

IN THE CIRCUIT COURT OF THE EIGHTEENTH JUDICIAL CIRCUIT
DuPAGE COUNTY, ILLINOIS

CONFIDENTIAL

EMPLOYERS INSURANCE OF WAUSAU,
A MUTUAL COMPANY, a mutual
Insurance corporation,

ORIGINAL

Plaintiff,

v.

No. 91 MR 0256

McGRAW-EDISON COMPANY, a
Delaware corporation, et al.,

Defendant.

The Deposition of RAYMOND D. HARBISON, Ph.D.,
taken pursuant to Notice of Taking Deposition, taken before
Randall D. Herrala, RPR, CSR, a Notary Public in and for the
County of Wright, State of Minnesota, taken on the 28th day
of October, 1997, at City Center, Suite 4500, 33 South Sixth
Street, Minneapolis, Minnesota, commencing at
approximately 10:00 a.m.

1 APPEARANCES:

2
3 SCOTT J. RYSKOSKI, ESQUIRE, of the Law Firm of ZELLE
4 & LARSON, City Center, Suite 4400, 33 South Sixth Street,
5 Minneapolis, Minnesota 55402, appeared for and on behalf of
6 Plaintiff.

7 KEVIN P. HOLEWINSKI, ESQUIRE, of the Law Firm of
8 JONES, DAY, REAVIS & POGUE, One Mellon Bank Center, 31st
9 Floor, 500 Grant Street, Pittsburgh, Pennsylvania 15219,
10 appeared for and on behalf of Defendant.

11 ALSO PRESENT: Jeff Carlson

12 *The Original is in the possession of Attorney Kevin P.
13 Holewinski.*

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1 (At this time Harbison Deposition
2 Exhibit Number 1 was marked for
3 identification by the Court Reporter.)
4

5 RAYMOND D. HARBISON, Ph.D.,
6 the Witness in the above-entitled
7 matter after having been duly sworn
8 deposes and says as follows:
9

10 EXAMINATION

11 BY MR. HOLEWINSKI:

12 Q. Good morning, sir. Briefly, before we got on
13 the record, there were some introductions. My name is Kevin
14 Holewinski with the law firm of Jones, Day, Reavis & Pogue,
15 and I'm here on behalf of McGraw-Edison Company, who is a
16 party to the lawsuit involving Wausau Insurance Company and
17 certain other insurers.

18 As I indicated, my expectation is to try to
19 sort of be as efficient as possible today during the conduct
20 of this deposition. I'm going to spend some time going
21 through some of your background information, cases you've
22 been involved in, general credentials, that type of thing,
23 and then I'm going to get into issues that are raised in
24 your report. And my expectation is that we may be able to
25 conclude this in about three hours. That's the time frame

1 I'm shooting for.

2 However, I recognize that you've got -- you may
3 have a need to take a break at some point in time, and I
4 want to encourage you to do that. I don't want this
5 deposition to be driven by my assessment of what time I
6 think this should conclude. So if you need to take a break,
7 please let me know.

8 If you don't understand a question that I ask,
9 let me know that. I will attempt to rephrase it to the
10 extent I can. To the extent counsel has an objection --
11 obviously, you've been deposed before, in looking at your
12 background. You understand the purpose or you may
13 understand the purpose of counsel's objection. I think from
14 counsel's point of view, he's probably going to want you to
15 not answer a question if there's an objection raised. My
16 only point on that is I'll assume that if there's an
17 objection raised and you're answering the question, then you
18 understand the nature of my question notwithstanding
19 counsel's objection.

20 I had the court reporter mark earlier, and I'm
21 just going to pass it to you now to begin, Deposition
22 Exhibit Number 1. At least looking at the cover page and
23 leafing through it, does that appear to be a copy of the
24 report that you prepared in connection with this case? And
25 take whatever time you need to get familiar with the

1 document.

2 A. Yes, sir, it does.

3 Q. And is it correct, as indicated by the date,
4 that that report was prepared on September 29th, 1997?

5 A. Yes, sir.

6 Q. Now, I'll be getting into some questions,
7 obviously, about the report, but in connection with this
8 deposition today, what, if any, materials did you review for
9 purposes of likely questions that might be raised today?

10 A. I reviewed interrogatories -- answers to
11 interrogatories. I reviewed depositions of Dr. Parent,
12 Frazier, Kramer. Let me say I reviewed testimony. There
13 was a variety of testimony, either deposition or trial
14 testimony, of Parent, Frazier, Kramer, Nordone, Rodgers,
15 some plaintiff depositions.

16 Q. Do you recall the names of any of those
17 plaintiffs?

18 A. I think the flagship -- Gilpin, Parks.

19 Q. Rhetta Parks?

20 A. Yes, sir.

21 Q. Rhetta M. Parks? I only ask that because
22 apparently there are at least two Rhetta Parks.

23 MR. RYSKOSKI: By flagship, he's
24 referring to the bellwether plaintiffs, so whichever Rhetta
25 Parks is a bellwether plaintiff.

1 A. Robinett, Farmer, Rutherford -- I can't
2 remember the sixth one -- and other depositions as well. I
3 can't recall them all. I also reviewed the medical records
4 of all of the plaintiffs as well.

5 Q. So I'm clear, if I may interrupt you, all the
6 plaintiffs, you're not just taking the narrow class of the
7 flagship, bellwether plaintiffs? All plaintiffs?

8 A. Yes, sir.

9 The settlement documents for the plaintiffs,
10 the report of Mr. Spencer, those are the documents that I
11 can remember.

12 Q. Okay. Did you look at any maps of the NEC
13 facility?

14 A. I'm sorry, I also looked at the RI, remedial
15 investigation, which contained maps and a description of the
16 history of the site as well as the analytical data from the
17 site.

18 Q. For the sake of clarity, did you just review
19 the RI or the RI and the FS report?

20 A. The RI and FS.

21 Q. Okay. Going back to my earlier question, aside
22 from the maps that might have been contained in the last
23 referenced reports, the RI/FS, did you look at any other
24 blowups of the facility?

25 A. I don't recall any other blowups.

1 Q. Did you look at any photographs of the
2 facility?

3 A. I did not.

4 Q. What type of settlement documents did you
5 review?

6 A. These are the settlement documents that
7 described the conditions, and there were conditions
8 described by Richard Parent, also I believe by Donna Holt,
9 and then the description of the calculation of the
10 settlement for cost purposes or for the allocation of
11 moneys.

12 Q. Did you review any correspondence in connection
13 with those settlement documents that might have explained
14 Donna Holt's position on the settlement formula or anything
15 like that, to the extent you can recall?

16 A. Like a letter, you mean?

17 Q. Correct.

18 A. I don't recall any specific letters, no, sir.

19 Q. For what purpose did you undertake a review of
20 the settlement documents in connection with this deposition?

21 A. To evaluate those claims and the methodology
22 used to arrive at a conclusion that those claims or injuries
23 or complaints were caused as a result of the NEC facility
24 and specifically with regard to the time period 1959 through
25 1974.

1 Q. Now, you could not tell from the settlement
2 documents alone -- let me rephrase that question. Did you
3 need other documents aside from the settlement documents to
4 make, to arrive at an opinion about whether or not the
5 settlement values reflected in those settlement were
6 appropriate?

7 A. I didn't have an opinion about the value. My
8 opinion is simply about whether or not there's a causal
9 relationship between the site and those claims.

10 Q. Did you review any -- in connection with this
11 deposition today, we'll limit the question to that category,
12 did you review any motions that McGraw-Edison or Cooper
13 would have filed in connection with the suit, the lawsuit,
14 the toxic tort lawsuit before the federal court in Kentucky?

15 A. I don't recall any specific for filing in
16 Kentucky, not in this matter.

17 Q. Right. Okay.

18 A. I don't recall any.

19 Q. Let me ask it this way: Do you recall whether
20 or not Cooper or McGraw-Edison, Cooper Industries or
21 McGraw-Edison, had filed any motions at trial in connection
22 with the testimony of, for example, of Dr. Spencer?

23 A. I don't have knowledge of that.

24 Q. Do you know whether or not at trial in the
25 underlying case whether or not Cooper or McGraw had sought

1 to preclude the testimony of any of the plaintiffs' experts?

2 A. I don't have knowledge of that.

3 Q. I take it the review of the trial testimony of
4 the plaintiffs' experts that you conducted -- let me
5 rephrase it. Were the portions of the testimony on those
6 experts that you reviewed, were they separated out or was
7 the testimony -- did you have a copy of the trial transcript
8 for purposes of reviewing?

9 A. I had a copy of the trial transcript.

10 Q. Did you review -- and, again, I'm talking about
11 the deposition today. Did you review any literature or
12 studies that the underlying plaintiffs' experts might have
13 based any of their conclusions on for purposes of this
14 deposition today?

15 MR. RYSKOSKI: If I can just clarify, are
16 you asking him specifically did he review any of that sort
17 of material just to answer questions today, or has he
18 reviewed it in any course of time?

19 MR. HOLEWINSKI: I'm breaking it up now
20 just for purposes of preparation of this deposition.

21 A. I thought I understood the question, but let me
22 see.

23 Q. Sure. I'll rephrase it.

24 A. So your question is, Did I do it specifically
25 just for today?

1 Q. Correct.

2 A. No, I did not.

3 Q. Okay. All right. Let's move on in terms of
4 broader review of documents for purposes of the report, but
5 before I get there, I've just got a few more follow-up
6 questions. I take it, obviously, that you met with counsel
7 for Wausau in connection with this case prior to this
8 deposition.

9 A. Yes, sir.

10 Q. Did you talk with anybody else about the fact
11 that you were going to be deposed in this case prior to
12 coming here today, excluding Counsel Zelle and Larson?

13 A. I did not.

14 Q. Do you recall the interrogatories? You
15 mentioned that you reviewed interrogatory answers. Do you
16 recall whose answers those were?

17 A. I recall some of those answers being McGraw's,
18 and I believe there was also some from Wausau.

19 Q. Do you recall whether or not in any review of
20 the trial transcript, either in connection with this
21 deposition today or in connection with your work that's set
22 forth in this report, whether or not you reviewed any
23 statements by the judge in the underlying case about any
24 preliminary views on the evidence?

25 A. I did not.

1 Q. Okay. Let's go to the broader area of your
2 report, and I'll get into sort of the opinions more at the
3 end, but I guess one of the questions I have for you is how
4 long, approximately, did it take for you to complete the
5 report once you started it?

6 MR. RYSKOSKI: Let me seek clarification.
7 Literally in terms of drafting the report from the moment he
8 started to draft it until it was completed?

9 MR. HOLEWINSKI: Correct.

10 MR. RYSKOSKI: Okay.

11 A. I would estimate it probably took me probably
12 about a week to do that, and I assume by that you don't mean
13 for me to word process this.

14 Q. Correct.

15 A. I would estimate probably about a week.

16 Q. And when did you complete the report?

17 A. September 29, 1997.

18 Q. I take it there were draft reports?

19 A. Yes, sir, there were.

20 Q. How many?

21 A. I do not know the answer to that. I would
22 estimate a couple.

23 Q. Do you recall how far in advance of September
24 29th those draft reports were completed?

25 A. I would estimate a few days.

1 Q. And did you submit those draft reports to
2 anyone for review or comment?

3 A. I did not.

4 Q. Now, some of this might be somewhat repetitive.
5 I just want to understand precisely what you reviewed for
6 purposes of completing the report, but -- and I think the
7 report itself indicates some of the documents you had
8 reviewed. So I won't try to belabor the points that are
9 obvious from the report, but I take it that for purposes of
10 completing the report, you reviewed each of the underlying
11 plaintiffs -- for the sake of clarity, as I use the term
12 "underlying plaintiffs," I'm talking about the underlying
13 litigation, the trial testimony that you were talking about
14 earlier.

15 A. I'm sorry, I don't understand.

16 Q. It's a bad question. Just so we can have a
17 common understanding of what I'm talking about, when I use
18 the term underlying plaintiffs or underlying plaintiffs'
19 experts, do you understand that by that I mean the
20 plaintiffs who sued Cooper and McGraw-Edison in connection
21 with the NEC facility?

22 A. Yes.

23 Q. In connection with preparing your report,
24 Exhibit Number 1, I take it that you reviewed each of the
25 underlying plaintiffs' expert testimony at trial?

1 A. Yes, sir.

2 Q. Did you review each of those expert's
3 deposition testimony to the extent they were deposed?

4 A. I may have looked at some deposition testimony,
5 but I focused on the trial testimony.

6 Q. Is there a particular reason why you focused on
7 the trial testimony?

8 A. That was the testimony that was relevant to
9 these plaintiffs.

10 Q. In what sense?

11 A. That that was their ultimate opinions with
12 regard to the exposure and the effects in these individuals.

13 Q. Okay. Did you review, in connection with
14 completing your report, Exhibit Number 1, any reports that
15 the underlying plaintiffs' experts prepared in connection
16 with that case?

17 A. Yes, there were reports as well.

18 Q. Did you review those reports?

19 A. I did.

20 Q. Do you recall whether or not there were any
21 reports that you focused more of your energies on?

22 A. No, I can't identify any.

23 Q. In connection with completing your expert
24 report in this case, Deposition Exhibit Number 1, did you
25 review the trial testimony of Cooper/McGraw-Edison Company's

1 experts at trial?

2 A. I did not.

3 Q. You did not?

4 A. I did not.

5 Q. Do you have any intention to review the
6 testimony of Cooper or McGraw-Edison's experts in the
7 underlying case before the trial in this case?

8 A. Not that I know of at this particular time.

9 Q. In connection with completing Deposition
10 Exhibit 1, your report, did you review all of the underlying
11 plaintiffs' medical records?

12 A. I scanned all of those records, spending more
13 time on those that were there prior to 1974 and less time on
14 those that were there after 1974, after March 1, 1974.

15 Q. And why is it that you spent more time on those
16 that were present prior to 1974?

17 A. Well, I assumed that no one is going to claim
18 that if they moved there after 1974, that they were affected
19 prior to 1974.

