't find it unreliable, but I'll say
20 this now for about the seventh or the tenth time.
21 That it is a function of which article that you're
22 pulling the data from and the time frame which that

1 article is taken and what form of the product that
2 you're referring to.

3 Q. Kopstein also cites a Carpenter
4 publication, a Carpenter article, for the premise
5 that Stoddard solvent contains a thousand PPM. Do
6 you find that to be reliable?

7 A. Can I see the Carpenter article?

8 Q. I don't think that Carpenter article was in
9 your materials.

10 A. There's one on Stoddard solvent and I
11 believe it says 0.1 percent.

12 Q. Okay.

13 A. Can I see that stack?

14 Q. (Complies.)

15 A. Eyes are going.

16 Yes. It's 0.1 and it's also an article in
17 1975. So again, it goes to relevancy of the time
18 period.

19 Q. So 1975 Carpenter said that there's a
20 thousand PPM benzene in Stoddard solvent?

21 A. In that particular product, that is
22 correct.

1 Q. Okay. And then the ATSDR in 2000
2 references up to 10,000 PPM in Stoddard solvent?

3 A. Well, again, it's a variety. It's a number
4 of references. It's not independent research being
5 done by ATSDR. I believe that they even reference
6 Carpenter -- the very same Carpenter article.

7 Q. Even though on page 8 of your report you're
8 critical of Nicas for relying upon Kopstein data
9 which you find not relevant after 1980.

10 As we sit here today, you can't -- you
11 haven't brought Kopstein article nor have you looked
12 at the underlying articles upon which he relies on
13 such that you could give us an informed opinion as
14 to what you have to support your assertion in that
15 regard?

16 A. I've just -- I've given you an informed
17 position. I've showed you the data from the
18 relevant time period, what the levels are. I've
19 discussed my own experience and testing these
20 products a number of times, including Stoddard
21 solvent, mineral spirits and the testimony of the
22 chemist for Ashland who looked specifically at their

1 products.

2 Q. As we sit here today, you don't have
3 Dr. Kopstein's paper with you, correct?

4 A. No.

5 Q. And you don't have all of the references in
6 Kopstein's 2006 paper such that you could give us
7 your opinions on why each of those references and
8 the data upon which they rely are or are not
9 reliable? You can't do that for us right now, can
10 you?

11 A. No. That wasn't what I had prepared for in
12 developing my opinions today. Frankly, there was
13 just no relevance to work done by Kopstein.

14 Q. The work Kopstein did, which gives us an
15 indication of benzene content of the products, work
16 which Ashland apparently hasn't done or provided in
17 this case, you're telling me that Kopstein's
18 references in that regard are not relevant?

19 MR. PARKS: Objection to form.

20 THE WITNESS: I'm sorry. You've lost me.
21 I have no idea what work you said Kopstein has done
22 that Ashland did not do. I'm not sure what that is.

1 BY MR. PATTON:

2 Q. You said that Ashland -- I'm sorry. You
3 say -- your testimony -- let me start over.

4 Is it your position that Kopstein 2006
5 article is in no way relevant to the benzene content
6 of the Ashland products at issue in this case?

7 A. No. I would consider it not reliable in
8 any form to relate to the products that are at issue
9 in this case.

10 Q. Okay. And tell me again why that is?

11 A. Based on the literature that we have
12 reviewed here today, based on my experience in
13 testing similar products within the relevant time
14 frame and based on the testimony of the chemist for
15 Ashland.

16 Q. Besides the technical data sheets numbered
17 as Ashland/Wilson 3835-3942, Ashland hasn't provided
18 you any other relevant data which would tell you the
19 benzene content or likely or possible benzene
20 content of the products at issue or their
21 ingredients in this case, true?

22 MR. PARKS: Objection to form.

1 THE WITNESS: As we had discussed earlier,
2 I have no other documents. That's correct.

3 BY MR. PATTON:

4 Q. Did Ashland provide you Exhibit 3, which is
5 the Carpenter 1975 article that talks about benzene
6 and Stoddard solvent or did you pull that from your
7 own collection?

8 A. The latter.

9 Q. Did Ashland provide you with Exhibit 5, the
10 Carpenter -- another Carpenter 1975 article that
11 talks about benzene and toluene or did you pull that
12 from your own collection?

13 A. The latter.

14 Q. Your own collection?

15 A. Correct.

16 Q. Did Ashland provide you with Exhibit 4,
17 Carpenter's article about benzene and mixed xylene
18 or did you get that from your own collection?

19 A. The latter.

20 Q. This World Health Organization document,
21 Exhibit 2, it talks about benzene and Stoddard
22 solvents, right? Is this from your own collection?

1 A. Yes.

2 Q. Exhibit 1 talks about xylene and benzene
3 content of xylene according to the United States
4 Department of Health and Human Services. That's a
5 document you pulled from your own collection,
6 correct?

7 A. Yes.

8 Q. The references in Kopstein's article. He
9 has about 40 references in there that talk about, in
10 various ways, generally talk about benzene content
11 in various solvents. Did Ashland provide you with
12 any of those articles?

13 A. I have all of them and I hope you do
14 understand that the majority of those articles come
15 from, in large part, the same source document and
16 he's just repeating them over and over again. Maybe
17 you don't understand that, but you should be aware.

18 Q. I object to your full answer as completely
19 nonresponsive to my question.

20 Did Ashland provide you with any of the
21 articles that are cited as references in Kopstein's
22 paper 1 through 40, yes or no?

1 A. No. I have them all myself.

2 Q. Okay. And did you review each of those
3 articles and determine that all 40 of those articles
4 have absolutely zero relevance in helping you in
5 forming your opinions as to likely benzene content
6 of the Ashland solvents and ingredients at issue in
7 this case?

8 A. Yes. I've reviewed those in the past.

9 Q. And you feel those had no relevance on the
10 benzene content of that Ashland product, correct?

11 A. Yes.

12 Q. Have you ever been excluded from testifying
13 in a case?

14 A. No. Well, let me qualify. I was excluded
15 from testifying in a specific area having to do with
16 dose, but I was not excluded from testifying in that
17 case.

18 Q. Are you at all skeptical of Mr. Whitlock's
19 and Mr. Keenan's testimony regarding what they think
20 the benzene content of the solvents and ingredients
21 in this case might be?

22 A. No. I have no reason to be skeptical of

1 that.

2 Q. You're taking their word for it, correct?

3 A. Sure.

4 Q. Do you always take your client's word for
5 it on issues of scientific matters that are
6 undocumented?

7 A. Well, I don't start out by accusing them of
8 lying, but I do look for support documentation.

9 Q. Support documentation which was not
10 provided to you by Ashland expect for these
11 technical data sheets that we talked about, true?

12 MR. PARKS: Objection. Form.

13 THE WITNESS: The technical data sheets are
14 all that I have been provided.

15 BY MR. PATTON:

16 Q. Do you know for a fact that Ashland
17 conducted analytical testing?

18 A. Not other than the testimony of
19 Mr. Whitlock.

20 Q. Do you consider yourself an expert in
21 chemical engineering?

22 A. No.

1 Q. Do you consider yourself an expert in
2 chemistry?

3 A. I know more than the average bear so --
4 I've never been held up to be an -- a chemistry
5 expert, but part of industrial -- a big part of
6 industrial hygiene is chemistry. I worked in the
7 Laboratory of Chemistry for the National Institutes
8 of Health synthesizing synthetic chemicals and then
9 published a paper in that regard.

10 Q. Did you publish any papers criticizing
11 Dr. Kopstein's paper of 2006?

12 A. No.

13 Q. Did you write a letter to the editor
14 criticizing Kopstein's paper of 2006?

15 A. No.

16 Q. Why not?

17 A. Because others had already done that.

18 Q. McKey did, right?

19 A. There are at least one or two that have
20 done so.

21 Q. You cited McKey --

22 A. Correct.

1 Q. -- in your report, right?

2 A. Yes.

3 Q. McKey works for Exxon, correct?

4 A. I'm not sure who he works for.

5 Q. Would it surprise you to learn that McKey

6 works for Exxon?

