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1	IN THE CIRCUIT COUNTY COURT
2	OF PUTNAM COUNTY, WEST VIRGINIA
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4	NOYLE ALDRIDGE, et ux : CA-91-C-463 GLENN ARRINGTON, et ux : CA-91-C-436
5	CHARLES E. BLAIR, JR. : CA-91-C-298 CARL CLAY : CA-91-C-495
6	GEORGE W. ECHOLS : CA-91-C-499 BUEL GILLENWATER, et ux : CA-91-C-450
7	WALDO GRIFFITH, et ux : CA-91-C-451 ROBERT D. HUNT, et ux : CA-91-C-337
8	HUBERT JAMES, et ux : CA-91-C-342 HARRY JANNEY, et ux : CA-91-C-181
9	BOBBY E. MEANS, SR., et ux : CA-91-C-441 HAROLD C. MEEKS, et ux : CA-91-C-443
10	JOE B. PADILLA, et ux : CA-91-C-388 REXYALL J. WADE, et ux : CA-91-C-442
11	GEORGE C. WINES, et ux : CA-91-C-461
12	Plaintiffs, :
13	vs. :
14	APPALACHIAN POWER CO., : et al., :
15	Defendants. :
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2 2	CORBETT & ASSOCIATES Registered Professional Reporters
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BRUCE W. KARRH, M.D. - 30 (b)

1	Deposition of BRUCE W. KARRH, M.D.,
2	taken pursuant to notice under West Virginia Rule of
3	Civil Procedure 30 (b) 6 before Judith B. Thorpe,
4	Court Reporter, in the offices of E.I. DU PONT DE
5	NEMOURS & COMPANY, DuPont Building, Room D-7004,
6	Wilmington, Delaware, on Monday, April 27, 1992,
7	beginning at 2:00 p.m. there being present:
8	71VDG W 770V 77 750V
9	JAMES H. RION, JR., ESQUIRE NESS, MOTLEY, LOADHOLT, RICHARDSON & POOLE
LO	151 Meeting Street, Suite 600 Post Office Box 1137
11	Charleston, South Carolina 29402 For Plaintiffs,
12	C. LYNN OLIVER, ESQUIRE
13	JACKSON & KELLY 1600 Laidley Tower
L 4	P.O. Box 553 Charleston, West Virginia 25322
15	For Defendant DuPont,
16	DAVID B. SIEGEL, ESQUIRE CROWELL & MORING
L 7	1001 Pennsylvania Avenue Washington, D.D. 20004-2505
L 8	For Defendant DuPont,
.9	TAMARA C. SAMPSON, ESQUIRE LISA E. CHISMIRE, ESQUIRE
20	E.I. DU PONT DE NEMOURS & CO. Wilmington, Delaware 19898
21	In-House Counsel for Defendant DuPont,
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	CORBETT & ASSOCIATES

BRUCE W. KARRH, M.D., having first been duly sworn according to law, was examined and testified as follows:

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MR. RION: Before we start the record I am going to put a statement on that record. We're going to create two separate transcripts today. The first is going to be of Dr. Karrh as a corporate representative designated under West Virginia Rule 30 (b) 6 to testify about certain specific matters, and the second transcript will be a deposition of Dr. Karrh as an individual with knowledge of relevant facts and not taken specifically pursuant to the 30 (b) 6 designation. And I guess I need to put the transcript of both of these depositions so that anybody who reads it in the future will know that we've agreed for these depositions in the pending trials that the deposition with regard to the deposition of Dr. Karrh taken on June 4, 1991 and in the case of Harrison Vs. DuPont and others that DuPont, neither DuPont nor the plaintiffs will object to use of that deposition at trial on the basis that the issues there were different, the motive for cross-examination was different and that

the deposition is therefore hearsay because of the different issues and potential different motives for cross-examination. So the matter in that deposition will not have to be inquired into here.

MS. OLIVER: Now, let me also state for the record what my understanding of that agreement is which is simply that we will treat that deposition as though it had been taken in this case. Therefore, there will be no objection based on hearsay. By "we" I do mean DuPont reserves it right that to all other deposition objections can be made.

MR. HALL: For the record, I am Jeff Hall here on behalf of one the other Defendants. With regard to this stipulation agreement between DuPont and the Plaintiffs on behalf of my clients we were not party to the other case referred to and I'm assuming that that agreement that that testimony that was elicited in the other matter, I'm certainly not waiving any objection that my clients may or may not have regarding that deposition testimony as much as we weren't represented in that proceeding nor to my knowledge was there anyone there that had any interest similar to those of my clients.