20 Q. Are you aware that the years that Wausau,
21 Employers Insurance of Wausau, the years that any insurance
22 policies they issued in connection with coverage for the NEC
23 facility, what years those policies no longer apply? That's
24 a long question. I'll rephrase it.

25 Do you know anything about the length of

1 insurance coverage provided by Wausau to Cooper
2 Industries/McGraw-Edison Company in connection with the NEC
3 facility?

4 A. Yes. 1959 through 1974.

5 Q. Did you base your review on the plaintiffs'
6 records, the focus being more time on those prior to 1974 in
7 part because Wausau's coverage wasn't at issue for those
8 later years?

9 A. Yes.

10 Q. Do you recall offhand, and you may not, who of
11 the medical records that you did review, the individual that
12 lived in proximity to the facility for the longest period of
13 time?

14 A. The single individual?

15 Q. Yes.

16 A. I do not.

17 Q. Do you recall the approximate time frame of
18 anyone, the longest time frame for any individual, whether
19 or not you can attribute a name or particular medical
20 background to them, as to the length of time any one person
21 lived in connection with -- lived adjacent to or nearby the
22 NEC plant?

23 A. I have no recollection of the individual
24 plaintiffs. I would have to look at their records. It
25 varied from a few years to decades.

1 Q. Now, to jump ahead just to get to the next
2 question, I take it in connection with the various work that
3 you've done, scientific work that you've done, cases that
4 you've been involved in, I take it you've reviewed a lot of
5 medical records.

6 A. Yes, sir.

7 Q. Approximately how many?

8 A. Thousands.

9 Q. Is it fair to say that the standard of medical
10 care in a given community varies from area to area?

11 A. It would vary somewhat, but there certainly is
12 a minimal standard of care, but it would probably vary.

13 Q. Do you have any opinion as to whether or not
14 the medical records of the underlying plaintiffs, whether or
15 not they were sufficiently detailed to enable you to render
16 an opinion about whether or not their any medical condition
17 might be related to the NEC facility?

18 A. I did not review the records for the detail
19 with regard to whether they were adequate for that purpose.
20 What I did is I looked at the claims that were made to
21 determine whether or not those claims could have been
22 related to the NEC facility. I did not look at the adequacy
23 of the medical records.

24 Q. Did you review, in connection with completing
25 your report, any volumetric estimates on the amount of

1 chemicals that might have been used at the NEC facility from
2 1959 to 1974?

3 A. I did not.

4 Q. Did you review any documents for purposes of
5 completing your report that would indicate the type of
6 materials generally used, albeit not necessarily the volume,
7 but the type of materials that were once used at the NEC
8 facility in Harlan, Kentucky?

9 A. I did not look at the materials that were used.
10 I focused on those chemicals that were alleged to have
11 caused the complaints, the illnesses, the disease of the
12 plaintiffs.

13 Q. Okay. And to the extent you can recall, do you
14 recall what those chemicals were alleged to be?

15 A. They're in my report -- vinyl chloride,
16 trichloroethylene, dioxin, PAHs, PCBs, methylene chloride,
17 trichloroethylene.

18 Q. Okay. In connection going back to the medical
19 records of the underlying plaintiffs, did you review --
20 strike that. For purposes -- you've used the term "medical
21 records." What would that include?

22 A. It would include any medical records that they
23 had in addition to the claim form. The claim form contained
24 the complaints or the ailments, allegations with regard to
25 why that individual was paid.

1 Q. Did you review, in connection with completing
2 your report, any report that Dr. Frank might have completed
3 in connection with activities at the NEC facility?

4 A. I don't recall Dr. Frank.

5 Q. Do you recall reviewing any report by any State
6 of Kentucky environmental official about conditions at the
7 NEC facility? And again the limitation is for purposes of
8 completing your report.

9 A. Yes. There was a State of Kentucky report with
10 regard to the facility.

11 Q. Do you recall the title of that report, if any?

12 A. I'm sorry, I do not.

13 Q. That's fine. I take it that you reviewed EPA's
14 record of decision in connection with completing your
15 report?

16 A. Yes, sir.

17 Q. Did you review any groundwater data that had
18 been gathered pursuant to actions taken at the direction of
19 U.S. EPA at the NEC facility?

20 A. I did.

21 Q. Do you recall what type of groundwater data you
22 reviewed?

23 A. These were well water samples. There were
24 samples on site, off site, various private wells, public
25 facilities. Those would be the ones I could generally

1 recall.

2 Q. Do you recall the approximate time frame for
3 the data that was reviewed in terms of what -- do you know
4 what years the groundwater data was taken for?

5 A. The initial data was taken around 1989. Based
6 upon that sampling residents were put on public water, and
7 subsequently there were additional samples taken, and I
8 don't recall specifically the dates.

9 Q. I take it that given the 1989 data, do you
10 disagree with the decision by the State of Kentucky to
11 require that the individual residents of the trailer park be
12 taken off -- be put on a separate water supply?

13 A. I don't disagree with it.

14 Q. To the extent you can recall the 1989 data, do
15 you recall how far -- let me rephrase it. Do you recall the
16 1989 data, any EPA point of reference in terms of drinking
17 water standards, whether or not the 1989 data was
18 significantly above any applicable drinking water standards
19 at the time?

20 A. It was.

21 Q. Significantly?

22 A. In some instances, yes.

23 Q. Did you, in connection with completing this
24 report, plot out the location of the underlying plaintiffs
25 in reference to any chart of where the groundwater plume

1 extended?

2 A. I did not.

3 Q. Are you aware from reviewing other -- let me
4 rephrase it. Are you aware, from using your term "scanning"
5 any of the plaintiffs' medical records or reviewing in more
6 detail others, whether or not any of the underlying
7 plaintiffs had been diagnosed as having any form of cancer?

8 A. Yes.

9 Q. Do you recall how many of those underlying
10 plaintiffs had such a diagnosis?

11 A. I do not.

12 Q. Do you recall whether or not it was more than
13 five?

14 A. My recollection is that it was more than five.

15 Q. In connection with those that had a diagnosis
16 for cancer, did you in connection with completing this
17 report, did you -- do you have any opinion as to whether or
18 not those cancers that have been diagnosed, whether or not
19 those cancers were caused by the NEC facility's operations?

20 A. I would have to go through each of those
21 individually. I can certainly give you the example of
22 Rhetta Parks in multiple myeloma. My opinion would be that
23 it was not.

24 Q. It was not? I'm sorry.

25 A. It was not caused by the NEC facility.

1 Q. And we'll get to this more later, but is that
2 based on your understanding that -- I withdraw that
3 question. You used the term "first exposure" in your
4 report, and, like I said, we're going to get to your report
5 a little bit later, but since we're talking about these
6 cancer diagnoses, what do you mean? You've got in
7 quotations, "first exposure." Could you explain that?

8 A. First exposure did not occur as a result of the
9 NEC facility. These are chemicals, that is, the chemicals
10 that we've talked about, are ubiquitous in the environment,
11 in consumer products, in a variety of places in your daily
12 life activity to which you would be exposed to them. So the
13 first exposure would not have occurred as a result of the
14 NEC activity.

15 Q. And I don't want to be repetitive, so I'm not
16 going to go into great detail with you now on this, but is
17 it your view that for there to be a causal relationship
18 between a chemical and an injury, let's say, cancer, that
19 the only way you could measure cause and effect is by
20 identifying the first exposure?

21 A. Absolutely not.

22 Q. Okay. In connection with completing your
23 report, Exhibit Number 1, did you review any other materials
24 from EPA aside from the RI/FS?

25 A. I don't recall other EPA information.

1 Q. You did review, for purposes of your report,
2 the RI/FS?

3 A. Yes, sir.

4 Q. Did you review, for purposes of your report,
5 any correspondence from Cooper/McGraw-Edison, their trial
6 counsel in the underlying case, to Wausau?

7 A. I did not.

8 Q. In connection with completing your report, did
9 you review any publications that you have authored, for
10 purposes of completing your report?

11 A. I didn't specifically review any publications
12 that I've authored. I have general knowledge of those. I
13 didn't go back and specifically review any of those.

14 Q. In connection with completing the report, did
15 you review any published medical materials to complete your
16 report?

17 A. Meaning have I ever, or specifically for this?

18 Q. Specifically for the report.

19 A. Not specifically for this. For these
20 chemicals, I have teaching responsibilities, research
21 publications.

22 Q. I understand.

23 A. But I used all of that, so the answer is, yes,
24 I have reviewed scientific and medical literature but not
25 exactly specifically for this, but I certainly considered

1 that in coming to this opinion.

2 Q. I understand completely, and I'm not trying to
3 limit your answer. I'm just trying to sort of break out so
4 I can identify what possibly immediately went into the
5 formation of your report as opposed to your own knowledge
6 that you've acquired through your many years of experiences.
7 So I'm not questioning sort of -- I'll just withdraw the
8 last question.

9 With respect to your report, did you review any
10 underlying complaints?

11 A. Yes.

12 Q. Approximately how long did you take to -- do
13 you recall how long it took for you to review those
14 complaints?

15 A. The complaints were part of the medical records
16 that I reviewed in the forms that were used to calculate the
17 moneys to be paid to that claimant. Those are the
18 complaints that I evaluated or illnesses or disease or
19 whatever they might be.

20 Q. In connection with your report or otherwise,
21 have you reviewed any deposition testimony of any of the
22 underlying plaintiffs' trial counsel that might have been
23 taken in this case? For example, I'll be more specific to
24 help focus the question. Do you know whether or not you
25 reviewed the deposition testimony of Donna Holt?

1 A. I don't think I did. If I did, I certainly
2 don't remember. I don't think I actually have that.

3 Q. Do you recall whether or not you reviewed any
4 deposition testimony of any officials from Cooper
5 Industries/McGraw-Edison that was taken in this case?

6 A. I have not.

7 Q. Do you recall whether or not, in connection
8 with your report, you reviewed any deposition testimony
9 taken in this case of any of the underlying plaintiffs?

10 A. You asked me that, and I said yes for some of
11 them.

12 Q. Okay. And I did ask you the question about
13 what was reviewed. My recollection, when I asked earlier,
14 it was in connection with deposition preparation. I've got
15 your answer. That's fine.

16 A. I'm sorry, yes, okay. I'm sorry. So you're
17 asking now with regard to depositions for the preparation of
18 the report.

19 Q. Yes.

20 A. And the answer is, yes, I did.

21 Q. Do you recall which ones you looked at?

22 A. The same that I described to you.

23 Q. The bellwether people?

24 A. Yes, sir.

25 Q. Any others?

1 A. There are some others. I just can't tell you
2 who they are.

3 Q. Are you aware how any settlement values, any
4 settlement figures that were ultimately agreed to in
5 connection with the underlying case, how plaintiffs' counsel
6 arrived at those figures?

7 A. Yes.

8 Q. What's your understanding of how they arrived
9 at those figures?

10 A. There is a formula that was used based upon
11 zones of exposure, based upon symptoms, based upon water
12 versus air exposure. There were about four or five
13 components to that equation, which came up with a number.
14 There was also a fairness factor that was used, various
15 factors used to come up with a dollar amount.

16 Q. Do you recall whether or not the formula that
17 formed the basis for the ultimate settlement values in the
18 underlying case, whether or not there were certain factors
19 or variables that plaintiffs ultimately -- plaintiffs
20 through their counsel or their experts ultimately determined
21 to take out of the mix? For example, just to focus your
22 attention, do you recall whether or not there were certain
23 everyday exposures that were discounted for purposes of this
24 settlement formula?

25 MR. RYSKOSKI: I'm going to object to the

1 form of the question as vague. You can go ahead and answer
2 if you can understand.

3 A. I think what you mean, or at least as I
4 understand the question, things like alcohol use, tobacco
5 use were those factors in reducing or eliminating certain
6 considerations.

7 Q. Correct.

8 A. Yes, there was some alcohol and I believe
9 smoking that I remember.

10 Q. Do you recall whether or not plaintiffs had
11 determined that there were certain other daily exposure
12 scenarios that should not necessarily be included in the
13 formula, the settlement formula? And, for example, the
14 point of reference would be whether or not eating vegetables
15 from their own garden that might have been watered through
16 their well.

17 MR. RYSKOSKI: I'm going to repeat my
18 question. You can go ahead and answer.

19 A. I don't specifically recall that. I'd have to
20 look at the individual plaintiffs. I don't recall that.

21 Q. Do you have any opinion about the settlement
22 formula itself that was ultimately used by the plaintiffs?

23 MR. RYSKOSKI: I'm going to object to
24 that question as being beyond the scope that he's been
25 offered for as an expert.

1 MR. HOLEWINSKI: That's fine.

2 BY MR. HOLEWINSKI:

3 Q. Now, I think I have an understanding, but I ask
4 for a brief explanation, if you could, of some of your --
5 some of the information listed under the title "Personal
6 Background and Experience." The first question is "Board
7 Certified Toxicologist." What is that?

8 A. It's a board certification process of the
9 American College of Toxicological Scientists.

10 Q. How do you obtain that certification?

11 A. It is based upon a peer review of education,
12 research accomplishments, contribution to the field, and
13 continuing research or continuing affiliation with the field
14 of toxicology.

15 Q. And this is going to be a very broad question.
16 What does a toxicologist do?

17 A. A toxicologist is a specialist in determining
18 the harmful effects of chemicals on the living system.

19 Q. In connection with your duties as Director of
20 the Center for Risk Analysis and Management at the
21 University of South Florida, what is it that you do?

22 A. I conduct research, I teach, and also provide
23 service. We have a residency program in occupational
24 medicine, so I also provide service for the Occupational
25 Medicine Clinic, which we have every Tuesday and Wednesday,

1 in which we evaluate individuals who are exposed or alleged
2 exposed or harmed as a result of exposure to chemicals, so
3 teaching, research, and service.

4 Q. Is it all types of chemicals?

5 A. Yes, sir.

6 Q. Are there particular protocols that you or your
7 staff go through to make an assessment as to whether any
8 chemicals would have a particular toxicological effect on a
9 given individual?