7 A. No.

8 Q. Are you aware that the only letters that

9 were written to the editor criticizing Kopstein's

10 paper came either from Mr. McKey of Exxon or from

11 the American Chemistry Council?

12 A. I'm sorry. Those were the only ones?

13 Q. Correct.

14 A. Generally, you don't see letters to the

15 editor about published articles.

16 Q. Isn't that part of --

17 A. I'm not surprised that those are the only

18 ones, no.

19 Q. My question was, do you know that those are

20 the only ones?

21 A. Those are the only ones that I am aware of.

22 Q. And so the McKey letter covered everything

1 that you would have wanted to say about
2 Dr. Kopstein's paper had you chosen to write a
3 letter to the editor criticizing that work?

4 A. No. I don't know that everything -- and I
5 don't recall everything that he said, but that
6 everything that he -- all the things he said would
7 have covered the issues that are specific to this
8 matter.

9 Q. As I understand your testimony, Kopstein's
10 paper has no relevance to benzene content of
11 aromatic hydrocarbons from the period 1978 to 2006,
12 correct?

13 A. As it relates to this case, that is
14 correct.

15 Q. And what is the hitch about, As it relates
16 to this case? Is it because Whitlock --

17 A. Well, I'm here talking about a case which
18 there's an alleged exposure to Mr. Wilson from using
19 Ashland products. I don't want to live in a world
20 of generalities. I'm trying to be specific to the
21 issues in this case.

22 Q. But the Ashland products at issue in this

1 case contain those types of hydrocarbons which
2 Kopstein talks about in his paper?

3 A. Well, yes. They are defined as that sort
4 of process, but as we know -- as we've read today,
5 different processes, different companies would have
6 exhibited different levels of benzene in their
7 product over different periods of time.

8 Q. And because, in your mind, what Kopstein --
9 I'm sorry -- what Whitlock says and what Dr. Keenan
10 says, what they say is right so Kopstein's article
11 is no longer relevant, correct?

12 A. No. That's only a portion of it. As I've
13 said before, it's also based on the papers that
14 we've talked about here today and my own experience
15 at looking at these products. Again, we're talking
16 about toluene, xylene. We know they contain
17 benzene.

18 Q. Do you think it is ethical for you, as an
19 industrial -- well, do you hold yourself out as an
20 industrial hygienist?

21 A. Yes.

22 Q. Do you believe it is ethical of you to

1 selectively ignore levels of benzene reported in the
2 peer-reviewed literature such as the 40 references
3 in Dr. Kopstein's paper?

4 MR. PARKS: Objection to form.

5 THE WITNESS: Well, I don't think it's
6 right to ignore it and I -- I don't want to -- what
7 you have described is not what I've done. I did
8 look at it. I evaluated it and found that it's not
9 relevant.

10 BY MR. PATTON:

11 Q. And as we sit here today, you're not
12 prepared to walk through that and tell me why each
13 of the 40 references is not relevant?

14 A. No. That's at least another full day of
15 deposition and I'm not prepared to do that.

16 Q. You're prepared to criticize Dr. Nicas for
17 relying on Kopstein, but you can't tell me
18 specifically what is wrong with Nicas' reliance on
19 Kopstein in that regard, true?

20 A. No. I have told you specifically a number
21 of times now.

22 Q. You go on to say in the next paragraph of

1 your report, near the middle, that using
2 unrealistically high benzene contaminant levels, you
3 think it's unrealistically high to estimate benzene
4 content at the levels Nicas -- Dr. Nicas estimates
5 them at?

6 A. Yes.

7 Q. And using other extreme values, those are
8 the extreme values like air flow rate and
9 ventilation, correct?

10 A. Yes.

11 Q. And you say those would exaggerate the
12 modelled estimates?

13 A. Correct.

14 Q. So you believe Dr. Nicas' methodology is
15 unrealistic, extreme and exaggerated?

16 A. I think the input parameters that are in
17 there present a scenario that is not within the
18 range of accurate values.

19 Q. Okay. And tell me again what are the input
20 values that you used in forming your opinions?

21 MR. PARKS: Objection. That's -- that's --
22 he's gone over that at length. I mean, if he can

1 summarize in response to your question, but that's
2 asked and answered in detail.

3 THE WITNESS: I've used less than .1
4 percent. I've used 20 to 50 -- I'm sorry -- 30 to
5 50 feet per minute and I've used air changes per
6 hour of one and one to two, two-and-a-half.

7 BY MR. PATTON:

8 Q. Then when you do the math, based on the
9 numbers that you're using, tell us again what the
10 levels of benzene exposure arrived at?

11 A. Well, it's one to two orders of magnitude
12 below that presented by your industrial hygiene
13 expert.

14 Q. What is that in numbers?

15 A. 1.8 in terms of does, PPM years to less
16 than 0.18 PPM years.

17 Q. Where is that in your report?

18 A. It's not in my report.

19 Q. Why not?

20 A. Because I just didn't put it in there. I'm
21 sorry. In the report, if you go to page 6 in the
22 very last paragraph, Using the conservative

1 estimate.

2 Q. Yes.

3 A. That is where that defines that.

4 Q. Okay. And you have no math to support that
5 opinion at the bottom of page 6, correct?

6 A. Correct. I'm just, again, using your --

7 MR. PARKS: Objection to form.

8 MR. PATTON: Did you get where he said
9 "correct" in the front of that answer?

10 THE REPORTER: Yes.

11 MR. PARKS: Are you asking is there math at
12 the bottom of page 6 or is there math that supports
13 the opinion at the bottom of page 6?

14 MR. PATTON: Let me start again.

15 BY MR. PATTON:

16 Q. Mr. Spencer, where is the math that
17 supports your opinion at the bottom of page 6, for
18 the paragraph, Using a conservative estimate?

19 A. The math is basically in a spreadsheet
20 model that your industrial hygiene expert utilized
21 and I just plugged in the parameters I just
22 described for you.

1 Q. So you made a spreadsheet generally going
2 off of Dr. Nicas' model? You plugged in your own
3 numbers, arrived at conclusion in numbers, wrote
4 this paragraph at the bottom of page 6 and threw
5 away your calculations, correct?

6 MR. PARKS: Objection to form.

7 THE WITNESS: I didn't throw them away. I
8 simply didn't save them because I am also waiting
9 for more information. I understand that someone
10 from the employer is going to be deposed. My hope
11 was that it would even further and more clearly
12 define the input parameters for that.

13 BY MR. PATTON:

14 Q. Okay. So if the employer --

15 A. Even a worst case scenario, as I calculated
16 it, I came up with the values that are stated here
17 in the report and what I described to you earlier.

18 Q. So if the employer give us air flow rates,
19 air change per hour, ventilation rates, then you
20 could go back and redo your spreadsheet, right?

21 A. Well, it may be other information as well
22 that defines what we had local exhaust ventilation

1 or the building was built as a printing facility and
2 built in accordance with building codes. Those
3 sorts of things I'd be looking for.

4 Q. What benzene content would you plug in if
5 you're able to go back and do you calculations?

6 A. Well, I would do a worse case analysis and
7 put in less than .1 percent. I'd start there. So
8 maybe .09 percent.

9 Q. 900 PPM?

10 A. Yes. And then I would also use some of the
11 values as the average values reported in the current
12 literature.

13 Q. You would use values, average values from
14 the current literature excluding the 40 references
15 in the Kopstein article, true?

16 A. I'd have to look at all the references to
17 see whether to exclude them all. I can't say that
18 right now.

19 Q. The bottom of page 7 of your report. If
20 you could read -- you don't have to read it aloud,
21 but take a look at the paragraph starting, Based on
22 a more comprehensive review.

1 It continues to the next page.

2 A. Yes.

3 Q. What is the study by -- the peer-reviewed
4 article by Dr. Nicas that you're being critical of?

5 A. It was a paper that he recently had
6 published I think had to do with solvents in paints,
7 the toluene, xylene. I think maybe, perhaps, some
8 of the same solvents that are at issue here. He was
9 a co-author on that paper.