MR. FITZGERALD: Brad Fitzgerald for

various other defendants. I would just join in that statement that anything from the previous deposition that is intended to be used against my clients that we do not join in that stipulation.

BY MR. RION:

Q. Doctor, let's go back on the record. This is, I don't know how you want to designate the transcript. Just put for this transcript taken under West Virginia Rule of Civil Procedure 30 (b) 6 and the other one just don't put anything, I guess.

MS. OLIVER: Let me just state on the record that Dr. Karrh's questions and answers in the case will be given pursuant to and in correspondence with the response, the written response which was filed to the Rule 30 (b) 6 notice of deposition on behalf of DuPont on the 23rd of April 1992.

BY MR. RION:

Q. Doctor, one set of questions I have to ask you concern the designation of you as the person most knowledgeable about the relationship between DuPont and the Industrial Hygiene Foundation or IHF.

I'll start with that. Generally is DuPont now a member of the IHF?

A. I can't say with certainty right now, Mr.

Rion, that we are. We have been up until very recently if we're not now. I was consulted maybe six months to a year ago about whether or not there was enough value in continuing as a member of IHF to continue that. I made a recommendation at that time. I don't know what action was taken pursuant to that.

- Q. Do you know during what years previously DuPont was a member of the IHF?
- A. My understanding we probably joined somewhere in the mid-thirties, '35 or '36. I'm not that familiar with when IHF started and it was probably not too long after that it started as an entity that our membership was started. Our membership was continuous until just recently if we're not still a member.
- Q. Do you know if as a member DuPont received copies of the IHF Digest?
- A. We receive a copy of a summary of various articles that either comes out every six months or every three months. I'm not sure which. I don't know. I don't know if it's called the IHF Digest but it's a summary of various articles, particularly in the industrial hygiene and health areas that IHF

- compiles and we still receive that document.
 - Q. Is it your understanding that has been a practice of the IHF to mail to its members a copy of the abstracts to which you referred regarding industrial hygiene issues?
 - A. I know it has been at least since the probably the mid- to early seventies. From my own personal knowledge I don't know whether it was started prior to that.
 - Q. Could you briefly explain in your words what the IHF is?
 - A. I'm not sure that I have enough firsthand information about the IHF except that it has been more or less a coordinating body that served to keep up with the literature on various health issues particularly as regards industrial hygiene. And by membership in that you could avail yourself of this summary of abstracts of articles that have come out in the health areas and also participate in some of the programs that IHF would put on in the industrial hygiene occupational health areas.
 - Q. Would it be fair to say that the emphasis of the IHF has been on recognition and, or one of the emphases has been on the recognition and

prevention of diseases that occur as a result of various industrial exposures?

- A. Hum, I think that that could be one of their missions. I think their main mission has been to assure that information pertaining to industrial hygiene and occupational health issues is disseminated to their membership for the membership themselves to make the assessments of the applicability of that information to their activities.
- Q. One of the primary, would it be fair to say that one of the primary functions of IHF has been to make available information to various members of American industry so that those members of industry can identify and then hopefully prevent diseases caused by industrial exposures?
- A. I think what they have principally tried to do is make sure that their membership was aware of articles that had come out. The abstracts really are not sufficient to get a detailed understanding of what the article says but it's sufficient to give a knowledgeable person, an industrial hygienist or an occupational health professional, enough information to know whether or not that article may

be applicable to their activities. They then can get the original article.

Q. Abstracts that are made available to the membership do include, at least a substantial portion of the abstracts concern diseases caused by industrial exposures?

MS. OLIVER: Objection to the form.

BY MR. RION:

- O. Would that be correct?
- get a copy of it. I forward it on to our industrial hygienist or the person in industrial hygiene so I haven't looked at them in recent years. But when I used to look at them most of their articles dealt with occupational health issues and newer data that may have been developed or either older data that was being further amplified showing that whether or not there could be some occupational health issues pertaining to various occupational exposures such as occupational activities.
- Q. Okay. Would the copies of the abstracts that DuPont received from the IHF be kept at Haskell Laboratories or would they be kept in a different library?