10 A. Yes.

11 Q. What are those protocols?

12 A. It's the one that I've described in this report
13 -- looking at exposure, dose, affect, other possible
14 explanations for the complaint, biological plausibility,
15 temporal eligibility. Those are the criteria or protocol
16 used.

17 Q. Are those protocols published in available
18 literature, as far as you're aware?

19 A. Yes, sir.

20 Q. What type of literature would they be published
21 in?

22 A. Well, there are probably about 25 publications
23 starting all the way back in the 1800s with Dr. Koch, the
24 "Koch Postulates," subsequently the "Henly-Koch Postulates,"
25 all the way up to Sir Dole, which is about 1980, and

1 subsequently from that period on, a refinement of that
2 methodology and that protocol.

3 Q. Now, you're familiar with the Agency for --
4 ATSDR?

5 A. Agency for Toxic Substance Disease Registry.

6 Q. Now, you have worked in -- have you worked with
7 them before?

8 A. Worked with them is a little nebulous. I
9 certainly haven't been on the payroll. I'm not an employee.
10 I've certainly interacted with the ATSDR.

11 Q. Have you, in your role, for example, your
12 current role as director, have you received any funding from
13 ATSDR for purposes of conducting research?

14 A. I have not.

15 Q. As far as you're aware, have you ever received
16 any funding from ATSDR for purposes of completing research
17 of any type?

18 A. I don't believe so.

19 Q. And I recognize that funding sources, being
20 what they are, it's possible, to the extent you've received
21 funding from any federal agency -- so the record is clear,
22 I'm not going to assume that you can always pinpoint the
23 source of given portions of those funds.

24 A. That's probably true.

25 Q. As a professor of pharmacology and

1 therapeutics, what do you teach?

2 A. Teach pharmacology.

3 Q. What is that?

4 A. Pharmacology is the study of the beneficial
5 effects of chemicals on the living system.

6 Q. And therapeutics is?

7 A. Use of drugs.

8 Q. As I recall from your CV, you had spent some
9 time with the National Drug Office?

10 A. I was a consultant to the National Institute of
11 Drug Abuse for several years.

12 Q. Do you recall approximately when that was?

13 A. It's in my curriculum vitae.

14 Q. Just let me ask the next question, because I
15 really don't think the time frame is material. Do you
16 recall who was the director of that office during your time
17 that you were involved with them?

18 A. One of the directors was Charles Schuster, from
19 the University of Chicago. I don't remember the others.

20 Q. Do you recall whether or not -- whether
21 Dr. DuPont was involved in that time?

22 A. Dr. DuPont was involved, yes, sir.

23 Q. With respect to, just stepping back a bit, the
24 protocols you referenced, protocols used by members in the
25 field of toxicology, do you know whether or not those

1 protocols take into account any reference doses that U.S.
2 EPA has determined are appropriate reference doses from a
3 toxicological point of view?

4 A. Now, we're talking about determining the cause
5 of a disease and not risk?

6 Q. Let's put the question in terms of risk, and
7 I'll rephrase the question to maybe try to break it down to
8 get at what I'm trying to find out about.

9 A. In terms of risk, yes, regulatory standards
10 would be used as a benchmark for protecting public health or
11 evaluating the potential exposure and potential consequences
12 of that exposure.

13 Q. And those regulatory standards, or whatever you
14 would refer to them as, which regulatory standards would
15 you, as a matter of routine practice, look to, meaning
16 current standards?

17 A. Well, that's a very difficult question to
18 answer because there are many standards. There are water
19 standards, air standards, workplace standards, soil
20 standards, so I would look to all of those to evaluate
21 whether or not there was a potential risk associated with
22 exposure to chemicals.

23 Q. For purposes of making an assessment today
24 about the possible toxicological effects from a particular
25 chemical substance on a given individual, would the

1 standards you would look to be those that are currently in
2 effect in, for example, as it relates to air exposure?

3 MR. RYSKOSKI: Can you read back the
4 question, please? Sorry.

5 (Whereupon the requested portion of the record
6 was read aloud by the Court Reporter.)

7 MR. RYSKOSKI: Just to clarify, are you
8 still talking about risk assessment?

9 MR. HOLEWINSKI: Yes. Yes.

10 A. I wouldn't use regulatory standards to
11 determine the cause of a human ailment or disease.
12 Regulations protect. They do not predict. Regulations or
13 the regulatory standards are the levels that don't result in
14 harm, so they can't be used to determine the cause of an
15 ailment or a disease. They can only be used to protect
16 human health.

17 Q. As a point of reference, though, do regulatory
18 standards -- for example, if someone is exposed at, say, to
19 soil of 1,000 parts per million for lead, is it relevant to
20 your assessment of risk what EPA's standards on acceptable
21 levels of lead in soil are?

22 A. With regard to an estimate of risk, yes. Risk
23 is not equal to or does not relate to the cause of a disease
24 or ailment. It's not equivalent to the cause.

25 Q. I understand. With respect to risk as opposed

1 to causal connection, with respect to risk analyses that
2 toxicologists do, is it fair to say that to the extent
3 regulatory standards are looked to, it's important to
4 determine whether or not in assessing risk where the
5 exposure levels are in reference to those applicable
6 regulatory levels?

7 A. For risk, yes.

8 Q. Okay. I see you've got your doctorate in
9 pharmacology/toxicology from the University of Iowa College
10 of Medicine in 1969. What did you complete your
11 dissertation in?

12 A. It was on the teratogenicity of a substance
13 known as diphenylhydantoin, the mechanism by which it was
14 able to produce birth defects as a result of in utero
15 exposure.

16 Q. And for the sake of the record, could you spell
17 the first word, teratogenicity?

18 A. T-E-R-A-T-O-G-E-N-I-C-I-T-Y.

19 Q. And what is that?

20 A. Birth defects.

21 Q. When you were at the Vanderbilt Medical Center,
22 what courses on the faculty did you teach, if any?

23 A. Toxicology, pharmacology, drug metabolism.
24 Those would be the ones I could recall.

25 Q. During your time at the Vanderbilt Medical

1 Center, did you, as part of any of your studies, conduct any
2 studies on residents living in the Harlan, Kentucky, area?

3 A. I don't specifically recall. That's certainly
4 a possibility, but I don't recall.

5 Q. Do you recall whether or not you've ever been
6 to Harlan, Kentucky?

7 A. I don't believe I've been to Harlan.

8 Q. Let me ask this question: I take it you did
9 not attend any trial in London, Kentucky, of the underlying
10 case.

11 A. I did not.

12 Q. As far as you're aware, you've not been to
13 Harlan, Kentucky, for purposes of completing your report?

14 A. I have not.

15 Q. Is it fair to say from a risk assessment
16 standpoint that good diet or the absence of a good diet has
17 an impact on a particular exposure or the risks from the
18 given exposure to a given individual, it possibly being
19 increased?

20 MR. RYSKOSKI: I'm going to object to the
21 question as vague. Go ahead and answer if you can.

22 A. Does the absence of a good diet -- I don't know
23 what a good diet is.

24 Q. I'll rephrase the question. It is kind of
25 long. Does diet have any impact on an individual's

1 increased risk to a given chemical?

2 A. I am not aware of a dietary impact on these
3 chemicals specifically that I address in my report. I'm not
4 aware of any.

5 Q. In your service on the editorial boards of
6 scientific journals, specifically "Environmental Health
7 Sciences" --

8 A. Yes.

9 Q. -- what was your role during that time on that
10 journal?

11 A. To serve as a peer reviewer of articles that
12 would be submitted for publication in the journal.

13 Q. Do you recall who else served with you at that
14 time on the "Environmental Health Sciences"?

15 A. I'm sorry, I do not.

16 Q. Have you ever worked with any of the underlying
17 plaintiffs' experts?

18 A. I don't believe so.

19 Q. Prior to reviewing their trial testimony, do
20 you recall having heard by reputation any of their names
21 before?

22 A. Not by reputation. I've certainly read
23 testimony of Richard Parent before. The others I have not.

24 Q. Do you recall in what connection you recall
25 reviewing the testimony of Richard Parent?

1 A. I reviewed his testimony in a matter in
2 Louisiana. Mr. Reviere is the plaintiff, and I believe that
3 Exxon and others who formed a cleanup group for the sites in
4 Louisiana, and I can't remember the name of that company,
5 were the defendants, and so I reviewed his testimony in that
6 matter.

7 Q. Do you recall who he did work on behalf of in
8 that matter?

9 A. Mr. Reviere was the plaintiff.

10 Q. So he did it on behalf of Mr. Reviere?

11 A. Yes, sir.

12 In a matter in Alabama called THAN, in which he
13 evaluated a number of claimants who were exposed to
14 pesticides, I reviewed his testimony in that matter.

15 In a Benelate matter in Florida and also in a
16 matter in Mississippi, in which he has reviewed claims, and
17 this is with regard to exposure to metals, hydrogen chloride
18 or chlorine, and other chemicals. I don't remember the rest
19 of them.

20 Q. And to the extent you recall, I recognize you
21 may or may not, do you recall whether or not his testimony
22 in each of these matters was on behalf of the plaintiffs?

23 A. It was.

24 Q. And yours in each of these was on behalf of the
25 other side, the defendants?

1 A. Yes, sir.

2 Q. And I realize this might be an inappropriate
3 generality, but do you recall whether or not his methodology
4 in each of the cases you just referenced, from having
5 reviewed his testimony before, do you recall whether or not
6 you arrived at an opinion about whether or not his
7 methodology was acceptable or not?

8 A. I believe that I did in Reviere. I did not in
9 the matter -- did not, not meaning that I looked at it and I
10 didn't conclude that it was okay or not okay or correct or
11 not correct. I simply didn't have an opinion. I believe I
12 did in Reviere. I did not in the Florida matter. I believe
13 that I did in the THAN Alabama matter, and I have not in the
14 Mississippi matter.

15 Q. And to the extent you can recall in the Reviere
16 matter, what, if any -- what precisely did you take
17 exception with with respect to his methodology?

18 A. I don't really recall specifically, but I
19 expect it was over the exposure and the condition and
20 whether that condition could have been related to that
21 exposure.

22 Q. And is it the same in the THAN matter?

23 A. Yes.

24 Q. Now, the Reviere and THAN matter, do you recall
25 whether or not the testimony that you reviewed of his,

1 whether or not it was trial testimony?

2 A. None of it was trial testimony.

3 Q. Do you know, from reviewing his trial testimony
4 and any background materials on him, whether or not he's
5 ever testified at trial aside from the underlying proceeding
6 in connection with this case?

7 (At this point Mr. Carlson left the
8 deposition proceedings.)

9 A. You're asking me do I know if he's ever
10 testified in trial?

11 Q. Right, aside from the underlying case.

12 A. I don't have any specific knowledge that I can
13 remember. There may have been some, but I certainly don't
14 remember.

15 Q. I recognize that. Do you recall from looking
16 at his background materials whether or not he's published
17 any articles in any of the journals that you served on the
18 board of?

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

20 Q. Do you know whether or not he's -- whether or
21 not he's published any articles on any scientific
22 discipline?

23 A. I'm having a problem with "on any scientific
24 discipline." You mean, has he published any articles on,
25 for example, toxicity?

1 Q. Correct.

2 A. Yes, sir, he has.

3 Q. Has he extensively published?

4 MR. RYSKOSKI: Objection. Vague. You
5 can answer.

6 A. That's a difficult question to answer,
7 extensively. He's certainly published. I don't know that I
8 would call it extensively, but he certainly published.

9 Q. Do you have a recollection of what journal he
10 published in?

11 A. I do not.

12 Q. Do you recall in what connection you were able
13 to learn that he has published materials in some scientific
14 journals?

15 A. I've seen his resume.

16 Q. Exclusive of a review of his resume, do you
17 have any independent recollection of whether or not you have
18 personally reviewed, outside the context of litigation that
19 you might have been involved with where he was on the other
20 side, any article by him?

21 MR. HOLEWINSKI: Let's go off the record
22 a second.

23 (At this time a discussion was held off the
24 record.)

25 MR. HOLEWINSKI: Back on the record.

1 BY MR. HOLEWINSKI:

2 Q. Dr. Harbison, aside from having had occasion in
3 connection with the five or six matters, which the record
4 will reflect the number on, that we were talking about that
5 you had at least some occasion to review testimony of
6 Dr. Parent, independent of those situations, do you recall
7 whether or not you had ever reviewed any articles published
8 by him?

9 A. I do not recall reviewing any of his articles.

10 Q. In connection with your service on the advisory
11 committee for the National Academy of Sciences, first, is
12 that an ongoing role that you have now?

13 A. I have not served on a committee for some
14 years.

15 Q. And in what capacity did you serve on the
16 National Academy of Sciences?

17 A. I was a reviewer and a reviser of what's called
18 Document 1138. Document 1138 are the protocols for toxicity
19 testing for the Consumer Product Safety Commission.

20 (At this point Mr. Carlson returned to the
21 deposition proceedings.)

22 Q. And, generally speaking, first question, are
23 those protocols in draft form, or are they finalized?

24 A. They're finalized.

25 Q. How long have they been finalized?

1 A. I can't tell you that. It's been many, many
2 years. It's probably more than ten years.

3 Q. And to the extent you can recall, and I
4 recognize something like the protocol you've described, it
5 might likely contain a lot of information. Generally
6 speaking, though, what is Protocol 1138 -- Document 1138?

7 A. Document 1138 describes the toxicity
8 requirements of the Consumer Product Safety Commission for
9 being able to market or to sell products to consumers, for
10 which that agency has regulatory authority. That would be
11 such things as nipples for baby bottles, foam for
12 mattresses.

13 Q. Saran wrap?

14 A. I don't know about Saran wrap.

15 Q. And I take it Document 1138 contains certain
16 exposure levels or levels of chemicals that can -- that
17 certain levels of chemicals that would be permissible for
18 inclusion in a given product?