10 Not word one about benzene in that paper.

11 I -- if he truly believes that benzene was such a
12 significant exposure in these types of solvents, I
13 was just curious why he would not have presented
14 that information in a peer-reviewed paper that he
15 just was co-author on.

16 Q. Do you have a list of your publications?

17 A. Yes, on my CV.

18 Q. Have any of those publications dealt with
19 benzene?

20 A. Yes.

21 Q. Which one?

22 A. The one I did with Mark Nicas.

1 Q. Is that the only one?

2 A. Yes -- actually, no. Another one I did on
3 modelling, I think, included some benzene data as
4 well. Sorry.

5 Q. Who did you author that one with?

6 A. Another industrial hygienist in my office.

7 Q. Who is that?

8 A. Mark Plisko. P-L-I-S-K-O.

9 MR. PATTON: Let's take a short break.

10 Off the record.

11 THE VIDEOGRAPHER: Going off the record at

12 2:03.

13 (A recess was taken from 2:03 p.m. until
14 2:17 p.m.)

15 (Spencer Deposition Exhibit Numbers 17
16 through 19 were marked for identification.)

17 THE VIDEOGRAPHER: We're back on the record
18 at 2:17.

19 BY MR. PATTON:

20 Q. Dr. Spencer -- I'm sorry. Mr. Spencer,
21 Exhibit 17 is a true and correct copy of your list
22 of testimony for the last four years and you believe

1 that might be even longer than four years, correct?

2 A. Yes. I know I saw some -- this is probably
3 more than ten years old.

4 Q. Okay.

5 A. Not all of them. There's -- there's a
6 mixture and I guess it needs to be cleaned up.

7 Q. We marked as Exhibit 18 the curriculum
8 vitae for you which was produced by your lawyers in
9 this case and filed in this case and then you handed
10 me an updated CV and this is Exhibit 19, correct?

11 A. Yes.

12 Q. What the difference between the old CV and
13 the new CV?

14 A. Primarily, presentations that I've given,
15 publications that I have done.

16 Q. Okay.

17 A. Some other professional development course
18 work, a certification, another certification that
19 I've gotten.

20 Q. Your current occupation is with
21 Environmental Profiles, Inc., correct?

22 A. Yes.

1 Q. And is that the company through which you
2 do your expert consulting work in the context of
3 litigation, and perhaps other matters?

4 A. Yes.

5 Q. Okay. How many people work for
6 Environmental Profiles, Inc.?

7 A. I think there's 14.

8 Q. And do the other 13 people also serve as
9 experts as you do or is there an administrative
10 staff in that?

11 A. No. They do other -- they are primarily
12 industrial hygienists and environmental people but
13 they do not do testifying.

14 Q. Do you maintain an office or do you work
15 from your home?

16 A. Office.

17 Q. And Exhibit 17 is a list of your cases that
18 you testified in either at deposition or trial,
19 correct?

20 A. Yes.

21 Q. And I totaled up approximately 107 cases
22 from this list. How many cases of these or if I

1 represented to you that I counted -- let me start
2 over.

3 When we were on the break you and I went
4 through this list of cases that you've testified in,
5 correct?

6 A. Yes.

7 Q. And we marked what we believed or you
8 believed were the ones that involved benzene,
9 correct?

10 A. Yes.

11 Q. Okay. And I'll represent to you --

12 A. Well, you marked them, but yes.

13 Q. You advised me which ones they were and we
14 talked about it in some instances?

15 A. You advised me on more of them that I
16 didn't recall, but I believe you were correct.

17 Q. Okay. I'm showing from this list that
18 you've testified in 20 benzene cases before this
19 one. Does that sound correct based on your memory?

20 A. Over the last ten or so years, yes. I
21 think that sounds about right.

22 Q. Have you testified in any of these benzene

1 cases that the worker or the person claiming
2 exposure was exposed to benzene in dangerous levels?

3 A. Not to -- not to benzene to dangerous
4 levels, no.

5 Q. Have you ever testified in a case for a
6 plaintiff in a benzene matter?

7 A. Well, benzene was a constituent in a
8 plaintiff's case that I testified in, but I did not
9 testify that it was dangerous to them.

10 Q. Is that case on this list?

11 A. Yes.

12 Q. Which one is it?

13 A. It's Hall versus Avalodis (phonetic)
14 Painting.

15 Q. What did that case involve?

16 A. Several painters applying paint and
17 solvents.

18 Q. And what was your general opinions in that
19 case regarding benzene?

20 A. That the -- the employer in that case had
21 exposed -- had created an environment that exposed a
22 group of individuals to extraordinarily high levels

1 of products such as xylene, toluene, I think Naptha
2 was involved such that it would have been harmful to
3 them.

4 Q. So they were exposed to benzene in harmful
5 levels by virtue of working with xylene and Stoddard
6 solvents, et cetera, as ingredients in paint under
7 what you found to be bad working conditions?

8 A. Terrible.

9 Q. Okay.

10 MR. PARKS: Just to clarify. You indicated
11 they were ingredients in the paint. I think he
12 mentioned solvents, too. They were working with
13 paints and solvents.

14 THE WITNESS: I would have classed it as an
15 ingredient in the paint. I mean, the solvents help
16 make up the paint.

17 MR. PARKS: Okay.

18 THE WITNESS: There were some cleaning
19 solvents as well, but it was more of what was being
20 applied with the paint.

21 MR. PARKS: Okay.

22 THE WITNESS: And again, while they are all

1 products that contain trace levels of benzene in my
2 view, benzene was not the issue there. It was the
3 other exposure to the primary constituents of those
4 products that present it had harmful exposure to the
5 individuals.

6 BY MR. PATTON:

7 Q. What kind of diseases did the plaintiffs
8 have in the Hall case?

9 A. As I recall, I mean, there was a mixture of
10 issues because they were several plaintiffs. I
11 don't know, five or six plaintiffs in the case and I
12 think many of them were central nervous system
13 disorders.

14 Q. Do you remember or can you tell us
15 approximately how many of these cases involved
16 Ashland?

17 A. I think we saw two.

18 Q. And that would be the Milkey case?

19 A. Milkey and Conrad was another one.

20 Q. What was the Conrad case about?

21 A. I could not tell you.

22 Q. You testified at trial in that case?

1 A. Is it checked off that I did so?

2 Q. Yes, sir.

3 A. Then I likely did. I just don't
4 specifically recall.

5 What page is that on?

6 Q. Page 3.

7 A. Again, I -- that was probably five or six
8 years ago. I just don't specifically recall the
9 issues.

10 Q. Page 5 of this list, in the middle, you
11 list the Douglas case versus Ashland. Did you work
12 for Ashland in that case?

13 A. Yes.

14 Q. What kind of products were at issue?

15 A. I do not recall the specific details of
16 that. I would have to go back and look.

17 Q. In the other Ashland cases, were you
18 provided any documents from Ashland which talked
19 about the benzene content in some of the aromatic
20 hydrocarbon-type ingredients that were talked about
21 today?

22 A. Not that I recall.

1 Q. Has Ashland ever provided you with
2 documents bearing on the benzene content of its
3 xylene, Stoddard solvent, Naptha, et cetera?

4 MR. PARKS: Objection to form.

5 THE WITNESS: Again, I do not know
6 specifically, but, you know, it causes me, perhaps,
7 to go back and see if I still -- I'm not sure I
8 still have those files, but if I do, to look for
9 that kind of information.

10 BY MR. PATTON:

11 Q. How much are you being paid for your time
12 in this case?

13 A. \$245 an hour. Wasn't that one of our first
14 questions today?

15 Q. Do you have any documents reflecting how
16 many hours you've spent on this case?

17 A. I have billing records which gives some
18 indication.

19 Q. Who else -- well, first of all, did you
20 draft the report yourself?

21 A. Yes.

22 Q. And did anyone help you in reviewing

1 materials, summarizing materials, typing, drafting,
2 revising, gathering literature, anything of that
3 nature?