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- A. Haskell may also get a copy of their own. I can't speak to whether or not they keep a separate file. The copy that I get is kept in our industrial hygiene group in my organization.
- Q. How long has that group been in existence, do you know?
 - A. As a group since '84, I guess. 1984.
- Q. Before that do you know where the information sent from the IHF would have been kept?
- A. It most likely would have been kept at Haskell at that time.
- Q. Doctor, you've also been designated to be the person most knowledgeable about when DuPont learned that asbestos could cause various diseases. I want to ask you --

MS. OLIVER: Let me object to the characterization. Perhaps it might be easier if we just read it.

MR. RION: The designation was when you first, you meaning DuPont, first learned that inhaling asbestos dust could cause disease.

MS. OLIVER: I think it might be helpful if we just go ahead and read it into the record or what your response to that was because it

does limit to some extent what Dr. Karrh's testimony will cover.

Subject to the preliminary statement and general objection DuPont's response to Request Number 3 also states, "Defendant DuPont also objects to this request on the grounds this it is vague, overly broad, unduly burdensome and that the request speaks to the general association between asbestos and 'disease' and does not specify the type, amounts and or concentrations of asbestos. DuPont cannot determine from its record the precise date or name of the person at DuPont who first learned of the possibility of a causal connection between asbestos and any particular 'disease'. See DuPont's response Number 40 to Plaintiff's March 13, 1992 Interrogatories Request of Production of Documents. DuPont designates Dr. Bruce Karrh to offer general testimony concerning the subject."

BY MR. RION:

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- Doctor, are you able or can you tell me when DuPont first learned that there was a disease called asbestosis?
- I can't tell you with certainty, Mr. Rion, A. as to when DuPont as such would have learned of

that.

Q. And I think you, when did you first learn there was a disease known as asbestosis?

MS. OLIVER: I'm going to object to this question. You can ask him that question in the second deposition if you would like to, Jackie, but he is here today to talk what about DuPont knew and what DuPont learned as opposed to when he did.

MS. RION: Well, I'm not sure. I think the question is relevant in that he worked for DuPont.

MS. OLIVER: He's not here today to talk about what he learned as someone who worked for DuPont; under the Rule 30 (b) 6 deposition he is speaking for DuPont.

MR. RION: Are you going to tell him not to answer the question?

MS. OLIVER: No, I'm simply asserting an objection.

20 BY MR. RION:

- Q. Okay. When did you first learn that there was a disease called asbestosis?
- A. I know I had learned by 1970. I'm not sure exactly when I learned prior to that, whether I

learned it in medical school or in subsequent training, but at least by 1970 I had that knowledge.

- Q. As a person designated for this deposition to be the person most knowledgeable about when DuPont learned that asbestos could cause disease subject to the objections in the designation have you made any attempt to review the information that is contained in the corporate files of DuPont before the date you began working here?
- A. I have not made an attempt to review all of the possible files that could exist and I have not recently made any attempt to review them. When I came to work for DuPont in 1970 I reviewed the files that were available to me at that time at the plants where I was. And I became knowledgeable about what was contained in that file then.
- Q. Do you recall, Dr. Karrh, if you don't I can. I have got it here with me, I think you probably remember everything in the last deposition I took and at other times having looked at the textbook Modern Occupational Medicine?
 - A. Yes, I have.
- Q. Do you recall that there was a volume of that published in 1960?

A. Yes.

- Q. And that included various DuPont authors?
 - A. Various authors who worked at DuPont.
- Q. Who worked at DuPont. And it included a discussion of the disease asbestosis.
 - A. Yes.
- Q. Do you think it would be fair for me to state that at least by 1960 that it was recognized at Dupont that there was a disease known as asbestosis?
- A. I would have to look back at that book again to determine exactly what the book said on asbestosis to be able to answer.

MS. OLIVER: I'm also going to raise an objection here, Jackie. This was a matter which was gone into in great detail at the last deposition. It is my understanding that the deposition here today on these subjects is simply a follow up deposition and we're not going to go back and repeat the entire deposition again.

MR. RION: My question really is do you agree that by 1960 it was recognized within DuPont that there was a disease known as asbestosis and if the doctor and I think referring to this text may

help answer that question since he didn't go to work until 1970 and you've designated him as being somebody who's authorized to speak for the entire time period.