19 A. No. It describes the testing protocols to
20 determine the safety or appropriate use of those materials,
21 what you have to do to determine its safety.

22 Q. What type of products does Document 1138 get
23 applied to?

24 A. All those that would be regulated by the
25 Consumer Product Safety Commission, such as paints on baby

1 toys would be one, lead paint versus no-lead paint. That
2 would be one of the regulatory duties of the Consumer
3 Product Safety Commission.

4 Q. Is it fair to say that Document 1138
5 contemplates that there are acceptable levels of certain
6 chemicals in a given product?

7 A. Yes, sir.

8 Q. Do you recall whether or not Document 1138 has
9 a specific protocol for any of the chemicals that are talked
10 about in your report?

11 A. Does not.

12 Q. What committee -- what advisory committee did
13 you serve on on behalf of the U.S. EPA?

14 A. For the U.S. EPA for approximately 20 years, I
15 have been a consultant and advisor to both the FIT, Field
16 Investigation Team, and the TAT, Technical Assistance Team.

17 The FIT teams are those groups that went out
18 and identified and investigated hazardous waste sites all
19 over this country, probably about 30,000 of those sites. I
20 served as a toxicology consultant and also a consultant for
21 medical surveillance programs for protective equipment and
22 surveying individuals who would go out and work on PCB sites
23 or dioxin sites or whatever the sites might be.

24 For the Technical Assistance Teams, I serve as
25 a consultant to advise on emergency responses. That is, if

1 a tank car releases 20,000 gallons of some commodity in the
2 middle of Houston, there is under the National Contingency
3 Plan an emergency response that is already prepared for that
4 release. What I do is serve as a technical assistant to the
5 TAT teams who go out and respond to that and also to
6 emergency rooms that might receive those individuals that
7 might be contaminated or harmed as a result of that release.

8 Q. I take it that in connection with your service
9 as consultant with one or both of the FIT and the TAT teams,
10 you've had the opportunity to deal with all of U.S. EPA's
11 regions?

12 A. Yes, sir.

13 Q. And I take it that you've had experiences in
14 dealing with the Atlanta region, which I think is Region 4?

15 A. Yes, sir.

16 Q. Is there any particular region of U.S. EPA that
17 you've had greater involvement with than others?

18 A. Probably Region 4, having provided also
19 training to the Departments of Health, Departments of
20 Environmental Quality, in all of the states from Kentucky
21 south, including Tennessee, Mississippi, Alabama, providing
22 training with regard to hazardous materials management,
23 identification of hazardous materials, and the potential
24 consequences of exposure to hazardous materials.

25 Q. I take it you had no consulting role in

1 connection with EPA's response action at the NEC site?

2 A. In what was the that time? '88? Or '89?

3 Q. I believe '89. I'll have the scope of my
4 question any role in connection with U.S. EPA's response
5 activities at any time in connection with the NEC site.

6 A. Not that I can recall.

7 Q. As part of your service as a consultant for
8 U.S. EPA, have you had any responsibility for developing
9 community relations plans pursuant to the NCP requirements?

10 A. Have none.

11 Q. You're familiar with the different, the nine
12 criteria in the NCP for EPA's taking a Superfund response
13 action at a site?

14 A. I'm familiar with some of them. If you asked
15 me to tell you the nine, I probably could not tell you all
16 nine.

17 Q. Generally speaking, do you know whether or not
18 those criteria are conservative in that they overstate the
19 potential risk?

20 A. This is for an emergency response?

21 Q. Correct.

22 A. That's a difficult question to answer. I don't
23 know that it overstates the risk because generally there's
24 very little known about the matter other than chemicals are
25 present and could threaten, for example, a waterway, or

1 could go into a waterway, so I don't know that I would say
2 that they exaggerate or over estimate or -- it's sort of a
3 an evaluation that has lots of public policy, political and
4 other integrations into it.

5 Q. Have you ever, as part of your service on
6 behalf of the U.S. EPA, have you ever been involved in
7 reviewing and giving an opinion about any record of a
8 decision that U.S. EPA might have arrived at in connection
9 with a Superfund site?

10 A. I'm sorry, have I ever had, as a consultant or
11 as an individual, had an opportunity --

12 Q. As a consultant.

13 A. To the EPA?

14 Q. Correct.

15 A. I don't recall. I'm sure I've reviewed records
16 of decisions, but I don't have any specific comments. I
17 can't recall.

18 Q. On behalf of any party, have you ever submitted
19 comments on any U.S. EPA record of decision, any proposed
20 plan during the public comment period of a Superfund
21 response action?

22 A. Not that I can recall.

23 Q. Do you -- let me rephrase that. Can you
24 dispute any conclusions in U.S. EPA's record of decision in
25 connection with the NEC site as not being scientifically

1 valid?

2 A. I can't answer that question because I didn't
3 do that. I haven't looked at that document for that
4 purpose, so I don't have an opinion about that at this time.

5 MR. RYSKOSKI: Kevin, do you want to take
6 a break here?

7 MR. HOLEWINSKI: Yes.

8 (At this time a brief recess was taken.)

9 MR. HOLEWINSKI: Going back on the
10 record, please.

11 BY MR. HOLEWINSKI:

12 Q. Dr. Harbison, before the break, I'd asked the
13 question of whether or not you had an opinion about EPA's
14 record of decision, and I think you had indicated that you
15 had not been asked to look at that issue. Do you recall?

16 A. That's correct, yes, sir.

17 Q. My question, the next question, though, is, do
18 you have an opinion, having reviewed EPA's record of
19 decision, whether or not that record of decision overstates
20 the potential risk at the site at that time?

21 MR. RYSKOSKI: Let me assert an objection
22 here. I think he's made it clear that's beyond the scope of
23 what he's been asked to provide an opinion on as an expert.

24 MR. HOLEWINSKI: Right. And I'm asking
25 whether or not he's got an opinion as someone in the field

1 who does toxicological risk assessment, whether or not the
2 record of decision by EPA is a valid one, essentially.

3 MR. RYSKOSKI: You can go ahead and
4 answer the question, but again I'm asserting an objection.
5 He hasn't been asked to do that as an expert witness in this
6 case.

7 A. I don't have an opinion about that. I haven't
8 reviewed it for that purpose at this time. I simply don't
9 have an opinion about it.

10 Q. Based on your experiences working with EPA, do
11 you have any personal knowledge where U.S. EPA has issued a
12 record of decision for a Superfund site without any factual
13 basis?

14 A. Factual basis is a little broad.

15 Q. I'll narrow it to scientific basis.

16 A. Yes, I'm aware of a record of decision such as
17 that, yes.

18 Q. Where?

19 A. Shavers Farm.

20 Q. And are you retained on behalf of any parties
21 in connection with that site?

22 A. I am.

23 Q. Is that matter in litigation?

24 A. It is.

25 Q. What's the type of record of decision involved?

1 Does it involve groundwater remedy?

2 A. It involves a remediation that did not, I don't
3 believe, include groundwater mediation, but it was barrel
4 removal or soil removal and stockpiling and placement on
5 site, that is, creating essentially a waste site for the
6 material on site.

7 Q. This was a rapid removal action, to the extent
8 you know?

9 A. I don't know what it's specifically called, but
10 it was an immediate removal, over a period of months.

11 Q. And the parties you were retained by in that
12 matter are?

13 A. I believe it's Northwest Industries.

14 Q. Have you submitted comments in connection with
15 EPA's record of decision in that case? By the term
16 "comments," I'm talking about the type of comments that the
17 NCP public participation process contemplates in terms of
18 EPA publishes its proposed plan, invites public comments on
19 it, accepts those comments, deliberates about them, and
20 issues a final decision.

21 A. Have I submitted comments to that process?

22 Q. Yes.

23 A. I have not.

24 Q. Do you know whether or not the time frame for
25 the public comment period in connection with that site has

1 passed? .

2 A. I believe, yes.

3 Q. Have you testified in any capacity in that case
4 -- in that matter, I should say?

5 A. Testify, meaning?

6 Q. By deposition?

7 A. No, I have not.

8 Q. Have you submitted any affidavits or
9 declarations in connection with any papers that have been
10 filed in connection with that matter?

11 A. I have.

12 Q. And where were they submitted to? Were they
13 submitted to a court?

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

15 Q. Do you know whether or not that matter is
16 listed on your CV?

17 A. It is not.

18 Q. How long have you been involved in that matter?

19 A. I would estimate about a year.

20 Q. In connection with your work for U.S. EPA, have
21 you ever worked with Dr. Marcus at Research Triangle Park?

22 A. I don't think Dr. Marcus is at Research
23 Triangle Park. I think he's in Washington, and I think the
24 answer is no.

25 Q. For sake of clarity --

1 A.. William Marcus?

2 Q. Yes.

3 A. William Marcus I believe is in Washington. I
4 have not.

5 Q. How about Dr. Muzak?

6 A. No.

7 Q. So I'm clear, the Superfund matter, the removal
8 action matter that you have been involved with for about a
9 year, that was removal of drums?

10 A. Drums, soil, contaminated soil.

11 Q. But as far as you're aware, no groundwater
12 contamination?

13 A. No, I don't believe so.

14 Q. Okay. Do you have any training in
15 hydrogeology?

16 A. I do not.

17 Q. I take it from the introduction with
18 Mr. Carlson that you've worked with him before?

19 A. I have.

20 Q. In what capacity?

21 A. I have reviewed some matters for him concerning
22 Bendecten.

23 Q. And I'll limit the nature of the question to
24 matters that you've been formally designated or testified
25 in. With respect to work with Mr. Carlson, have you

1 testified at trial?

2 A. I have.

3 Q. How frequently?

4 A. I can recall, I believe, five times in the last
5 ten years.

6 Q. And those were -- were all those products
7 liability cases?

8 A. Yes.

9 Q. For what? For drug products?

10 A. Drugs and chemicals, I believe.

11 Q. And the chemical case would have been the
12 Lockheed case?

13 A. Yes.

14 Q. And you testified at trial in that case?

15 A. I did.

16 Q. You worked -- just for the sake of clarity, you
17 worked with Mr. Carlson?

18 A. Correct.

19 Q. Do you know which party retained you?

20 A. I do not.

21 Q. What was your trial testimony in that case, to
22 the extent you can recall?

23 A. About the chemicals, their potential effects,
24 the levels that are not associated with effects. Those
25 would be the general areas that I could recall.

1 Q. And the chemicals in that case involved
2 solvents?

3 A. Yes.

4 Q. And some of the plaintiffs there involved
5 workers; is that correct?

6 A. Yes.

7 Q. And what opinion -- let me strike that. Do you
8 know what the alleged time period of exposure to chemicals
9 was in that case, in the Lockheed case?

10 A. I don't recall that.

11 Q. Do you recall generally whether or not it was
12 long-term exposure or whether or not it was short durations?

13 A. Short durations being matters of days?

14 Q. I'm sorry?

15 A. Matters of days, you mean?

16 Q. That was a poor question. By short durations,
17 I mean individuals who might have been employed at the plant
18 for a year or less.

19 A. I don't remember the time of the employment of
20 those individuals. I just don't remember.

21 Q. What type of opinion or opinions did you render
22 at trial in that case?

23 A. Well, I don't recall those specifically either.
24 I think I had opinions about the material safety data
25 sheets. I believe that I had opinions about the exposures.

1 I don't recall specifically.

2 Q. Do you recall generally what opinions you had
3 about material safety data sheets in the Lockheed case?

4 A. I do not.

5 Q. What would refresh your recollection? Review
6 of the trial transcript?

7 A. Sure.

8 Q. Do you, as part of your file, have a copy of
9 the trial transcript from the Lockheed case, at least that
10 portion that you testified?

11 A. I do not.

12 Q. Do you recall generally anything about your
13 testimony concerning the exposures that were allegedly
14 suffered in that case?

15 A. I do not.

16 Q. Do you recall whether or not you disputed the
17 alleged exposures by the plaintiffs in the Lockheed case?

18 MR. RYSKOSKI: Objection. Vague. You
19 can answer if you can.

20 A. I don't recall specifically a dispute about
21 those exposures. I simply don't recall that testimony.

22 Q. How long ago was this?

23 A. A couple years.

24 Q. That went to a verdict?

25 A. I believe that it did.

1 Q. Do you recall the result of that verdict?

2 A. I do not.

3 Q. Did you sit in the trial most of the time
4 during the length of the trial?

5 A. I did not.

6 Q. Do you recall what the plaintiffs in that case
7 were contending about the alleged exposure?

8 MR. RYSKOSKI: Objection. Vague. You
9 can answer.

10 A. There were injuries alleged as a result of
11 exposure.

12 Q. As a result of exposure to solvents?

13 A. I don't remember all the chemicals, but
14 certainly solvents were part of that.

15 Q. Is it fair to say that the testimony you gave
16 in general terms, at least, was of the view that the levels
17 of chemicals those employees were exposed to would not
18 support the type of injuries they alleged?

19 A. Well, I don't remember that testimony, so I'd
20 have to look at it. I simply don't remember.

21 Q. Do you recall what other experts testified in
22 that case?

23 A. I do not.

24 Q. Did you give a deposition in that case? Do you
25 recall?

1 A. I don't recall if I did or did not. I don't
2 recall.

3 Q. You used the term "material safety data
4 sheets." What are those?

5 A. A material safety data sheet is a document or a
6 description of the product, its physical, chemical
7 characteristics, toxicity information that would be
8 associated with exposure at some levels with those
9 materials, incompatibilities. Those would be the general
10 informations that are on there.

11 Q. Do you recall -- are those required by any
12 regulatory agency, as far as you're aware?

13 MR. RYSKOSKI: Objection. Vague and
14 overbroad. Go ahead.

15 Q. Do you know why a particular, say,
16 manufacturing facility would be in possession of material
17 data sheets?

18 A. A manufacturing facility, yes. They're
19 required under the hazard communication regulation of OSHA
20 to provide those material safety data sheets to their
21 workers.

22 Q. To the extent you know or can recall, do those
23 material -- generally speaking, do material safety data
24 sheets identify potential risks associated with a particular
25 chemicals?