4 A. Yes.

5 Q. Who is that?

6 A. It could have been a variety of people.
7 Cindy Richard, Mark Neely, Mark Plisko, and there
8 may have been others.

9 Q. And it looks like from these invoices
10 somebody at your office bills out at \$195 an hour.
11 Somebody bills out at \$240 an hour and somebody
12 bills out at \$30 an hour. Does that seem right?

13 A. I don't know what the \$240 an hour is or
14 who that is and the \$30 may have been some
15 administrative function.

16 Q. Can you tell us by looking at these
17 invoices which I will mark as Exhibit 20, which
18 time -- which time you actually spent on the case as
19 opposed to another member of your staff?

20 A. Well, my rate is \$245 an hour. So wherever
21 you see that, that's where I billed -- at least
22 billed time to the case.

1 Q. So you first looked at this case on
2 July 31st; is that right?

3 A. No. That's the invoice date.

4 Q. Yes.

5 A. So it would have been sometime prior to
6 that invoice date.

7 Q. Okay. Do you know when you were first
8 retained in this case?

9 A. I do not know the specific date. I know it
10 was sometime ago.

11 Q. Per this letter, would it be June 12th?

12 A. Well, it would have been sometime before
13 June 12th, obviously. I just don't know how it was,
14 whether it was in May or April.

15 (Spencer Deposition Exhibit Number 20 was
16 marked for identification.)

17 MR. PARKS: There's a letter from May right
18 there. I don't know what those letters are.

19 BY MR. PATTON:

20 Q. Your report is dated July 5th, correct?

21 A. Yes.

22 Q. Okay. Did you draft this report yourself?

1 A. Yes. You just asked me that a moment ago.

2 Q. Did you type this?

3 A. No. Well, I did parts of it, yes, and then
4 I would make changes and have administrative folks
5 make editorial changes.

6 Q. Who have you spoken to at Thompson & Knight
7 regarding this case besides Mr. Parks?

8 A. Jonathan Shoebottom.

9 Q. And when did you speak with him?

10 A. Probably originally. I can't remember
11 whether I spoke with Mr. Parks or Mr. Shoebottom
12 originally when I was asked to look at this.

13 Q. There's some time in here billed for
14 preparation materials for meeting and this is the
15 invoice dated 8/31. What meeting was that?

16 A. Probably an internal meeting.

17 Q. I want to go back to your report a little
18 bit and I want to go through the references in your
19 report starting at Reference 28.

20 What are the various state and federal
21 occupational safety and health legislation and/or
22 regulations that you're relying upon in forming your

1 opinions in this case?

2 A. One is the OSHA, the preamble, the Benzene
3 Standard and the Benzene Standard itself. It's the
4 Hazard Communication Standard. I think those three
5 items and it's just generally the regulations in
6 general as it relates to employer responsibilities.

7 Q. The meetings that you would have had in
8 your office, the internal meetings, did you have
9 internal meetings about this case?

10 A. Yes.

11 Q. Did you take any notes from those internal
12 meetings?

13 A. No. I mean, any of the notes would have
14 been reflected in the report that I wrote.

15 Q. Did any of the others working on this case
16 in your office take notes?

17 A. Not that I'm aware of. Any notes would
18 have been part of the file.

19 Q. So you all had a meeting and nobody took
20 any notes?

21 A. Well, again, those notes -- they may have
22 taken notes that are reflected in this report and I

1 don't -- I don't keep everything.

2 Q. So you threw away some of the documents
3 that underlie your opinions in this case?

4 A. No. No.

5 Q. But we don't have the notes today, right?

6 A. Well, yes. I have --

7 MR. PARKS: Objection to the form.

8 THE WITNESS: I have summary notes I've
9 taken from the depositions. It includes more than
10 that.

11 (Spencer Deposition Exhibit Number 21 was
12 marked for identification.)

13 BY MR. PATTON:

14 Q. Mr. Spencer, I've marked as Exhibit 21 what
15 looks to be an EPI Project Summary Data Sheet; is
16 that correct?

17 A. Yes.

18 Q. And what is this document?

19 A. It's basically a summary of all the
20 materials I reviewed, all the, basically, legal
21 documents that were provided, depositions and
22 interrogatory answers and so forth.

1 (Spencer Deposition Exhibit Number 22 was
2 marked for identification.)

3 BY MR. PATTON:

4 Q. I'm marking as Exhibit 22 a summary of
5 Charles Wilson's deposition on August 25th and then
6 again on August 10th -- I'm sorry -- on August -- I
7 think the dates is wrong but what is this document?

8 A. These are summary notes from the deposition
9 of Mr. Wilson and then Mr. Whitlock.

10 Q. Do you all always summarize the depositions
11 that you get?

12 A. No.

13 (Spencer Deposition Exhibit Number 23 was
14 marked for identification.)

15 BY MR. PATTON:

16 Q. And I'll mark as Exhibit 23 the deposition
17 summary of Mr. Adcock. Is this something that you
18 prepared?

19 A. Yes.

20 Q. The attorneys didn't prepare this for you?

21 A. Correct.

22 (Spencer Deposition Exhibit Number 24 was

1 marked for identification.)

2 BY MR. PATTON:

3 Q. Exhibit 24 is the continuing deposition of
4 Mr. Adcock. Same thing, right?

5 A. Yes.

6 Q. Nobody summarized Mr. Keenan's deposition?

7 A. No.

8 Q. Nobody summarized Mr. --

9 A. I looked at it but it just wasn't a whole
10 lot to put to paper.

11 Q. There wasn't enough in Whitlock's and
12 Keenan's depositions to put to paper?

13 A. No. No. We just looked at the notes for
14 Whitlock.

15 Q. No. That was Adcock.

16 A. No. It's in there.

17 MR. PARKS: I guess that's the first one.

18 THE WITNESS: He's got it. I think you
19 have it in your left hand.

20 MR. PATTON: I'll mark Whitlock Summary as
21 Exhibit 25.

22 (Spencer Deposition Exhibit Number 25 was

1 marked for identification.)

2 BY MR. PATTON:

3 Q. And do you have a summary of Mr. Keenan's
4 deposition?

5 A. No.

6 Q. Do you know for certain or we're just not
7 finding it so you don't -- so you say no?

8 A. The first.

9 Q. You know for certain that there's no
10 summary of Mr. Keenan's deposition?

11 A. Correct.

12 (Spencer Deposition Exhibit Number 26 was
13 marked for identification.)

14 BY MR. PATTON:

15 Q. And then Exhibit 26, this is looks like an
16 inventory from your office dated September 6th,
17 2007, which summarizes all of the materials you've
18 reviewed?

19 A. Yes. I do not know that that includes --
20 can I see that -- all the references that we
21 discussed. This may be the materials that were sent
22 to me. These are the documents that were sent to

1 me, as best I can tell.

2 Q. Okay. I want to go back to your report
3 starting at page 11 and I want to walk through some
4 of the references in your report and talk about how
5 they bear on your opinions in this case. First of
6 all, Number 32, the Burroughs article. What is the
7 importance of that publication as it bears on your
8 opinions?

9 A. I don't -- I have to pull that article.

10 Q. Here it is.

11 A. I think originally -- I'm thinking of a
12 rights issue here. There was some issue with
13 blending a product with diesel.

14 Q. Correct.

15 A. And I think this addressed some of the
16 benzene contents of diesel, diesel fuel.

17 Q. What else besides that issue is addressed
18 in the Burroughs article?

19 A. I don't believe there's anything else.

20 Q. Where is that discussed in your article --
21 I'm sorry -- in your report?

22 A. I'm not sure that I even discussed it. I

1 just think it was a reference because I wasn't sure
2 where that particular issue was going, that the
3 employer's using diesel fuel.

4 MR. PATTON: Okay. Let's go off the
5 record.

6 THE VIDEOGRAPHER: Off the record at 2:39.

7 (Spencer Deposition Exhibit Numbers 27
8 through 41 were marked for identification.)