BY MR. RION:

- Q. I guess what I'd like you to do, doctor, the question is this. Do you agree that by 1960 it was recognized within DuPont that there was a disease known as asbestosis? Since you were not here then I want to ask you in answering that question to refer briefly to this text which would include the date of publication in 1960 -- these tabs here, by the way, don't have anything to do with what you're being asked to do -- who the authors were and then maybe look briefly at the section on occupational lung disease, excuse me, chest disease by Dr. Scheper which is tabbed here in the second volume and then maybe answer the question.
- A. This has obviously been rebound because this is not the original binding.
 - Q. That's correct.
- A. If I can -- and copied also. That is not the original publication.

The first, Part One, is Modern

Occupational Medicine by Drs. Fleming, D'Alonzo and

Zapp in 1960. It's a second edition.

MS. OLIVER: And as I understand it,

Jackie, what you're asking him to do is look at this
to see if it refreshes his recollection. Is that
what the question is at the moment?

BY MR. RION:

Q. The question is this. Do you agree that by 1960 it was recognized within DuPont that there was a disease known as asbestosis?

MS. OLIVER: We will put on the record that the booklets that he is looking at are not DuPont publications and therefore we object to your suggestion that by reviewing those documents that might help him answer his question in any way; further, that any statements that are made within that book are clear that the words speak for themselves. There is no reason for Dr. Karrh to try to interpret what is contained therein.

MR. RION: If I close my eyes during the deposition I'm not trying to be rude. I didn't bring my drops or I might go blind.

THE WITNESS: In this document, this

book that I referred to earlier on page 463 there is a section that is called Silicosis that has a subsection Asbestsosis. And it apparently describes the state of knowledge of the author at least at that time on asbestosis. And this particular chapter was authored by Dr. C.W.H. S-c-h-e-p-e-r-s. And at least this portrays Dr. Schepers' state of knowledge at that time of asbestosis. I can't say that it portrays what DuPont knew at that time but it does apparently portray what Dr. Schepers knew at that time.

- Q. And he was employed by DuPont at the time?

 MS. OLIVER: Objection to form.
- 14 BY MR. RION:

- Q. Do you know?
 - A. My understanding is he was employed by DuPont at Haskell Laboratory at that time as a pathologist.
 - Q. Okay. I think that's a fair answer. Do you know, doctor, as a corporate representative for DuPont when DuPont became aware that there were certain threshold limit values recommended for control of asbestos dust or dust containing asbestos?

MS. OLIVER: Let me place an objection on the record and state that I would like to clarify what you mean by certain threshold record values?

MR. RION: All right. I don't think that's objectionable but I don't mind clarifying.

MS. OLIVER: Confusing.

BY MR. RION:

- Q. Doctor, do you know if or when DuPont learned that there existed a recommendation that asbestos dust or dust containing asbestos be kept below the level of five million parts per cubic foot?
- learned of that. I don't know when the threshold limit value list started being developed and kept. I also don't know when they published the list on five million fibers as part of the asbestos exposure. I know within DuPont we have been familiar with these threshold limit values, at least throughout my career with DuPont.
- Q. Is there a technical library at DuPont in addition to the library that is kept at Haskell Laboratories?
 - A. There is a technical library at DuPont,

yes.

- Q. Does it contain information concerning industrial health matters?
- A. The technical library takes a number of different journals and I don't, I can't say with certainty exactly what journals they take and which ones they don't take. They are a resource library for all of the company. If someone needs a particular journal they can call the technical library and if the technical library does not have it then they have an exchange arrangement with other libraries. There are libraries where they can borrow it from.
- Q. Doctor, from your previous deposition we discussed generally the number of physicians employed by DuPont at various times to your knowledge. I want to ask you generally are most of the doctors employed by DuPont including yourself members of the American Medical Association?

MS. OLIVER: Let me stop here and raise an objection. I believe we're getting outside the scope of what Dr. Karrh has been asked to and identified for to testify under the Rule 30 (b) 6 deposition. If you can explain to me, Jackie, how

it comes in maybe I'll reconsider my objection.

MR. RION: I want to know generally the source of information that DuPont had available to it over the years including information that would be distributed to them.

MS. OLIVER: I think that would be better asked in his deposition other than under the Rule 30 (b) 6 deposition. Here he's here simply to talk about the subject which you asked and that was when DuPont first learned that inhaling asbestos could cause disease. He's not here to testify as a corporate witness on sources of information or what physicians may or may not have known. If you want to ask him those questions with his second deposition that is fine.