1 A. They may, yes.

2 Q. Do you know when material safety data sheets,
3 as part of the hazard communication standard, were first
4 required?

5 A. It was around 1986 when the legislation was
6 passed. When it was finally promulgated, I'm not sure, but
7 I believe it was 1986.

8 Q. In the Lockheed case, do you recall whether or
9 not you gave any opinion about what the industry's state of
10 knowledge was at the time, at any time period, about
11 acceptable levels of chemical exposure for an employee?

12 MR. RYSKOSKI: Objection. Vague and
13 overbroad. You can go ahead and answer, if you can.

14 A. I don't recall that.

15 Q. Aside from the Lockheed case, in your work with
16 Mr. Carlson, were there any other cases that involved
17 exposure to chemicals as opposed to ingestion of drug
18 products?

19 A. I don't believe so.

20 Q. I've got some further questions about your
21 background and experience. On page of 6 of Exhibit 1, you
22 reference experience in connection the U.S. Department of
23 Justice at a number of sites, but actually two sites on that
24 page, but my questions relate to the Price Landfill.

25 A. Yes.

1 Q. What role did you have there?

2 A. To evaluate water contamination and whether
3 that water contamination exceeded the water quality criteria
4 at that particular time and the potential toxicity of
5 chemicals that were found in the groundwater.

6 Q. And do you recall what opinions you came to as
7 a result of your review of that data there?

8 A. Yes, that those individuals should not continue
9 to drink that water, that there were potential risks
10 associated with that, and that they should not drink the
11 water.

12 Q. Did you recommend any diagnostic study be done
13 on those individuals who had once been drinking that water
14 at that site?

15 A. I had no purpose for evaluating those
16 individuals. My evaluation was one of risk, not of a
17 likelihood of cause of an injury as a result of that
18 exposure.

19 Q. Are you aware whether or not a diagnostic study
20 was ordered by the U.S. EPA or the court in connection with
21 that site?

22 A. I am not.

23 Q. In connection with work that you did on behalf
24 of Hooker Chemical Company, again focusing on page 6, what
25 type of work did you do there?

1 A. I'm sorry, where is that?

2 Q. It's above. I'm sorry.

3 A. I evaluated the health claims at the Hooker
4 Love Canal site for the effects that may have been produced
5 as a result of exposure to those chemicals for a 10 K filing
6 for the Securities and Exchange Commission.

7 Q. How long ago was this approximately?

8 A. I would say probably 15 years ago.

9 Q. Do you recall what your opinion was about the
10 possible health effects?

11 A. That some may have been related; others not.

12 Q. Do you recall the type of chemicals that were
13 disposed of at the Love Canal site?

14 A. I recall some.

15 Q. The some that you do recall, can you state
16 those?

17 A. I believe that there was
18 hexachlorocyclopentadiene, and there were also some
19 chlorinated materials, chlorinated solvents like, I believe,
20 carbon tetrachloride and also some aromatic solvents, I
21 believe, like benzene, toluene, and xylene. Those are the
22 ones I recall.

23 Q. Any TCE?

24 A. I don't specifically recall TCE.

25 Q. Generally speaking, as part of your background

1 and experience in toxicology, have you had the opportunity
2 to do any assessment on the health effects of TCE exposure
3 on individuals?

4 A. Meaning having seen them in a clinic or having
5 experimented on them?

6 Q. Let's first say in the clinic.

7 A. Yes.

8 Q. And I take it the answer to the second
9 question, having experimented on them, have you?

10 A. I have not.

11 Q. With respect to those that you've seen in the
12 clinic, are there particular -- first, how many
13 approximately have you seen of that description?

14 A. I would estimate a couple dozen.

15 Q. And do you know what the source of their
16 alleged TCE exposure was?

17 A. Use of it as a cleaner.

18 Q. In the workplace or at home?

19 A. It would have been both.

20 Q. And did you come to any opinion about whether
21 or not the exposures to TCE by those individuals had an
22 adverse health effect on them?

23 A. Can be some adverse health effects, depending
24 on the concentration, such as eye irritation, nose
25 irritation, throat irritation, higher levels resulting in

1 motor incoordination because of its depressant properties.
2 Those would be the general effects that I would agree with.

3 Q. But in connection with those individuals that
4 you had seen in the clinic, did you diagnose any effect from
5 any TCE use by them in any health-related condition they
6 might have manifested?

7 A. Sure.

8 Q. What were those conditions that were
9 manifested?

10 A. Eye irritation, nose irritation, throat,
11 respiratory congestion.

12 Q. Continuing on page 6, maybe I'll group these.
13 There was the reference there to evaluation of environmental
14 and public health problems associated with the LiPari
15 Landfill in New Jersey.

16 A. Yes.

17 Q. And below that there are two other, what I
18 presume are Superfund sites, but my question first as to
19 LiPari, did you come to any opinion in connection with that
20 activity, that work at LiPari, as to what health effect, if
21 any, might have resulted to individuals living near the
22 LiPari Landfill?

23 A. That was not an evaluation of health effects.
24 That was an evaluation of risk, which are not the same.

25 Q. Okay.

1 A. So --

2 Q. In terms of risk, did you identify any risk to
3 those individuals that lived near LiPari Landfill as a
4 result of your analysis?

5 A. I believe the answer is yes.

6 Q. What risks were those?

7 A. I do not recall.

8 Q. In connection with the Velsicol Corporation,
9 the Hardeman County Landfill --

10 A. Yes.

11 Q. -- different terminology used there, evaluation
12 of health problems associated with the Hardeman County
13 Landfill, could you describe that work?

14 A. For the State of Tennessee, as well as for
15 Velsicol, I looked at the complaints that were made of the
16 residents of Hardeman County and served on a state committee
17 with regard to the potential remediation of that site, and
18 then ultimately testified with regard to I think about six
19 or ten of those individuals who made complaints about
20 personal injury.

21 Q. And do you recall what your testimony was about
22 those individuals?

23 A. Well, I don't recall specifically --

24 Q. Generally?

25 A. -- those individuals. I recall that the

1 complaints, the injuries, in my opinion, were not consistent
2 with either the levels or the chemicals that were found in
3 the drinking water.

4 Q. Is it fair to say that the field of toxicology
5 has generally advanced in the past 35 years?

6 MR. RYSKOSKI: Objection. Vague. You
7 can answer, if you can.

8 A. Sure.

9 Q. So in, for example, 1959, the scientific
10 knowledge from a risk standpoint, at least, would not be as
11 comprehensive as it is today.

12 MR. RYSKOSKI: I'm going to object. I
13 think it's beyond the scope that he's been offered for as an
14 expert. If you can answer the question, you can go ahead.

15 A. I think I would generally agree with that.

16 Q. Is there a point, to your knowledge, based on
17 your experience, is there a point in the field of toxicology
18 where sort of there was an avalanche of change that has
19 taken place about evaluating risks to human health?

20 MR. RYSKOSKI: Same objection. You can
21 answer if you can.

22 A. An avalanche of change?

23 Q. I will rephrase that to any change, any
24 significant change in the past 35 years.

25 MR. RYSKOSKI: Same objection. Vague.

1 A. The methodology for assessing risk was first
2 refined or developed in about 1986. It has since been
3 refined since that period of time, having evolved to a
4 state that is considerably different in 1997.

5 Q. Based on the work you've done in the field over
6 time, do you have any knowledge as to whether toxicologists
7 have changed their views about whether the use of solvents
8 in the industrial workplace might pose a risk to employees?

9 MR. RYSKOSKI: Same objection.

10 THE WITNESS: I'm sorry, could he read
11 that back again?

12 MR. HOLEWINSKI: Yes, please.

13 (Whereupon the requested portion of the record
14 was read aloud by the Court Reporter.)

15 A. I don't think I can answer that question
16 without knowing something about the exposure and what the
17 solvents are. There's certainly been information that has
18 evolved about solvents that didn't exist 30 years ago, but,
19 again, it would depend on the use, the exposure, as to
20 whether there's a hazard or not.

21 Q. You referenced information that has evolved.
22 What type of information were you referring to?

23 A. Well, certainly benzene and its association
24 with leukemia. And we're talking about decades, now, right?

25 Q. Right.

1 A. That would certainly be information that's
2 evolved.

3 Q. Do you know, based on all your experiences at
4 the Superfund sites and training in the field, whether or
5 not the manner of disposal of TCE, from a risk point of
6 view, there's been an appreciation that TCE use now can pos
7 a risk to human health in the environment?

8 MR. RYSKOSKI: I'm going to assert the
9 same objection.

10 MR. HOLEWINSKI: You might need to have
11 that read back.

12 A. I think I understand it. You're talking about
13 today is there a different appreciation for that fact than
14 there was 20 years ago, 30 years ago.

15 Q. Correct.

16 A. I would say, yes, that's probably true.

17 Q. What type of change and appreciation would
18 there be, has there been?

19 A. Well, the disposal of those solvents certainly
20 in the '50s and '60s was by dumping them onto the surface of
21 the ground or disposing of them down a drain or into a
22 septic system. That practice certainly has changed.

23 In 1976, the Resource Conservation Recovery Act
24 restricted that disposal, so from '76 on, there were
25 regulatory requirements with regard to that disposal, and it

1 certainly changed.

2 Q. Moving to page 9, your teaching experience, the
3 only question I have there is about the last matter, the
4 Health Implications/Aspects of Chemical Issues, the
5 Superfund University Training Institute, East Tennessee
6 State, University of Virginia, EPA. Could you tell me a
7 little bit about your involvement or your teaching
8 experience there?

9 A. This is a course that is put on for state
10 health departments, for state emergency response personnel,
11 with regard to chemical releases, chemical disposal, the
12 potential health effects associated with that as well as
13 other technical issues concerning that.

14 Q. On page 11 you reference training at Research
15 Triangle Park at North Carolina. What type of training?

16 A. I'm sorry, I don't understand the question.

17 Q. On page 11 of your CV, Exhibit Number 1, the
18 report which is attached to the CV, you reference the
19 Research Triangle Institute.

20 A. Yes, sir.

21 Q. What does that reference mean?

22 A. That means that I trained Hudson Bates, who
23 received his Ph.D. with myself, and he is currently at the
24 Research Triangle Institute. That's where he's employed.

25 Q. What type of training?

1 A. In toxicology.

2 Q. Did that involve lectures or --

3 A. I was his mentor for his Ph.D. degree.

4 Q. And going up to the top, Felix Adatsi, did you
5 serve as a mentor to him?

6 A. I did.

7 Q. Do you know, right below that, Ann Clevenger,
8 EPA, do you know whether or not she's still with EPA?

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

10 Q. Okay. On page 18, Exhibit Number 1, I just
11 want to get an understanding on Publications 66 and 67.
12 Maybe they're not publications -- yes. Number 66, what does
13 that reference?

14 A. I received a grant from the U.S. EPA to develop
15 a training program for on-scene coordinators. I trained the
16 first on-scene coordinators designated under Section 311 of
17 the Clean Water Act for response to emergency spills. That
18 course was used to train the on-scene coordinators in
19 chemistry, toxicology, engineering, cleanup management.

20 Q. And Number 67, could you briefly describe what
21 that involved?

22 A. This was a report of a model for assessing the
23 environmental impact of hazardous material spills by looking
24 at various sampling strategies to be able to identify the
25 likely mobility or leachability of those materials.

1 Q. All types of materials, or were there
2 particular chemicals that you were focusing on?

3 A. I suspect there were probably specific
4 chemicals.

5 Q. On page 19, I've got two questions in
6 connection with 82 and then 83. Could you explain what is
7 referenced on -- as the Number 82, please?

8 A. I'm sorry, explain what's referenced, you mean
9 explain --

10 Q. Explain what that involved.

11 A. It was an evaluation of halocarbon
12 hepatotoxicity and the effects of ketones, such as
13 2,5-hexanedione, on that hepatotoxicity.

14 Q. Excuse me for asking it this way, but in
15 laymen's terms?

16 A. Well, to look at the interaction of ketones
17 with halogenated hydrocarbons and their ability to produce
18 hepatotoxicity.

19 Q. Hepatotoxicity is what?

20 A. Liver damage.

21 Q. And did part of that evaluation involve the
22 study of halogenated solvents?

23 A. Yes, I believe it did.

24 Q. And did you come to any conclusion with respect
25 to halogenated solvents as to the likelihood of

1 hepatotoxicity resulting from exposure?

2 A. Yes.

3 Q. And what was the opinion?

4 A. My recollection is that the hexanedione
5 enhanced the cell effects, cell damage that occurred under
6 some exposures with regard to those materials.

7 Q. Enhanced the cell damage in the liver?

8 A. Correct.

9 Q. Because that was your only focus?

10 A. Right.

11 Q. All right. I'll try to narrow it as to 83.
12 What type of assessments of human risks involving PCBs did
13 you do in connection with what is referenced in 83?

14 A. Evaluated the toxicity, that is, the effects
15 that could be produced as a result of exposure to PCBs and
16 also its carcinogenicity with regard to the studies that
17 were published at that time.

18 Q. And in 1983 did you come to any opinions about
19 the possible human risks from -- associated with PCBs?

20 A. Yes, I think so.

21 Q. What were those?

22 A. That there are some risks associated with
23 exposure to PCBs at some levels of exposure in the
24 workplace. One can develop chloracne, and it can also
25 increase liver enzymes under some conditions of exposure,

1 and I believe that my opinion was that it was probably not a
2 human carcinogen.

3 Q. Do you know whether or not EPA has determined
4 whether or not -- do you know whether EPA has determined if
5 PCBs are a human carcinogen?

6 A. They have not classified PCBs as a known human
7 carcinogen at the present time.

8 Q. Do you know whether or not EPA has ever
9 determined whether -- if TCE is, in fact, a carcinogen, a
10 human carcinogen?