9 THE VIDEOGRAPHER: Back on the record at
10 2:56.

11 BY MR. PATTON:

12 Q. Mr. Spencer, during the break we went
13 through or I went through the rest of your file and
14 chose which materials I desired to mark as Exhibits
15 and I went ahead and marked Exhibits 27 through 41
16 and I'm going to mark a couple of other things as we
17 continue, but for now, I want to talk about these in
18 a little more detail.

19 First of all, I marked as Exhibit 27 the
20 Burroughs article or Burroughs's publication and you
21 talked about it earlier today. What is the bearing
22 of that in arriving at your opinions?

1 A. Well, I think we had talked about this just
2 before the break. This was the diesel fuel and the
3 benzene content of the diesel fuel.

4 Q. Right. Right. Exhibit 28 is the DeNardi
5 reference which is cited as 34 in your report. What
6 is the importance of that article bearing on your
7 opinions?

8 A. This is a standard -- it's -- excuse me,
9 chapter from a Standard Industrial Hygiene text that
10 kind of defines the practices and procedures for
11 evaluating exposures.

12 Q. What is it in there that specifically deals
13 with your opinions either expressed in your
14 deposition today or written in your report?

15 A. Just the process that one follows in
16 evaluating exposures.

17 Q. Is that -- well, first of all, does that
18 document have anything in it that would support some
19 of your criticisms of Dr. Nicas and his methods?

20 A. Well, no. Again, I don't know that I was
21 criticizing his methodologies. I was criticizing
22 the input variables. So I -- I don't think that it

1 addresses the issue you just covered.

2 Q. Okay. Exhibit 29, Evans article about a
3 printing plant in Cincinnati, Ohio in 1975 and this
4 is cited as 35 in your report, correct?

5 A. Yes.

6 Q. And what is the importance of that document
7 as it bears on your opinions in this case?

8 A. This was in the printing plant for GSA and
9 one of the constituents they looked for was benzene
10 and found none.

11 Q. They found benzene in the printing shop?

12 A. They did not. They looked for it but it
13 was not detected.

14 Q. Okay. Any other value in that paper as it
15 bears on your opinions?

16 A. No.

17 Q. Other than it didn't find benzene or it
18 didn't seem to look for benzene?

19 A. No. It looked for benzene. It was one of
20 the -- it said samples were taken for other things
21 including benzene. All results were negative.

22 Q. Okay. So whatever solvent was being used

1 in that print shop didn't have any benzene in it?

2 A. No.

3 Q. At least within the detection --

4 A. No. No. None of the air samples. They
5 believed, based on the solvent type, that there --
6 benzene may have been present, but that the air
7 samples found no benzene.

8 Q. Did they make any estimates of the benzene
9 content of the solvent types?

10 A. Let's see. It says small amounts of
11 benzene and perchloroethylene were used to clean the
12 rollers on the multi-lift machines. Seems like they
13 were using benzene.

14 Q. And document or Exhibit 30 is cited as
15 Kalkowski and it's Number 36 in your report. What
16 is the importance of that article on your paper or
17 on your report for your opinions in this case?

18 A. It was -- this was a paper that I thought
19 may have been useful in being able to estimate
20 exposures based on the amounts of material being
21 used and I think they used the toluene-based product
22 as an example.

1 Q. Anything else?

2 A. No.

3 Q. Exhibit 31 is the Kiel and Nicas article
4 cited as 37 in your report. What is the bearing of
5 that article on your opinions in this case?

6 A. It is a method for predictive modelling of
7 potential exposures and I think this was useful, in
8 particular -- it was a similar -- I can't say it was
9 the exact same process.

10 I believe your industrial hygiene expert
11 used it in determining exposure for Mr. Wilson.

12 Q. And Exhibit 32 is by the lovely
13 Kristin Svenson and this is cited as 38 -- Number 38
14 in your report. What bearing does that have on your
15 opinion ins the case?

16 A. This paper discuss it is variables that
17 influence the out come to have the assessment of
18 exposure.

19 Q. Is that it?

20 A. That's the primary one that I can recall at
21 this point.

22 Q. And what about 33. This is the Leung,

1 L-E-U-N-G, cited as number 39 in your report, what
2 bearing does that have on your opinions in this
3 case?

4 A. This is a description to have the effect of
5 ventilation on managing VOC, exposures.

6 Q. That's it?

7 A. Yes.

8 Q. And Exhibit 34, this is the McKey letter to
9 the editor of the Journal of Occupational and
10 Environmental Hygiene, correct?

11 A. Yes. I believe this is what we discussed
12 earlier.

13 Q. Okay. And you discussed that the primary
14 criticisms of Kopstein's paper and then the values
15 found in his paper are effectively rebutted by
16 McKey's paper, correct? McKey's letter?

17 A. Well, again, I think he, McKey, does
18 provide some -- certainly provides criticism and
19 some of this is relevant to this particular case,
20 but it's not the end all and be all for that -- for
21 my own criticism.

22 Q. Do you agree with everything in McKey's

1 paper?

2 A. I don't know that I've read it for that --
3 determine -- or I can't say that I agree with
4 everything in here. I'd have to -- I mean, I'd be
5 happy to read through it. I just haven't looked at
6 it in its full context here lately.

7 Q. Well, let me ask you this. Where in
8 McKey's paper does he report actual analytical data
9 to back up the numbers of the benzene content of the
10 products we've been talking about? Does he provide
11 any analytical data in that paper?

12 A. Well, he talks about Carpenter who we
13 talked about and one of his studies where he talks
14 about level of 0.1 percent and he talks about the
15 analytical technique that he used.

16 He talks about seeing benzene levels using
17 GC/flame ionization detection methods in a Varsol
18 product which is -- was their version of Stoddard
19 solvent and that those values, I think, by 1978 were
20 about 17 parts per million benzene.

21 Q. But the -- Varsol, which is like a Stoddard
22 solvent?

1 A. Correct. That was their version of it.

2 Q. Does he have any analytical data or cite for
3 that?

4 A. Well, yeah. He talks about the -- that's
5 what I just described, the analytical data using GC
6 flame ionization detector and 17 parts per million
7 in the liquid. So in other words, .0017 percent and
8 he has a table from 1975 to 1988 for benzene levels
9 in Varsols using the same method showing
10 variations.

11 Q. Exhibit 35 is a Mulhausen,
12 M-U-L-H-A-U-S-E-N, article. Again, it looks like it
13 about occupation exposures. This is marked as
14 Exhibit 35 but it is citation 41 in your report.

15 A. Again, it talks about the basic process for
16 evaluating exposures and I, as an industrial
17 hygienist or any industrial hygienist, should use to
18 evaluate the exposure.

19 Q. Is there anything in here which is in stark
20 contrast to Dr. Nicas' method?

21 A. No.

22 Q. The other similar articles that talk about

1 industrial hygiene methods and exposure modelling
2 and things of that nature, do you believe any of
3 these documents cited in your report are otherwise
4 relied upon in your opinions as marked as exhibits
5 are in stark contrast to Dr. Nicas' methodologies?

6 A. No. As I have repeatedly said, I do not --
7 I'm not in disagreement with the methodology that he
8 used. It is the input variables that -- it's how
9 much salt or sugar you put into the pie and what
10 kind of taste you get out of it.

11 Q. Okay. Exhibit 36. What is the value of
12 this article? This is a Wilson article about
13 exposure to VOCs in the vehicle repair industry.

14 A. This was an article we discussed earlier
15 where, I guess, your industrial hygiene expert was a
16 co-author of and he talks about various -- similar
17 types of solvents being utilized and other solvents
18 that have been associated with trace levels of
19 benzene, yet this paper makes no mention of benzene
20 as a -- an exposure variable in this assessment.

21 It just seemed in contrast to what his
22 opinions are in this case and the types of exposures

1 he would anticipate seeing from solvents that
2 contain trace levels of benzene, and yet there's no
3 mention of benzene in this particular publication.

4 Q. Okay. Four other people have their name on
5 this article besides Dr. Nicas, right?

6 A. Sure.

7 Q. And you don't know what creative process
8 went into, hey -- hey, coauthors, which chemicals
9 are we going to focus on. You don't know that,
10 right?