MR. RION: I didn't understand what difference that made. When I was asked to do things this way I was told that it would make some people feel more secure and comfortable and I'll do a lot of things to make people more comfortable but I don't fully understand or agree with the reasons. And this is getting so confusing that it's not hardly worth the effort to me to try to accommodate you all anymore.

It might be easier -- I'll do the best I can. And if I fail I'll agree that you're not waiving that objection by not making it now. You can go to judge at any time that I try using a portion of this deposition and say I went outside the scope of the designation. I personally don't think whether the person who is a managerial employee right now that makes a beans bit of difference but it might. I'm not trying to be difficult but --.

MS. OLIVER: I simply raise the objection. I have not directed him not to answer. BY MR. RION:

- Q. Okay. Are you a member of the AMA?
- A. Yes, I am.
- Q. Do you believe that most of the doctors who have been employed by DuPont during the time you've been with DuPont are members of the AMA?

 MS. OLIVER: Object to the form.

THE WITNESS: I really can't answer that specifically. I can say that DuPont has encouraged the physicians to be members of the state

medical societies in the states in which they are

located and members of the American Medical

Association.

- Q. Does duPont subscribe to the Journal of the American Medical Association?
- A. I don't know that DuPont as such subscribed. Those physicians within DuPont who are members of the AMA get the Journal because of their membership.
 - Q. That would include you?
 - A. Yes.
- Q. So as a matter, your understanding of what AMA function is, if you pay your dues and belong you get a copy of the journal?

MS. OLIVER: Objection to form.

THE WITNESS: Yes.

BY MR. RION:

Q. Do you know what in addition to what various doctors can get through their medical association memberships, does the Haskell Laboratory or any of the other DuPont libraries subscribe to medical journals?

MS. OLIVER: Objection to form.

THE WITNESS: Haskell Laboratory will subscribe to some journals. I don't know now which ones they subscribe to. I don't know whether any

other libraries within DuPont subscribe to medical journals or not.

BY MR. RION:

- Q. Do you recall whether Haskell has ever subscribed to any of the toxicological -- How do you pronounce that?
 - A. Toxicological.
- Q. Toxicological journals? If so, do you remember the name of any of them that they subscribe to?
- A. Haskell got subscriptions when I was there in 1973 to some toxicological journals. The only one I can remember the name of it is the Journal of Pharmacology Applied Toxicology. I don't know if there were others or not.
- Q. Are you board certified in any medical specialties?
 - A. In occupational medicine.
- Q. Do you get a journal, do you belong to any societies that send out publications on occupational medicine?
- A. Yes. The American College of Occupational and Environmental Medicine which has the Journal of Occupational Medicine as its journal.

- Q. Do you receive any chest disease journals?
- A. No, I don't.

- Q. Do you know if over the years any of the various doctors that DuPont has had retained either full-time or as plant physicians have been chest specialists?
 - A. I don't know.

MR. RION: Why don't we change transcripts now? We'll go to -- let me make the record clear. We are now going to conclude the deposition of Dr. Karrh taken under Rule 30 (b) 6 of the West Virginia Rules of Civil Procedure. We're going to on this same date in fact as soon as I finish talking start another transcript of Dr. Karrh in all other capacities other than his capacity as the designated DuPont under rule 30 (b) 6.

As long as everybody is talking about not waiving things I'm not by creating separate transcripts, I am certainly not waiving any arguments that I might make at any point that any statement in either transcript is an admission based on the doctor's position with DuPont rather than his designation under Rule 30 (b) 6. And let's start with the other transcript now.

CERTIFICATE

STATE OF PENNSYLVANIA:

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COUNTY OF DELAWARE

I, Judith B. Thorpe, a Notary Public within and for the County and State aforesaid, do hereby certify that the foregoing deposition of BRUCE W. KARRH, M.D. was taken before me, pursuant to notice, at the time and place indicated; that said deponent was by me duly sworn to tell the truth, the whole truth, and nothing but the truth; that the testimony of said deponent was correctly recorded in machine shorthand by me and thereafter transcribed under my supervision with computer-aided transcription; that the deposition is a true record of the testimony given by the deponent; and that I am neither of counsel nor kin to any party in said action, nor interested in the outcome thereof.

WITNESS my hand and official seal this . 9th day of May, A.D., 1992.

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JUDITH B. THORPE Notary Public-Reporter