11 A. EPA has determined that there is insufficient
12 evidence that trichloroethylene is a human carcinogen, and
13 the Science Advisory Board has requested that it be
14 declassified to a Class C from a B2 because of the unique
15 response that mice have to trichloroethylene, which is
16 peroxisome proliferation, and that response doesn't occur in
17 humans. So the C classification would be that there's not
18 sufficient evidence even in laboratory animals that it
19 causes cancer because of that unique response.

20 Q. And for the record, C classification means
21 what?

22 A. Insufficient evidence in laboratory animals
23 that it causes cancer, meaning that it only occurs under a
24 unique -- in a unique strain or species because of a
25 specific mechanism. In this case, peroxisome proliferation.

1 Q. And that C classification is EPA's
2 classification system, or is that some other protocol for
3 classifying?

4 A. No, that would be EPA's. And they haven't
5 classified it as a C. It's still a B2. It's not a C.

6 Q. Is it identified currently as a potential
7 carcinogen?

8 A. It's a B2, meaning sufficient evidence in
9 laboratory animals but insufficient evidence in humans, is
10 its current classification.

11 Q. Okay. I understand that. I'm just trying to
12 identify, do you know whether or not currently it's
13 identified by EPA as a potential carcinogen?

14 A. Potential is not part of their classification.
15 B2 would be its classification.

16 Q. On page 23 the work there labeled or numbered
17 128, could you describe that?

18 A. This is an article that describes the
19 assessment of risk associated with polycyclic aromatic
20 hydrocarbons from dermal exposure.

21 Q. And did you, as part of those perspectives, did
22 you come to any conclusions about what the risks from dermal
23 exposure to those hydrocarbons was?

24 A. That the risks would be significantly
25 attenuated as a result of the PAHs being adsorbed to soil,

1 and also the PAHs degrade in soil, so in assessing risk,
2 both of those factors would have to be considered in
3 assessing the risk associated with dermal exposure to PAHs.

4 Q. So is it fair to say that -- I'm just trying to
5 understand your views -- that because the hydrocarbons, for
6 lack of a better phrase, receded into the soil, that would
7 minimize the possibility for direct dermal contact?

8 A. No.

9 Q. Okay. Then could you explain a little bit more
10 so I can understand what your conclusion was?

11 A. PAH is adsorbed to soil, soil particles. That
12 adsorption retards the absorption of the PAHs into the body.
13 So it retards the ability of them to get into your tissues.

14 Q. The work reference in Number 130, I guess, if
15 you can answer this, did that -- the work for PCB exposure
16 referenced in 130, as I recall, that came about ten years
17 after the work reference in 83 of Exhibit 1, involving
18 assessment of risks through PCBs. And I guess my question
19 is, first question is, as it relates to the work in 130,
20 could you describe what that involved?

21 A. It was an evaluation of the effects produced by
22 polychlorinated biphenyls in humans.

23 Q. And was the target on particular groups of
24 individuals, study groups, or was it a review of available
25 scientific literature?

1 A. It would be the review of all literature
2 regarding occupational and environmental exposures.

3 Q. And to the extent you did, did you come to any
4 conclusions as to what human diseases could potentially
5 result from exposure to polychlorinated biphenyls?

6 A. Yes.

7 Q. What was that?

8 A. Based upon levels of exposure, there are some
9 levels of exposure that can cause chloracne, that can cause
10 skin dermatitis or contact dermatitis.

11 Q. So it's the same conclusion essentially that
12 you arrived at when you did the work in 1983?

13 A. It would be similar.

14 Q. Okay. Continuing on in Exhibit 1, page 23,
15 Reference 133, which golf courses did you assess?

16 A. These were golf courses in Florida over by
17 Ponte Verde and along the Atlantic Coast.

18 Q. What was involved in assessing the chemical
19 hazards on golf courses?

20 A. To evaluate the exposure of golfers to
21 herbicides, pesticides, limicides, nematicides, and other
22 materials applied to the golf course and to the greens to
23 evaluate the exposure and potential risks associated with
24 these exposures.

25 Q. And in terms of risk, did you reach any

1 conclusions as to whether or not, assuming -- strike that.
2 Did you come to any conclusions as to whether or not the
3 types of chemicals used on golf courses could pose a risk to
4 human health?

5 A. Well, it's not the type that determines whether
6 or not there's a risk. It's the exposure and the dose, and
7 based upon an evaluation of the likelihood of the exposure
8 and dose received from those exposures, the golf course is
9 not likely to pose a human health risk to the golfers.

10 Q. I see that you did some work with Brad DeVore?

11 A. I did.

12 Q. What type of work was that?

13 A. For Brad DeVore and another of your partners in
14 Washington, D.C., whose name I cannot remember. I evaluated
15 the risks associated with dioxin.

16 Q. Bob McDermott?

17 A. Yes. Creating affidavits with regard to
18 dioxin, with regard to chlorinated materials used as
19 pesticides and fumigants for I believe it was International
20 Paper, and also I believe it was Dole, Dole Foods.

21 Q. I see from the Exhibit 1 testimony that's been
22 provided, you testified in connection with a matter
23 involving Sherwin-Williams in 1994?

24 MR. RYSKOSKI: Do you have a page number?

25 MR. HOLEWINSKI: Page 2.

1 MR. RYSKOSKI: Okay.

2 Q. Down at the bottom in 1994.

3 A. On page 2? I don't see it.

4 Q. It's under category Testimony.

5 MR. RYSKOSKI: You're probably looking at
6 the deposition section. Page 2 of the trial testimony, I
7 believe.

8 A. Yes.

9 BY MR. HOLEWINSKI:

10 Q. Were you retained on behalf of Sherwin and
11 Williams?

12 A. Yes.

13 Q. What type of testimony -- strike that. What
14 work did you do on behalf of Sherwin-Williams?

15 A. I evaluated the claim of -- I believe it was
16 brain damage or nervous system damage, I believe, with
17 regard to exposure to paint, Sherwin-Williams paint.

18 Q. Was the allegation that the lead in the paint
19 caused the harm?

20 A. No. The solvents in the paints caused the
21 harm.

22 Q. Above that, the American Color and Chemical
23 Corp. v. Tenneco Polymers, Inc., who were you retained by in
24 that matter?

25 A. Tenneco Polymers, Incorporated.

1 Q.. And do you know what type of case that was, to
2 the extent you can recall?

3 A. My recollection is it was a dispute over a
4 property transfer that there was property that was
5 transferred, and the allegation of contamination and
6 devaluation of the property I believe was the issue.

7 Q. Going to page 1, the page just before that
8 under the Testimony section of Exhibit 1, the Industrial
9 Excess Landfill matter?

10 A. Yes.

11 Q. What type of work did you do in connection with
12 that site?

13 A. My recollection is that there was a claim of
14 property devaluation associated with the landfill, and my
15 recollection is that I looked at the analytical data and the
16 surrounding neighborhood and had an opinion with regard to
17 the chemicals on the site versus the chemicals off the site
18 from other sources.

19 Q. Were you retained there on behalf of the rubber
20 group of parties?

21 A. I'm sorry, the what? The rubber group?

22 Q. I'll strike that. Who were you retained by in
23 connection with that matter?

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

25 Q. Do you know whether or not that landfill had a

1 significant -- it was alleged that that landfill had a
2 significant amount of rubber material that had been disposed
3 of over time by the different manufacturers?

4 A. I recall rubber, yes, sir, latex.

5 MR. HOLEWINSKI: All right. If you want
6 to take like a two-minute break, I'm just going to go
7 through your report, and I think we can be done in like a
8 half-hour. If you want to take a break or we can continue
9 on, I'm just giving you the option.

10 THE WITNESS: It doesn't matter to me.

11 MR. HOLEWINSKI: We can continue on then.

12 BY MR. HOLEWINSKI:

13 Q. Now, is it fair to say that any material
14 opinion that you have about your review of the underlying
15 plaintiffs' allegations is contained in this report?

16 THE WITNESS: I'm sorry, could you read
17 that, please?

18 (Whereupon the requested portion of the record
19 was read aloud by the Court Reporter.)

20 A. I do not have in this report my opinions about
21 each of the plaintiffs. I have a general description about
22 my opinions, but I don't have in here each and every one of
23 the plaintiffs.

24 Q. Do you recall what your opinions were, what
25 your opinion was on each of the underlying plaintiffs?

1 A. I would have to go through each of the
2 underlying plaintiffs. I can tell you that in general my
3 opinion is that the NEC site is not a likely cause of those
4 complaints.

5 (At this point Mr. Carlson left
6 the deposition proceedings.)

7 Q. Did you reach an opinion as to whether or not
8 there might be one individual of the many plaintiffs for
9 whom the site might be the cause of their condition?

10 A. Of those that I evaluated who were there prior
11 to 1974, I cannot recall a plaintiff that I would have the
12 opinion that their complaint or disease or ailment was
13 caused by the NEC site.

14 Q. Since you completed Exhibit Number 1, have you
15 reviewed any additional materials for purposes of testifying
16 possibly in connection with the trial in this matter?

17 A. Any additional materials other than what we've
18 already talked about, right?

19 Q. Correct.

20 A. I can't at this time recall any additional
21 materials.

22 Q. I take it there's nothing in the report that
23 you wish to change at this time?

24 A. No.

25 Q. Now, none of the work that you have done in

1 connection with your review of the underlying plaintiffs'
2 allegations was intended to assess the jury's view of the
3 evidence?

4 A. Was not.

5 (At this point Mr. Carlson returned to
6 the deposition proceedings.)

7 Q. And as I understand it, you've not been asked
8 to make any determination about the possible impact the
9 evidence would have on a jury.

10 A. I was not.

11 Q. Now, did you -- I think you answered this
12 earlier, but did you at any point in time in connection with
13 this matter review the opinions of the experts that were
14 retained by Cooper and McGraw-Edison?

15 A. You asked me that, and the answer is, no, I did
16 not.

17 Q. Do you have any knowledge as to what data or
18 publications those McGraw-Edison Cooper experts relied upon
19 at trial?

20 A. I do not.

21 Q. Do you have any knowledge as to what -- strike
22 that. Do you have any knowledge as to whether or not Cooper
23 or McGraw's experts challenged the scientific methodology of
24 plaintiffs' experts?

25 A. I have no knowledge of that.

1 Q. Now, as I understand your report, and we could
2 walk through portions of it, but you challenged or you
3 dispute, not challenge, you think the methodology utilized
4 by the plaintiffs' experts is not scientifically valid; is
5 that correct?

6 A. That's correct.

7 Q. And, if you could, just generally explain the
8 basis for your opinion as to why their methodology was not
9 valid.

10 A. There was no evaluation of the exposure or the
11 dose that was subsequently received by the plaintiffs.
12 There was no evaluation of the specific complaints to
13 determine -- or diseases or illnesses to determine whether
14 or not the diseases or illnesses of the plaintiffs could
15 have been caused as a result of exposure to that chemical.
16 There was no evaluation of the temporal eligibility, that
17 is, whether or not those effects could have been caused as a
18 result of the exposure based upon time of the complaint
19 versus the exposure. There was no evaluation of the
20 biological plausibility with regard to the complaints,
21 illnesses, or diseases being likely caused as a result of
22 exposure to those chemicals. And there was no evaluation of
23 alternative causes, that is, to ask what caused someone's
24 ailment or disease as to assume there is a cause. That is,
25 there is a natural history of all of these diseases or

1 ailments or claims, and there was no methodology that was
2 used to determine that in fact those diseases, ailments, or
3 claims would not have occurred in the absence of the
4 exposure. So those would be my general criticisms.

5 With regard to the dose, again, these are
6 ubiquitous chemicals. These are chemicals that everyone is
7 exposed to, and you're exposed to those whether or not you
8 are near the NEC facility, and there was no methodology that
9 was used to compare whether or not the dose would be in
10 excess of that which you would normally receive as a result
11 of the ubiquitous nature of these chemicals.

12 Q. Was there available at the time of trial any
13 accepted scientific methodology to attempt to quantify
14 exposure, the given exposure level for a given plaintiff.

15 A. Sure.

16 Q. And how would one go about doing that?

17 A. Looking at how often that plaintiff was
18 residing in that house or wherever, the trailer, whatever it
19 was, for how many hours a day, what the size of that
20 individual was, whether it was a child, an adult, the amount
21 of air that would be breathed, the amount of water that
22 would be consumed. All of those factors could be used to
23 determine a dose of the chemical, what dose would have been
24 received during what period of time and whether it would
25 have exceeded either a regulatory level or a level that

1 would be associated with producing some harm as a result of
2 that level of exposure.

3 Q. Was the information available at the time of
4 the trial, at least, for the plaintiffs' experts to make an
5 assessment of exposure levels?

6 A. Well, information was available to make an
7 assessment of exposure. Let me give you the example of
8 dioxin. There were six off-site samples of dioxin. Four
9 were below the level of protection. Two were below the
10 level that the ATSDR considers to be, as a matter of public
11 policy, a level that is not associated with any adverse
12 effects.

13 So it would not be possible, based upon that
14 information, to conclude that dioxin was a cause of any of
15 the injuries because there is no information, no evidence
16 that would indicate that dioxin at sufficient doses or
17 sufficient exposures to result in doses was there for any of
18 these plaintiffs.

19 Q. When you're talking possibilities, you're
20 talking scientific possibilities; is that right?

21 MR. RYSKOSKI: Objection. Vague. You
22 can answer if you understand.

23 Q. You used the term possibility. What did you
24 mean by that?

25 A. You mean with regard to the possibility of the

1 injury occurring?

2 Q. Correct.

3 A. I would say it's not probable that the injury
4 would occur as a result of that exposure.

5 Q. But that's a scientific judgment; is that
6 right?

7 A. As opposed to --

8 Q. That you're making a determination based on
9 their review and evaluation of the evidence whether or not
10 they thought it was possible that based on the evidence
11 presented to them, they were available to conclude, through
12 inferences or otherwise, that the alleged exposure did cause
13 the harm. So the question is, when you're talking
14 possibilities, you're only talking about scientific
15 possibilities, aren't you?