11 A. I don't know. I have an understanding
12 having written several papers, but I do know if I
13 was writing a paper about significant exposures from
14 a particular solvent and I felt benzene was of
15 consequence, either I'd remove my name from the
16 paper if you're not going to include it or make sure
17 that it is, in fact, included.

18 Q. Exhibit 37 is the Wadden article about
19 press operations. What is the importance of that as
20 it bears on your opinions?

21 A. This paper discussed a couple of different
22 things. One was the emission rates of various

1 volatiles and, I believe, ratios of various product
2 constituents and it talked about the ventilation in
3 these types of facilities.

4 Q. And is any of that in contrast to
5 ventilation assumptions or estimates made by
6 Dr. Nicas?

7 A. No. This is kind of a -- this is something
8 of a different issue. I mean, the toluene, as they
9 describe here, comprised more than 90 percent
10 of the -- this was inks and solvents.

11 But again, I do not believe -- this was a
12 more current paper, 2001, and they are not -- they
13 have reported some benzene concentrations as a part
14 of -- as a percentage to have the total emissions
15 and where you have toluene at 93 percent,
16 90 percent, you have benzene at .2 percent.

17 So it demonstrated that benzene is a small
18 fraction of the over all emission, similar to what
19 we've been discussing today.

20 Q. Of the NIOSH, HETAs or HHEs, to have Wadden
21 article or some of the other print shop or
22 printing-industry specific references in your

1 report, do any of those pieces of authority, so to
2 speak, tell us which ventilation rate or which air
3 exchange rates Dr. Nicas should use or you should
4 use in your exposure modelling?

5 For instance, you mentioned that Dr. Nicas
6 used -- uses 12 feet per minute for air flow rate,
7 right?

8 A. Yes.

9 Q. And he used .5 cubic feet per minute per
10 square foot for --

11 A. No.

12 Q. What was that part of?

13 A. That was part of the ASHRAE standard that
14 defines what a printing -- a building utilizing a
15 printing operation as a minimum fresh air makeup
16 should be providing.

17 Q. Okay. Did any of the pieces of the
18 authority specific to printing industry, whether
19 they be the NIOSH reports or the other article we've
20 talked about, indicate what type of fresh air rate
21 or air flow rate one should use when modelling for
22 this type of case?

1 A. Those documents would not indicate that.
2 They simply were measuring based on the condition
3 that is existed in those facilities.

4 Q. But those documents --

5 A. That information -- I'm sorry -- that
6 information that you're looking for was in the
7 ASHRAE document.

8 Q. Okay. So the ASHRAE document tells us
9 which ventilation rates should be used for -- strike
10 that. I'm trying to ask this right even though I
11 have it all in my head.

12 The ASHRAE documents talk about what
13 ventilation rates should be like in a bowling alley,
14 in a hotel room, in a print shop, correct?

15 A. Yes.

16 Q. Okay. Do any of the publications on the
17 table with us today cited in -- or cited in your
18 literature -- cited in your report, tell us what
19 ventilation rates those investigators found or
20 measured or used in modelling or should use in
21 modelling for a case like the Wilson case?

22 A. Well, none of them discuss modelling as

1 you're describing. These are actual air
2 measurements in facilities. Some of the papers do
3 describe the ventilation rates at any particular
4 facility, but I'm not sure that was a facility that
5 was similar to that that Mr. Wilson described
6 working in.

7 Q. I guess the point of my question, and I'm
8 just trying to understand your opinions as they
9 relate to -- or as they contrast with Dr. Nicas'
10 opinions an methodology. Like, when you said,
11 Dr. Nicas uses a 12-feet-per-minute air flow rate,
12 right?

13 A. Yes.

14 Q. And you said that you would use a
15 30-to-50 feet-per-minute air flow, right?

16 A. Correct.

17 Q. Of the literature cited in your report or
18 otherwise which we've discussed today, is there any
19 indication in that literature what the actual air
20 flow rate was in the investigations or if we turned
21 to the industrial hygiene sort of guidelines, do any
22 of those tell us why Dr. Nicas is wrong and why

1 you're assumption or 30 or 50 feet per minute is
2 right?

3 MR. PARKS: Objection.

4 BY MR. PATTON:

5 Q. Do you understand my question?

6 A. I believe so. I don't believe that there
7 is -- I'd have to go through all these studies again
8 to say whether it specifically -- I can't think of a
9 specific, quantitative set of data that answers that
10 question for you, that says affirmatively that there
11 is something there. Okay.

12 What I said earlier on today was that based
13 on the values that were used in -- by the
14 plaintiff's IH expert for determining benzene
15 concentrations, if you apply those values to the
16 other primary constituents that were at issue here,
17 toluene, xylene, Naptha, Stoddard solvent, then your
18 values for those constituents are going to be
19 extraordinarily high.

20 Q. I understand your disagreement with
21 Dr. Nicas' selection of benzene amount. We talked
22 about that at length, but when I look at your report

1 on page 8, we talk about, you know, utilizing
2 unrealistically high -- unrealistically high benzene
3 contaminant levels in the product.

4 I understand where you stand on that and I
5 think we've talked about what you have to support
6 your opinions in that regard, but you say other
7 extreme values that would exaggerate modelled
8 estimates and that gets us into talking about things
9 like air flow rate, right?

10 A. Yes.

11 Q. Ventilation rate, right?

12 A. Or air exchange rates.

13 Q. Air exchange rates. Okay. We have air
14 flow. We have exchange rates. What other inputs
15 are there?

16 A. That's primarily it.

17 Q. Okay.

18 A. We had discussed earlier so I felt were
19 problematic.

20 Q. Okay. Just that you feel they are
21 problematic and just as you feel that Dr. Nicas'
22 benzene contaminant level estimates, just as you

1 disagree with those, you cited to me and you've
2 explained the authorities supporting your opinions.

3 I want to know if any of this authority
4 referenced in your report that we've talked about
5 supports your position that, for instance,
6 12-feet-per-minute air flow rate by Dr. Nicas is
7 wrong and your estimate of 30 to 50 feet per minute
8 right.

9 Does any of this paper tell us that?

10 A. The ASHRAE standards which define what's
11 supposed to occur in a facility that is operating a
12 printing business.

13 Q. Okay.

14 A. Those documents are in that stack.

15 Q. What else?

16 A. I think that's -- the most -- the -- with
17 regards to the materials that I've turned over today
18 that what presents it. I think we talked about my
19 experience in measuring air speed rates in a variety
20 of environments, including print shops.

21 Q. Okay.

22 A. And that was the basis for why I had the 30

1 to 50 feet per minute. I mean, it's really a low
2 value.

3 Q. Okay. So if we turn to Exhibit 38 and this
4 is the ASHRAE, Inc. 1996?

5 A. There should be another, yes.

6 Q. If we turn to Exhibits 38 and 39, these are
7 the ASHRAE documents which you reference and I'm
8 sure will be copied, both sides. These tell us what
9 the ventilation rate should be in a print shop; is
10 that right?

11 A. It give it is minimum values for
12 ventilation, that is correct.

13 Q. Okay. And so, for instance, on 38 it says
14 that if I go into a locker or dressing room then
15 the -- was does it tell us about the ventilation
16 rate for a locker or dressing room?

17 A. Well, the you're -- you have a minimum of
18 four liters per second per person in that room or
19 1.35 liters per second per square meter in that
20 building.

21 Q. Okay. What does it tell us about print
22 shops?

1 A. Printing is 2.5 liters per second per
2 person.

3 Q. And doesn't that say "computer room" and
4 then "excluding printing area"?

5 A. Correct.

6 Q. So this doesn't really tell us what it --
7 wait. Above it it says "photocopy, printing rooms."

8 A. Printing rooms.

9 Q. Okay. What are the numbers for printing
10 rooms?

11 A. 2.5 and 2.35.

12 Q. Okay. And then what are these other values
13 and simple system requirements?

14 A. Well, this shows the outside air and the
15 supply air. So how much outside air you should have
16 coming into that area and it's 2.6 liters per second
17 per square meter.

