

Kenneth L. White
2-6-2009

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 | SUPERIOR COURT OF NEW JERSEY
HOWARD BIRD, JR. and | LAW DIVISION
DEBORAH BIRD, husband | MIDDLESEX COUNTY
and wife, |
 | Docket No. L-3599-08 AS
Plaintiffs, |
 |
vs. | Civil Action
 | Asbestos Litigation
3M, et al., |
 |
Defendants. |

DEPOSITION OF: KENNETH L. WHITE

February 6, 2009 - 9:00 a.m.

Location: Parsons, Behle & Latimer
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Salt Lake City, Utah

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1 PROCEEDINGS 2 MR. PLACITELLA: We're doing this 3 deposition -- the audio is over the telephone and I 4 am looking at the witness, and I presume the witness 5 can see me through a Skype webcam. So that's how 6 we're proceeding, and hopefully that will help things 7 along a little bit better. 8 MR. HOOPER: The court reporter asks that 9 the other attorneys involved please state your 10 appearances. 11 MR. HAAS: This is Rich Haas. I'm 12 representing Sears Holding Corporation with Swanson, 13 Martin, and Bell. 14 MR. PLACITELLA: How do you spell your 15 last name, Rich? 16 MR. HAAS: H-a-a-s. 17 MS. KRIEGSTEIN: This is Megan Kriegstein. 18 I spell my last name K-r-i-e-g-s-t-e-i-n. I 19 represent Square D and I'm with K&L Gates. 20 MR. SCHMIEDER: This is Dennis Schmieder, 21 S-c-h-m-i-e-d-e-r, here on behalf of Whirlpool 22 Corporation and Maytag Corporation. 23 MR. SUSS: Ronald, R-o-n-a-l-d, Suss, 24 S-u-s-s, on behalf of Union Carbide. 25 MR. PLACITELLA: There's going to be a	1 A. Yes. 2 Q. Okay. And how many occasions? 3 A. Probably about 20 at this point. 4 Q. Okay. So you're familiar with what goes 5 on in a deposition and rules and how things are done? 6 A. Yes. 7 Q. And what kind of cases were you deposed 8 in? 9 A. Well, it's been a wide variety of 10 industrial hygiene related cases. A few have been 11 asbestos. There have been any number of chemical 12 exposure cases, dust exposures, carbon monoxide, wide 13 variety of industrial hygiene. 14 Q. Okay. When you testified in asbestos 15 cases, on whose behalf did you testify? 16 A. I have done a number of cases for Union 17 Pacific Railroad more as a corporate witness and in 18 one or two cases as an expert. 19 Q. Okay. 20 A. This is my first deposition for Georgia 21 Pacific. I did one very early on, gosh, back in the 22 80's, and I scarcely remember the name of that one. 23 Q. So if I was to ask you what companies 24 involved in asbestos litigation you've consulted for, 25 would it be limited to Union Pacific and Georgia
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1 couple more people coming in. I just got a couple 2 e-mails about the call-in number, and I apologize to 3 everyone for the snafu. I'll throw my secretary 4 under the bus. How about that? 5 MR. HORNE: Eric Horne, H-o-r-n-e, for 6 Westinghouse. 7 8 KENNETH L. WHITE, 9 having first been duly sworn, 10 was examined and testified as follows: 11 12 EXAMINATION 13 BY MR. PLACITELLA: 14 Q. Good morning, Mr. White. How are you? 15 A. Very good. Thank you. 16 Q. Can you see me on your screen? 17 A. Yeah. You're kind of small and off in one 18 corner, but I can see you. 19 Q. That's my general demeanor. 20 A. Okay. 21 Q. We're here today for the purpose of taking 22 your deposition. I represent the plaintiff in this 23 case. 24 Have you ever had your deposition taken 25 before?	1 Pacific? 2 A. Largely. I had one other recently that 3 was a pump manufacturer, compressor manufacturer. 4 Q. Who was that? 5 A. What is their name? Something Housefeld. 6 It didn't go to deposition. 7 Q. Okay. So those are the three defendants: 8 Union Pacific, Georgia Pacific, and some pump 9 manufacturer? 10 A. Yes, or compressor. 11 Q. All right. How many asbestos cases have 12 you consulted on, number of cases? 13 A. Eight or ten, somewhere in that 14 neighborhood. 15 Q. Okay. How many for Georgia Pacific? 16 A. Probably about four or five cases. 17 Q. Okay. Did you prepare reports in all 18 those cases? 19 A. No. Only in one other report -- or one 20 other case besides this one. 21 Q. And what case was that? Do you remember? 22 A. That was -- was it Kerns, Jim? I believe 23 it was Kerns. 24 Q. Where was that case? 25 A. Oh, I didn't come prepared to --