16 A. I guess I'm still not clear on the question. I
17 was not a juror, so obviously I can't have an opinion as a
18 juror. I can only have an opinion as a scientist, as a
19 toxicologist, and what I think a reasonable scientist or
20 reasonable people would conclude.

21 Q. Are you aware whether or not the court had
22 indicated that a view as to whether or not the jury was
23 ultimately going to hear, get the case, evaluate the merits
24 of the allegations and the evidence and be in a position to
25 make a judgment about whether or not the allegations were

1 true?

2 MR. RYSKOSKI: Could you read that back
3 again. I didn't quite understand.

4 (Whereupon the requested portion of the record
5 was read aloud by the Court Reporter.)

6 Q. I'll rephrase it. Do you know from your review
7 of the trial transcript whether or not the judge had
8 indicated that while Cooper and McGraw might have disputed
9 plaintiffs' experts' theories, ultimately those theories
10 were going to go to the jury? She was going to let the jury
11 hear and consider the evidence and make a decision as to
12 whether or not it was credible or not?

13 A. And your question to me is do I know that?

14 Q. Yes.

15 A. I do not know that.

16 Q. Would any -- if you knew that the judge allowed
17 that to take place, would that change any opinions you have
18 about the methodology employed by the plaintiffs' experts?

19 A. No.

20 Q. Would it change your opinion about the
21 possibilities, as you used the term in reference to the
22 dioxin, that those dioxin samples that you referenced, if
23 you knew that a juror could come to a conclusion different
24 from what you articulated?

25 MR. RYSKOSKI: I'm going to object to

1 that question as vague. You can answer it if you understand
2 it.

3 A. I don't understand that question.

4 Q. All right. I'll withdraw that question.

5 I guess the point is, you'll agree that
6 whatever acceptable scientific methodology and scientific
7 certainty might be in a given field, that while scientific
8 experts could disagree about particular viewpoints and
9 different methodologies, ultimately whether or not a jury
10 believes a methodology is valid or not is really the
11 deciding factor for a party when they decide to settle a
12 case.

13 MR. RYSKOSKI: I'm going to object. It's
14 beyond the scope that he's been offered as an expert.

15 A. I don't have an opinion about that.

16 Q. You've got no opinions about that?

17 A. No.

18 Q. Okay. On page 2 of your report, Exhibit Number
19 1, just so I'm clear, you reference sort of toward the
20 bottom of page 2 that you've reviewed other documents
21 concerning the NEC site. And I just want to be clear.
22 Aside from the RI/FS groundwater sampling data, what other
23 documents concerning the NEC site might you have reviewed
24 for purposes of completing the report?

25 MR. RYSKOSKI: You mean other than

1 anything else he may have already testified to today?

2 MR. HOLEWINSKI: Well, I'm trying to be
3 fair with the question. He may not recall everything he's
4 testified to.

5 MR. RYSKOSKI: I just don't want to have
6 any implication that if he doesn't remember something right
7 now that he's already testified to, that that's somehow
8 something that he didn't review.

9 A. I think what I told you is what I can recall at
10 this time.

11 Q. All right. On page 2, again, you reference
12 there "My opinions are also based on various records
13 concerning the allegations of the underlying
14 plaintiffs/claimants, including medical records as well as
15 my personal knowledge." The question there is personal
16 knowledge of what?

17 A. Of the records.

18 Q. Okay. And that's the only thing?

19 A. Personal knowledge of the toxicology of the
20 chemicals, of the methodology.

21 Q. But you've not sat down with any of these
22 individuals and done a medical history with them; is that
23 true?

24 A. I have not.

25 Q. Okay. On page 3 and 4 you state -- and I'll

1 read it for the record: "Having reviewed the information
2 provided along with other relevant scientific data, I can
3 find no factual basis for the conclusion that chemicals
4 allegedly released from the NEC facility can be causally
5 associated with bodily injury claims for which McGraw
6 reached a settlement with the underlying
7 plaintiffs/claimants." And the question I have is, When you
8 say "can be causally associated," what do you mean by that?

9 A. That the chemicals could be the cause of those
10 bodily injuries, as within the context of this facility.

11 Q. Okay. The next paragraph, the question I have
12 is about the use of the word "demonstrable." I'll start
13 with the sentence, "However, after reviewing the available
14 information, I can find no demonstrable evidence that
15 supports this assertion." And the assertion that's
16 referenced is "the first exposure to the chemicals at issue
17 was a result of the industrial activities of the NEC
18 facility."

19 The question I have is your use of
20 demonstrable, at least by me, infers that there was some
21 evidence that you possibly reviewed which might have
22 indicated some association between the chemicals and the
23 facility, or is that a misinterpretation?

24 A. That's a misinterpretation.

25 Q. What do you mean by "no demonstrable evidence"?

1 A. I could find no demonstrable evidence that the
2 first exposure to those chemicals occurred from the NEC
3 facility.

4 Q. Are you aware of any other causal sources near
5 the NEC facility for which exposure to chemicals might be --
6 the underlying claimants' exposure to chemicals might
7 otherwise be attributed?

8 MR. RYSKOSKI: I object to that question
9 as vague. Go ahead and answer if you can.

10 A. I can't answer that question because you have
11 causal in it. We're talking about exposure, not causal.
12 Your first question was exposure. Then you put cause in the
13 question.

14 Q. Well, are you aware, based on your review of
15 site data in connection with the NEC facility, are you aware
16 of any site data that suggests the possible source of
17 exposure of chemicals for the plaintiffs was attributable to
18 an off-site source, for example?

19 MR. RYSKOSKI: I object to the question
20 as vague again.

21 A. That question doesn't make sense. You mean
22 where these people lived you're calling the site?

23 Q. Well, we'll back up. The reference to the
24 sites comes from your report in referencing the facility.
25 My question is, based on your review of information for

1 purposes of completing this report, do you have any opinion
2 as to whether or not there are other exposure sources of
3 chemicals to the underlying plaintiffs?

4 A. For these chemicals?

5 Q. Yes.

6 A. Yes.

7 Q. What are those exposure sources?

8 A. Their food, their products that they have in
9 their home, the ambient air, medicines, that is shampoos,
10 for example. Those would all be sources.

11 Q. Let's talk about the ambient air. For these
12 chemicals, given the location of the facilities, how likely
13 is it that the ambient air would be exposing these
14 plaintiffs to TCE particulate matter?

15 MR. RYSKOSKI: I'm going to object to the
16 question to the extent that you're asking him whether he
17 performed some sort of analysis of emissions along the lines
18 of an air modeling expert, and you know we already had our
19 air modeling expert deposed. If that's what you're asking
20 for, that's not anything he was retained to do.

21 MR. HOLEWINSKI: I know, but he
22 referenced the ambient air, so I'm asking a follow-up
23 question.

24 A. I was okay with everything in the question
25 until you said TCE particulate. I don't think that's what

1 you meant, or is it?

2 Q. Strike the question. I'll rephrase the
3 question so the record is clear. You referenced earlier
4 exposure, possible exposure from ambient air. Based on the
5 location of the facility, do you have an opinion as to
6 whether or not TCE, the chemical TCE, could be transmitted
7 through the ambient air to the location where the underlying
8 plaintiffs lived?

9 MR. RYSKOSKI: I'm going to object.
10 Vague, hypothetical. You can go ahead and answer if you
11 can. Again, it's outside the scope that he's been offered
12 for as an expert as well.

13 A. There is general information available with
14 regard to air levels of trichloroethylene both inside your
15 home and outside your home. Inside because the products
16 that you use contain trichloroethylene and outside because
17 trichloroethylene is a ubiquitous contaminant, so it can be
18 found in both the outside as well as the inside air of the
19 home no matter where the home is.

20 Q. Do you know what the levels of, say, TCE
21 exposure in the home for any of the underlying plaintiffs
22 was from any given consumer product?

23 A. I haven't calculated it from any consumer
24 product, but I can tell you the general calculation is that
25 you take in a microgram quantities of trichloroethylene

1 every day, and you take them in from your food. It's found
2 in butter. It's found in chicken. It's found in a variety
3 of foods that you eat. It's also in a variety of consumer
4 products.

5 It's also produced when you chlorinate drinking
6 water. It can also be found in your breath, that is, you
7 can bring it home from other sources, so there are many
8 sources of trichloroethylene. I haven't calculated it
9 specifically from each source, but I can tell you the
10 general number is around micrograms per day of
11 trichloroethylene. That would be the dose that you would
12 get from all sources.

13 Q. Do you have an opinion as to whether or not any
14 groundwater data that was available to plaintiffs' experts
15 -- strike that. Do you know whether or not the underlying
16 plaintiffs' experts as of 1996 had reviewed, based on your
17 review of their trial testimony, for example, do you know
18 whether or not those experts had reviewed groundwater data
19 for purposes of rendering their opinions?

20 A. I believe that they may have reviewed that
21 data, but that data was not used in evaluating the
22 individual claimant's exposure and doses. I don't
23 specifically recall that data being used for the individual
24 claimants.

25 Q. Is reliance on that type of data, on

1 groundwater data such as that present at least as of 1996 in
2 connection with the NEC facility, the type of data someone
3 in your field reasonably relies upon for purposes of making
4 an opinion about, for example, risk?

5 A. You mean to rely upon groundwater water for
6 evaluating risk?

7 Q. Yes.

8 A. Sure.

9 Q. How about for purposes of making assessments of
10 causal relationship between exposure and groundwater,
11 exposure through groundwater? Did the sampling results give
12 any indication for purposes of assessing whether or not
13 there might be an associated causal relationship from where
14 the groundwater sample was taken and the exposure to the
15 individual?

16 A. You would have to evaluate in each case that
17 exposure. There may be no exposure, or there may be some,
18 or there may not be enough data to be able to conclude that
19 someone received a sufficient dose of the chemical to
20 produce a harmful effect. So all of these factors would
21 have to be evaluated.

22 Q. Have you been asked to look at the experts
23 retained by McGraw-Edison and Cooper Industries in the
24 underlying case, to look at their testimony before the trial
25 in this case?

1 A. I have not.

2 Q. On page 7 of your report, and take whatever
3 time necessary, I don't want to put this out of context, but
4 you state "No reasonable scientist would conclude that
5 sufficient evidence exists for linking the alleged exposure
6 with the alleged complaints under the facts of this case."
7 The question I have is, Do you recall where Rhettta Parks
8 lived in reference to the NEC facility?

9 A. I don't recall specifically where she lived.

10 Q. Do you recall looking at whether or not she
11 had, for example, a vegetable garden outside her home?

12 A. I don't recall her specific -- I looked at
13 hundreds of them, so I don't recall her. I'd have to look
14 at it.

15 Q. Do you think it would be relevant inquiry for
16 plaintiffs' experts to have looked at whether or not Rhettta
17 Parks used, for example, her well water to water her
18 vegetable plants?

19 A. If that would be an inquiry that ought to be
20 considered?

21 Q. Yes.

22 A. Sure.

23 Q. Would it, for toxicologists in your field,
24 would it be a factor that someone should look to to
25 determine whether or not the exposure might -- the given

1 exposure might be causally related to a condition, whether
2 or not an individual was regularly using contaminated
3 drinking water to make coffee every day?

4 A. I'm sorry, I can't remember all that.

5 MR. HOLEWINSKI: Please read that back.

6 (Whereupon the requested portion of the record
7 was read aloud by the Court Reporter.)

8 A. You would need to look at the condition. You
9 would need to look at the level of the material that's in
10 the water, whether it's volatile or not volatile, and how
11 much coffee was used or what the exposure could have been
12 from that coffee. All of those factors would have to be
13 considered.

14 Q. But it's a factor that should be looked at?

15 A. Well, it depends on what the chemical is and
16 what, you know, what the complaint is.

17 Q. Let's take Rhett Parks. As I understand it,
18 she was diagnosed with some form of cancer.

19 A. She had multiple myeloma.

20 Q. Given her condition, would you, if you were
21 involved in evaluating her condition, would you find it
22 helpful for you to know how much coffee she drank a day if
23 the source of that coffee was water from a contaminated
24 well?

25 A. I first of all would want to know what

1 chemicals are in the well and whether or not any of those
2 chemicals could cause a multiple myeloma.

3 Q. Do you know whether or not any of the chemicals
4 identified at the NEC site could cause multiple myeloma?

5 A. I do not know of any of the chemicals that were
6 found in the drinking water that would cause multiple
7 myeloma.

8 Q. How about generally, not limiting it to the
9 medium of drinking water, were there any chemicals found at
10 the NEC site which could cause multiple myeloma?

11 A. At either occupational or environmental levels
12 of exposure, I don't know of any of the chemicals, that is,
13 the ones I've referenced in my report, that would be
14 associated with multiple myeloma.

15 Q. Okay. I think I understand the answer, but my
16 question was -- I'm not talking about based on levels. I'm
17 talking about a given type of chemical. Were there any
18 chemicals that you're aware of that were found at the NEC
19 site that could cause -- and I recognize the limitation of
20 your answer -- that could cause, if at whatever level,
21 multiple myeloma?

22 A. I haven't evaluated any level. I've only
23 looked at those that are relevant to either environmental or
24 occupational levels of exposure, and my answer would be, no.
25 I don't know what might happen at any level of exposure to

1 any chemical. I can only tell you what's relevant with
2 regard to those chemicals and my knowledge of either
3 environmental or occupational levels of exposure.

4 Q. As someone in your field, are you aware of what
5 types of chemicals have been associated with multiple
6 myeloma?

7 A. I haven't looked at the chemical causes of
8 multiple myeloma. I have only looked at the chemicals that
9 I have in my report at this time.

10 Q. I'm talking about as someone in your field, are
11 you generally aware of the types of chemicals that have been
12 identified as being associated with multiple myeloma?

13 A. Specifically multiple myeloma, no.

14 Q. How about any cancer? Are you aware of
15 particular chemicals, for example, at the NEC site that are
16 identified in your report, whether or not any of those
17 chemicals could cause multiple myeloma?