18 Q. Okay. And does Dr. Nicas, in forming his
19 opinions and performing his modelling exercise, plug
20 in values for -- for these?

21 A. That's where he is using a number of
22 0.5 air changes per hour.

1 Q. And does this say air changes per hour?

2 A. No, but you can use -- it's in liters per
3 second and you can convert that based on the volume
4 of the room or the square footage of the room or the
5 number of people in the room or however you wish to
6 do it.

7 Q. So Dr. Nicas says that the air -- I'm
8 trying to learn this from you.

9 What does Dr. Nicas use as his estimate of
10 the air exchange rate?

11 A. 0.5 air changes per hour.

12 Q. Okay. 0.5 air changes per hour and then
13 was does Exhibit 38 tell us that a printing room
14 should have for air changes per hour?

15 A. Okay. This is just for outside air, fresh
16 air coming in, a minimum of 2.6 liters per second.
17 So number 1, you need to convert liters to cubic
18 meters or cubic feet, however you want to do it and
19 then seconds to minutes and to hours and you have to
20 know the square footage of the facility that they
21 are working.

22 So, I mean, we can -- we can go through

1 that calculation if you'd like.

2 Q. Can we?

3 A. Yeah, we can. If you want to go -- try
4 to -- I need to try to recall the testimony as to
5 the size of the employer's work area; 180 feet by 60
6 feet?

7 Q. Let's do this. To the extent that you
8 didn't already -- and I apologize if you did
9 already -- can you tell me again the calculation
10 that we need to do here so that I can compare or
11 someone can compare whether or not Dr. Nicas'
12 estimates jibe with what the ASHRAE says.

13 A. You take the number of liters per second
14 per square meter and convert that to either cubic
15 meters -- I mean, square meters or you have to
16 convert it to number of cubic feet per hour to
17 compare with your industrial hygienist's assessment.

18 MR. PATTON: Okay. We have to go off the
19 record to change the tape.

20 THE WITNESS: Okay.

21 THE VIDEOGRAPHER: We're off the record at
22 3:25.

1 (Pause in the proceedings.)

2 THE VIDEOGRAPHER: This is the beginning of
3 tape 3. We're back on the record at 3:30.

4 BY MR. PATTON:

5 Q. Mr. Spencer, before the break we were
6 talking about air exchange rates and the ASHRAE
7 documents in 38 -- reflected in Exhibits 38 and 39
8 and my question for you is this.

9 In your conclusion, conclusions expressed
10 in your report about which questions -- as you
11 called them, exaggerated modelled estimates and
12 extreme values used by Dr. Nicas, did you perform
13 any math to determine how Dr. Nicas' estimates of
14 ventilation rate and air exchange rate compared to
15 the ASHRAE guidelines?

16 A. Yes.

17 Q. And what were your conclusions?

18 A. That the values that he reported in terms
19 of the overall dose and exposure values would have
20 dropped by an order of magnitude of one to two
21 times.

22 Q. Okay. And the values that -- tell us again

1 the values that Dr. Nicas used?

2 A. He was -- I think a little over 18 PPM
3 years.

4 Q. I know that, but I'm talking about the
5 inputs as far as ventilation and exchange rate.

6 What were the values he used?

7 A. 0.5 air changes per hour.

8 Q. Okay. 0.5 air changes per hour. And what
9 else?

10 A. And 12 feet per minute.

11 Q. And you think he should have used how many
12 air changes per hour?

13 A. Well, I mean, you can be very conservative
14 and use one air change per hour, but I think the
15 ASHRAE basically is what you're looking at is
16 approximately two air changes, two-and-a-half air
17 changes per hour. I mean, even in a typical office
18 building, the air exchange rate is about two to four
19 air changes per hour.

20 Q. Okay. And then for the 12 feet per minute?

21 A. We talked about 20 to 30 feet per minute.

22 Q. Right. And what is the basis of your

1 opinion that it should be 20 to 30 feet per minute?

2 A. Actually, I think I had 30 to 50. I'm
3 sorry.

4 Q. 30 to 50?

5 A. Based on my own experience of being in
6 facilities taking ventilation measurements.

7 Q. You can't point us to any documents
8 referenced in your report or cited as exhibits to
9 this deposition which support your opinion that it
10 should be 30 to 50 feet per minute rather than
11 12 feet per minute? The only basis of that
12 conclusion is your personal experience, correct?

13 A. Correct. I do not have a specific document
14 I can direct you to.

15 Q. In your experience, personal experience,
16 did you consider the ASHRAE ventilation rates or air
17 exchange rates when performing exposure modelling?

18 A. Yes.

19 Q. And can you give us examples of that?

20 A. Well, for any type of -- in particular, if
21 there was -- I'm trying to think of a particular
22 example where I've done that, where I evaluated an

1 exposure in a facility and we want an understanding
2 of what the air exchange rates were in that
3 facility, I would go to ASHRAE to collect those
4 required rates, the minimum required rates.

5 Q. Some of the documents that we cited like a
6 strategy for assessing and managing an occupational
7 exposure, which is Exhibit 35 or some of these other
8 documents which talk about exposures estimating,
9 generally speaking, do they always refer to ASHRAE?

10 A. I don't know that they always refer to it.
11 It's certainly within the industrial hygiene
12 community. It's a -- for those who look at
13 ventilation, it is that and the ACGIH Ventilation
14 Guidance Manual is or are probably two prominent
15 sources of such information.

16 Q. How does the ACGIH Ventilation Manual
17 compare with what Dr. Nicas uses inputs or estimates
18 for things like air exchange rate and ventilation
19 rate?

20 A. Well the ACGIH manual is more focused on
21 local exhaust ventilation. Whereas ASHRAE is more
22 devoted to a general dilution or general area

1 ventilation.

2 Q. Okay.

3 A. It would be different. It don't
4 necessarily compare directly to ACGIH with what your
5 industrial hygiene expert did.

6 Q. Why do you keep calling him my industrial
7 hygiene expert? Why don't you call him Dr. Nicas?

8 A. It's just something I chose to do. Would
9 you rather I call him another name?

10 Q. Just curious.

11 Page 8 of your report, second paragraph
12 from the bottom beginning Ashland's MSDS. You say
13 that the Ashland MSDS incorporated the appropriate
14 information about the blended products as required
15 by HAZCOM, correct?

16 A. Yes.

17 Q. Do you believe that Ashland complied with
18 the Hazard Communication Act?

19 A. Yes.

20 Q. Do you believe that even though they didn't
21 test their incoming raw materials for benzene
22 content, even though they didn't calculate estimated

1 benzene content in the mixtures, even though they
2 didn't test the actual air exposure or benzene
3 exposure that would be experienced by someone using
4 it in a similar plane application as Mr. Wilson did,
5 is it still your opinion that they complied with
6 HAZCOM?

7 MR. PARKS: Objection to form.
8 Mischaracterizes the evidence.

9 THE WITNESS: I'll start with by saying,
10 yes, I believe that complied with HAZCOM. I do not
11 agree with the allegation you're making that they
12 had no knowledge of what the benzene content was in
13 there.

14 I think, again, from the testimony it's
15 clear that they did. I think from the limited
16 documents that I have that defines the -- at least
17 even the total aromatic component of the products
18 that they had an understanding of what the benzene
19 content was, and as a result, in addition to other
20 work that they did they, in fact, did comply with
21 the OSHA Hazard communication standard.

22 Q. What other work are you talking about?

1 A. Their -- their analysis of the various
2 constituents and products.

3 Q. Written analysis?

4 A. Yes. The ones we looked at earlier today.

5 Q. The Ashland documents 3835 to 3942?

6 A. I don't know the Exhibit Numbers.

7 Q. Those were the technical data sheets that
8 we talked about early on right?

9 A. Yes, that is what I'm referring to.

10 Q. Anything else you're referring to to
11 support your opinion in that regard?

12 A. Other than the testimony of Mr. Whitlock,
13 not specifically, no.

14 Q. Page 4 of your report, the first full
15 paragraph you talk about Ashland sales to Frankston
16 Packaging and then the last sentence of that
17 paragraph, you indicate that Frankston facility used
18 Ashland Blends 3078B and 7650 between '81 and '93,
19 and possibly Ashland Blend 3078C in 1994 when it was
20 first manufactured.