18 A. Isn't that the same question that you just
19 asked me?

20 Q. I don't think it is.

21 A. Well, with the restrictions that I gave you
22 before with regard to environmental and occupational levels
23 of exposure, the answer is no.

24 Q. With those same restrictions?

25 A. Yes, sir.

1 Q. Okay.

2 MR. HOLEWINSKI: Let me take a couple
3 minutes to look over my notes, and we're just about done.

4 (At this time a brief recess was taken.)

5 MR. HOLEWINSKI: Back on the record.
6 Just a few further questions.

7 BY MR. HOLEWINSKI:

8 Q. First, for the record, how is your fee -- what
9 is your fee in connection with this case?

10 A. \$200 per hour.

11 Q. Now, I think you identified -- and this is
12 based only on my recollection. The record will speak for
13 itself -- approximately five cases that you worked with
14 Mr. Carlson on?

15 A. That's an estimate. I believe that's close.

16 Q. Of those cases, how many of those settled?

17 MR. RYSKOSKI: To the extent you know.

18 A. None.

19 Q. They all went to trial?

20 A. Yes.

21 Q. All went to a verdict?

22 A. I attended the trials, so I assume there was a
23 verdict. I don't know.

24 Q. Aside from the Lockheed case that we talked a
25 little bit about earlier --

1 A. Yes, sir.

2 Q. -- which I think you indicated you testified
3 at --

4 A. Yes, sir.

5 Q. -- have you been involved in any cases where,
6 despite your opinion about the evidence, the jury has
7 disagreed with you?

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

9 Q. Let me put it this way: Have you been on the
10 losing side before?

11 A. I don't know the answer to that either. I
12 don't keep track. I'm sure there may very well have been
13 some.

14 MR. HOLEWINSKI: Dr. Harbison, I
15 appreciate your time. I've got no further questions.

16 MR. RYSKOSKI: Why don't we take a short
17 break and finish up real quick.

18 (At this time a brief recess was taken.)

19 MR. RYSKOSKI: Back on the record.

20 EXAMINATION

21 BY MR. RYSKOSKI:

22 Q. This is Scott Ryskoski on behalf of Employers
23 Insurance of Wausau. Dr. Harbison, I just have a few
24 questions to follow up with you. There was some testimony
25 concerning the documents that you've reviewed either to

1 prepare your report or to prepare for this deposition. Do
2 you recall that testimony?

3 A. I do.

4 Q. And you had made some reference to settlement
5 documents and Donna Holt and Dr. Parent. Do you recall
6 that?

7 A. I do.

8 Q. Do you recall, did you receive also among the
9 documents that you reviewed the database from Donna Holt's
10 office?

11 A. Yes, I did.

12 Q. And that was produced -- is it your
13 understanding that that was produced to Wausau in this case
14 and then provided to you?

15 A. Yes.

16 Q. In other words, you didn't get it personally
17 from Donna Holt. You got it through the counsel for Wausau?

18 A. That's correct.

19 Q. And you indicated, I believe, that you didn't
20 recall reviewing the Donna Holt deposition transcript.
21 Refreshing your recollection that you did, in fact, receive
22 the Donna Holt database, does that refresh your recollection
23 as to whether you saw the Holt deposition transcript as
24 well?

25 A. Yes, I must have received her deposition

1 transcript because that's how I figured out ultimately the
2 calculation or the equation. I didn't recall it as a
3 deposition, but it must have been.

4 Q. Now, you had indicated in response to some
5 questioning about arriving at an opinion concerning
6 methodology or lack thereof by Dr. Parent in the Reviere and
7 the THAN cases. Do you recall that testimony?

8 A. Yes.

9 Q. And in responding to those questions, was it
10 your understanding that you were responding as to whether
11 you had reached an expert opinion, an opinion as an expert
12 witness in those cases as to Dr. Parent's methodology or
13 lack thereof?

14 A. Correct.

15 Q. And you had indicated I think there was two or
16 three other cases that you were involved in that Dr. Parent
17 was also involved in that you hadn't reached an opinion
18 concerning his methodology. Do you recall that testimony?

19 A. I do.

20 Q. And, well, let me just ask you, Did you reach
21 an opinion as an expert witness in those other three or four
22 cases as to Dr. Parent's methodology or lack thereof?

23 A. I did not.

24 Q. Did you have an opinion as a layperson or
25 otherwise as to Dr. Parent's methodology or otherwise in

1 those cases?

2 MR. HOLEWINSKI: Object to the form.

3 A. No, I did not.

4 Q. Now, for purposes of rendering your opinions in
5 this case, were you asked to review historical disposal
6 practices for solvents or other wastes?

7 A. I was not.

8 Q. Do you consider yourself or hold yourself out
9 to be an expert in the field of historical industrial waste
10 disposal practices?

11 A. I do not.

12 Q. You had referenced that among the documents you
13 reviewed were documents that you had scanned through. I
14 think you said documents relating to claims of individuals
15 that were not there until after March 1 of 1974.

16 A. That is correct.

17 Q. And you did, in fact, review or scan through
18 documents concerning claims of people that were not born
19 until after March 1, 1974?

20 MR. HOLEWINSKI: Object to the form.

21 A. That's correct.

22 Q. And do you have an opinion as to whether those
23 claimants who were born after March 1, 1974, could have
24 possibly suffered bodily injury as a result of emissions
25 from the NEC -- strike that. Do you have an opinion as to

1 whether individuals who were born after March 1, 1974, could
2 have possibly suffered bodily injury prior to March 1, 1974?

3 MR. HOLEWINSKI: Object to the form.

4 A. Yes, I have an opinion.

5 Q. What is your opinion?

6 A. My opinion is they could not.

7 Q. And what's the basis for that opinion?

8 A. Well, that there would be no exposure that
9 would occur during that period of time.

10 Q. They weren't alive yet at the time?

11 A. They weren't alive.

12 Q. And did you also review documents relating to
13 claims of people who alleged no exposure to chemicals
14 emitted from the Harlan facility until after March 1, 1974?

15 A. I did.

16 Q. And do you have an opinion as to whether those
17 individuals could have possibly suffered bodily injury prior
18 to March 1, 1974, as a result of chemicals emitted from the
19 NEC facility?

20 A. Yes, I have an opinion.

21 Q. What's your opinion?

22 A. My opinion is they could not.

23 Q. What's the basis for that opinion?

24 A. That there could not have been exposure prior
25 to that time.

1 Q. Okay.

2 MR. RYSKOSKI: Mark this as an exhibit,
3 please.

4 (At this time Harbison Deposition
5 Exhibit Number 2 was marked for
6 identification by the Court Reporter.)

7 Q. Dr. Harbison, the court reporter has handed you
8 what's been marked as Exhibit 2. For the record, it's
9 "Defendant McGraw-Edison Company's Revised Answers and
10 Objections to Plaintiff Employers Insurance of Wausau's
11 Second Set of Interrogatories and Request for Production of
12 Documents Pertaining to the Harlan Site." And it is dated
13 July 28, 1997, and includes two attachments and some
14 certificate of service information.

15 I note for the record it does not include the
16 voluminous individual plaintiffs' summaries, which were part
17 of McGraw's responses.

18 Dr. Harbison, did you review Exhibit 2 in
19 preparation for your -- preparing your report and also in
20 preparation for your deposition today?

21 A. I did.

22 Q. And did you also review the individual
23 plaintiffs' summaries, the voluminous two or three inches of
24 individual plaintiffs' summaries that were accompanying
25 these, Exhibit 2?

1 A. I did.

2 Q. I'd like to direct your attention to Attachment
3 1 to Exhibit 2, and have you reviewed Attachment 1 to
4 Exhibit 2?

5 A. I have.

6 Q. Bear with me for a second here. Dr. Harbison,
7 do you have an opinion as to whether the information
8 provided in Attachment 1 provides evidence that exposure to
9 chemicals allegedly released from the Harlan plant
10 potentially causes injury to the body at some level
11 commencing upon first exposure to the chemicals?

12 MR. HOLEWINSKI: Object to the form of
13 the question.

14 A. Yes, I have an opinion.

15 Q. And what is your opinion?

16 A. My opinion is that it does not show that.

17 Q. What is the basis for your opinion in general?

18 A. That this information simply describes or the
19 testimony describes information about these chemicals, but
20 it does not provide a basis or a mechanism of injury that
21 occurs as a result of exposure to the chemicals in the
22 context of this particular matter at NEC.

23 Q. And if I could direct your attention to
24 Attachment 2, have you reviewed Attachment 2 to Exhibit 2?

25 A. I have.

1 Q. And do you have an opinion as to whether the
2 information set forth in Attachment 2 provides evidence of a
3 causal connection between exposures to the chemicals
4 allegedly released from the Harlan plant and the bodily
5 injury or alleged bodily injury alleged by the underlying
6 plaintiff or plaintiffs?

7 MR. HOLEWINSKI: Object to the form.

8 A. Yes, I have an opinion.

9 Q. What's your opinion?

10 A. My opinion is that it does not.

11 Q. What's the basis for your opinion?

12 A. That this testimony is testimony about these
13 chemicals and the effects that they can produce and that
14 there are claims that have been paid that are not concordant
15 with these effects and there are effects in the claims that
16 are not in this list, so the list is not concordant with the
17 effects that have been alleged and the ultimate payment, so
18 my opinion is that it does not support those claims.

19 Q. Does the information set forth in Attachment 2
20 comport with the methodology to establish a causal
21 relationship that's followed in the field of toxicology?

22 A. It does not. It simply describes a variety of
23 effects that can be produced or alleged to be produced as a
24 result of exposure to chemicals, and you could make that
25 same description with regard to any chemical. It doesn't

1 use any methodology to elucidate the dose or exposure that
2 is required to produce any of those effects and, again, not
3 all of these effects are produced by these chemicals.

4 MR. RYSKOSKI: That's all the questions I
5 have. Thank you.

6 MR. HOLEWINSKI: I just have a couple
7 follow-up.

8 RE-EXAMINATION

9 BY MR. HOLEWINSKI:

10 Q. With respect to Attachment 2 to Deposition
11 Exhibit 2, do you have any reason to doubt that the
12 descriptions of the testimony or references to deposition
13 testimony, for example, and other trial testimony, does not
14 accurately state what the testimony was in the underlying
15 proceeding?

16 A. I'm sorry, do I have any reason to believe that
17 this is not an accurate portrayal or transcript of the
18 testimony?

19 Q. Correct. Of what the evidence was in the
20 underlying proceeding.

21 MR. RYSKOSKI: Before you answer that
22 question, you just expanded it there at the last second.

23 MR. HOLEWINSKI: Read the question back.

24 (Whereupon the question appearing on
25 page 105, lines 10 through 15, was read

1 aloud by the Court Reporter.)

2 MR. RYSKOSKI: Let's just go off the
3 record for a second.

4 (At this time a discussion was held off the
5 record.)

6 MR. RYSKOSKI: Back on the record.

7 MR. HOLEWINSKI: Could read back my
8 question and let him try to answer it?

9 (Whereupon the question appearing on
10 page 105, lines 10 through 15, was read
11 aloud by the Court Reporter.)

12 MR. RYSKOSKI: I'm going to object.
13 Vague and overbroad. The record and the deposition and
14 trial testimony in the underlying case can speak for itself.

15 A. I don't understand. And other testimony, you
16 mean something that's not here?

17 Q. Because the Attachment 2 actually references
18 deposition testimony and trial testimony.

19 A. Okay. I'm still not clear. So the question
20 is?

21 Q. He can read the question back and you can
22 listen to it again.

23 (Whereupon the question appearing on
24 page 105, lines 10 through 15, was read
25 aloud by the Court Reporter.)

1 A. I have not evaluated whether it's an accurate
2 transcription or description of the testimony, but I have no
3 reason to believe that it's not, so I simply haven't looked
4 at it.

5 Q. You referenced when you were asked a question
6 about the Donna Holt transcript and the databases, you used
7 the term in connection with, I think, some correspondence,
8 equation. I think it was in connection with settlement.
9 Could you explain what you meant by that?

10 A. Her calculation for the moneys based upon the
11 zone of exposure, based upon the symptoms, the equation that
12 she used to calculate, the fairness factor, et cetera.

13 Q. Do you know whether or not the plaintiffs'
14 experts had any role in Donna Holt's settlement formula?

15 A. Yes.

16 Q. Do you know what role they had in assigning or
17 ascribing particular risk factors to sort of given exposure
18 levels, if any?

19 A. The exposure levels, I don't know. The
20 symptoms part of it was relied upon from the Richard
21 Parent's testimony.

22 Q. Have you attended -- strike that. On page 2 of
23 Attachment 2 of Deposition Exhibit 2, for the sake of
24 clarity -- let me look at my notes real quick. You
25 referenced earlier that you reviewed the testimony of

1 plaintiffs' expert Rodgers?

2 A. Yes.

3 Q. Do you recall whether or not that individual
4 testified as to whether or not they had an opinion as to
5 whether or not anyone exposed to the chemicals at issue in
6 the underlying case had a risk of developing cancer and
7 other illnesses?

8 A. Yes, he did.

9 Q. Do you disagree with that opinion?

10 A. Yes, I would.

11 Q. On what grounds?

12 A. On the grounds that the risks that were
13 calculated are population risks. It would be inappropriate
14 to use those risks to counsel a human being that in fact he
15 or she needs to have some sort of followup with regard to
16 these particular exposures. Those risks are not verified.
17 They're not validated. They're used for protection of
18 public health as a matter of public policy.

19 Q. For the sake of clarity and so I understand,
20 you actually reviewed the printouts of the database material
21 for purposes of compiling your report?

22 A. Yes.

23 Q. Do you recall when you received that database?

24 A. I couldn't tell you.

25 Q. That's fine.

1 MR. HOLEWINSKI: I've got no further
2 questions.

3 MR. RYSKOSKI: You're finished. We'll
4 have him read and sign.

5 (Whereupon, at 2:05 p.m., Tuesday,
6 October 28, 1997, the taking of the
7 deposition of Raymond D. Harbison, Ph.D.,
8 was adjourned.)
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