21 What's the basis of your knowledge or
22 opinion that Ashland Blend 3078C was first

1 manufactured in 1994?

2 A. I -- I think a combination of the documents
3 that were provided to us from Ashland and from
4 Frankston.

5 Q. Did you talk to anyone at Ashland who told
6 you when Blend 3078C was first manufactured?

7 A. Well, I'm trying to recall whether that was
8 part of either Mr. Whitlock's or Keenan's deposition
9 testimony. Those are the only other folks. I -- I
10 didn't talk to anybody at Ashland, but that's the
11 only Ashland-specific testimony that I reviewed.

12 MR. PATTON: All right. Let's take a short
13 break.

14 Off the record.

15 THE VIDEOGRAPHER: Off the record at 3:38.

16 (Pause in the proceedings.)

17 THE VIDEOGRAPHER: Back on the record at
18 3:40.

19 BY MR. PATTON:

20 Q. Mr. Spencer, I marked as Exhibit 40 the
21 Kalowkowski article from the American Industrial
22 Hygiene Association Journal and I've also marked as

1 Exhibit 41 Dr. Nicas' article with J. Jacques
2 regarding exposure estimating. Those are -- we
3 discussed them earlier or they are mentioned in your
4 report so I'm not going to go over them anymore.

5 Do you have any criticisms of Dr. Parent's
6 opinions in this case?

7 A. No.

8 Q. Have you ever spoken with Dr. Parent?

9 A. No.

10 Q. Do you have any criticisms of Dr. Infante's
11 report or opinions in this case?

12 A. You know, I did -- I looked at his report,
13 but I really doesn't focus on it for -- in
14 preparation of this deposition. So I can't say
15 without reviewing his report again whenever I have
16 any criticisms.

17 (Spencer Deposition Exhibit Numbers 42 and
18 43 was marked for identification.)

19 BY MR. PATTON:

20 Q. Exhibit 42 is a piece of paper that came
21 from your file. Can you tell us what this is?

22 A. This -- these are a couple of documents

1 that we had been through earlier today, that --
2 these were references used by Dr. Kopstein in his
3 report that contradict what he was ascribing
4 to regarding the benzene content in various
5 solvents.

6 Q. Okay. Exhibit 43 is another Stoddard
7 solvent article, a reference that came from your --

8 A. Yes.

9 Q. -- file? What is the value of this in
10 forming your opinions in this case?

11 A. I can't recall right now why this was in
12 here. I don't recall specifically. It may be
13 that -- that this document is reflecting Stoddard
14 solvent and the health standards associated with
15 Stoddard solvent, and of course we recognize that
16 there are may be trace levels of benzene, but
17 because there are trace levels of benzene, you're
18 not evaluating it for benzene content.

19 You're evaluating it for Stoddard solvent
20 as to exposure. This product has been tested as a
21 mixture. All the human data and the animal data
22 that's presented in here represents this product

1 being tested as a mixture. Therefore, you would
2 measure and evaluate for Stoddard solvent and not
3 benzene as an exposure.

4 Q. Is this a reliable piece of authority?

5 A. You know, it's a compilation of a variety
6 of studies. They don't do their own assessments,
7 their own studies. They scan the world's
8 literature, the -- I would like to think, valid
9 literature.

10 Q. You would presume that the ATSDR, which is
11 part of our federal government -- Department of
12 Health and Human Services -- you'd assume that they
13 would use reliable and credible references and other
14 information in forming their conclusions?

15 A. Well, they do. I'm sorry to interrupt.
16 They do. They also present case studies. They also
17 present old or historical data. So they try to
18 consider all the information.

19 Q. Did you know that this paper is cited by
20 Dr. Kopstein in his 2006 article?

21 A. Yes.

22 Q. Have you been asked to testify at trial in

1 this case?

2 A. Yes.

3 Q. Do you know when trial is scheduled for?

4 A. I don't -- do not know the specific date.

5 Q. What additional information would you like

6 to see in finalizing your opinions before you

7 testify in front of a jury on this case?

8 A. More specific information regarding the

9 facility and the employer's action in that facility,

10 engineering, ventilation controls, if any, that were

11 utilized and I guess I would anticipate reviewing

12 the testimony of Dr. Kopstein.

13 Q. Anything else?

14 A. That's what immediately comes to mind.

15 Q. You wouldn't like to benzene content and

16 documents from Ashland?

17 A. I would, but I have asked for those

18 already.

19 Q. When did you first ask Ashland for that

20 information?

21 A. When I first got involved in the case.

22 Q. Back in May?

1 A. Whenever I -- in May or April, whenever I
2 first got involved.

3 Q. What did you -- what was the substance of
4 that conversation or request?

5 A. Just wanted specific documents related to
6 production or the use of the products that were
7 utilized in the products defined in this case.

8 MR. PATTON: All right.

9 Mr. Spencer, thank you for your time.

10 THE WITNESS: Thank you.

11 MR. PARKS: We'll reserve to the time of
12 trial.

13 MR. PATTON: Off the record.

14 THE VIDEOGRAPHER: We're going off the
15 record at 3:46.

16 MR. PATTON: Actually, before we go off the
17 record, our agreement is that Exhibits 1 through 42
18 will be taken by Kevin Parks via airplane back to
19 Houston.

20 THE WITNESS: Not 43 ?

21 MR. PATTON: Exhibits 1 through 43 will be
22 taken by Kevin Parks back to Houston where he will

1 copy them and send me a copy and then, perhaps, give
2 the originals back to Mr. Spencer, correct?

3 MR. PARKS: I'll do that. Correct and
4 under the federal rules, we'll also invoke our right
5 to read and sign the deposition transcript.

6 MR. PATTON: Okay. Now we're down.

7 Off the record.

8 THE VIDEOGRAPHER: Okay. This concludes
9 it. We're off the record at 3:47.

10 (Reading and signature not waived.)

11 (Whereupon, the proceedings at 3:47 p.m.
12 were concluded.)

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1 STATE OF MARYLAND, to wit:

2 I, Timothy R. Yancey, before whom the
3 foregoing deposition was taken, do hereby certify
4 that the within-named witness personally appeared
5 before me at the time and place herein set out, and
6 after having been duly sworn by me, according to
7 law, was examined by counsel.

8 I further certify that the examination was
9 recorded stenographically by me and this transcript
10 is a true record of the proceedings.

11 I further certify that I am not of counsel
12 to any party, nor an employee of counsel, nor
13 related to any party, nor in any way interested in
14 the outcome of this action.

15 As witness my hand and notarial seal this
16 _____ day of _____, 2007.

17
18
19 _____
20 TIMOTHY R. YANCEY

21 Notary Public

22 MY COMMISSION EXPIRES: 12/01/10

1 CERTIFICATE OF DEPONENT

2 I hereby certify that I have read and
3 examined the foregoing transcript, and the same is a
4 true and accurate record of the testimony given by
5 me.

6 Any additions or corrections that I feel are
7 necessary, I will attach on a separate sheet of
8 paper to the original transcript.

9
10 _____
11 JOHN SPENCER

12 I hereby certify that the individual
13 representing himself to be the above-named
14 individual, appeared before me this
15 _____ day of _____, 2007, and
16 executed the above certificate in my presence.

17
18 _____
19 NOTARY PUBLIC IN AND FOR
20 _____

21 MY COMMISSION EXPIRES:

22 _____

1 WITNESS: JOHN SPENCER

2 DATE: SEPTEMBER 12, 2007

3 CASE: CHARLES WILSON AND LAURA WILSON vs. RYCOLINE

4 PRODUCTS, INC., et al.

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6 Please note any errors and the corrections thereof

7 on this errata sheet. Do not write on the

8 transcript. The Rules require a reason for any

9 change or correction. It may be general, such as

10 "To correct stenographic error," or "To clarify the

11 record," or "To conform with the facts."

12 PAGE LINE CORRECTION REASON FOR CHANGE

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