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1 Q. Do you have -- do you maintain a copy of 2 that report? 3 A. Sure. 4 MR. PLACITELLA: Okay. With respect to 5 the court reporter, to make life easy, if I ask for a 6 document, could you just separately list it, please? 7 THE REPORTER: Okay. 8 Q. (BY MR. PLACITELLA) The other cases that 9 you did not provide reports on, why did you not 10 provide reports? 11 A. They settled before that was necessary. 12 And many of them were in California, which don't 13 require reports. 14 Q. Have you ever consulted for a plaintiff in 15 an asbestos case? 16 A. Not an asbestos. In other cases. 17 Q. Can you tell me what you charge Georgia 18 Pacific by the hour or however you charge them for 19 your work? 20 A. \$200 per hour. 21 Q. Okay. And how much money did you make, 22 say, in 2008 working on asbestos cases? 23 A. Oh, I billed perhaps 10 thousand 24 dollars -- 25 Q. Okay.	1 training and a lot of survey work, field work related 2 to asbestos. 3 Q. What specific courses did you take 4 related -- in your professional development related 5 to the subject of asbestos? 6 A. Well, there were a number of courses in my 7 master's program. The industrial hygiene courses 8 certainly dealt heavily with asbestos. There was 9 environmental physiology, a medical type course. 10 It's an important topic in industrial hygiene, 11 obviously. 12 Q. Were there textbooks that you used as part 13 of your training as an industrial hygienist that 14 dealt with the subject of asbestos? 15 A. Yes, certainly. 16 Q. What textbooks, if you can recall? 17 A. Well, there's, of course, the Patty series 18 of industrial hygiene, three, four volumes. There 19 are any number of texts that I've looked at that have 20 asbestos in the title. I can't list them all off at 21 present. 22 Q. Well, tell me the ones you remember. 23 A. I can't think of full titles on any of 24 those at the moment. 25 Q. What about authors other than Patty?
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1 A. -- maybe 20. 2 Q. And with respect to the Bird case, how 3 much money did you bill? 4 A. I think we're five or six thousand at this 5 point. 6 Q. Okay. Have you ever authored any articles 7 related to asbestos and disease? 8 A. No. 9 Q. Do you have any -- have you ever been 10 qualified as an expert in a court of law on the 11 subject of asbestos and disease? 12 A. I think so. 13 Q. What court? 14 A. Well, I'm trying to remember. I haven't 15 gone to trial on any of these, so perhaps not. 16 Perhaps I haven't. 17 Q. In other words, has a judge ever had to 18 rule upon your qualifications to provide expert 19 testimony on the subject of asbestos and disease? 20 A. No. 21 Q. Okay. Do you have any special training on 22 the subject of asbestos and disease? 23 A. Yes. I have a master of science degree in 24 industrial hygiene and have been in the profession 25 since about 1980 and have had occasion to do a lot of	1 A. There's certainly Roggli, some of the 2 medical authors. You're talking about just texts as 3 opposed to articles? 4 Q. Yes, sir. 5 A. You know, there are those general 6 industrial hygiene books that are put together by 7 committee, essentially, the NIOSH, we call it the 8 white book. There are books by Clayton. Any number 9 of important authors in industrial hygiene. 10 Q. Do you keep reference books dealing with 11 the subject of asbestos in your home or place of 12 business? 13 A. In place of business, mostly. 14 Q. And what are the reference books on 15 asbestos that you use? 16 A. Oh, gosh. I could go back and prepare a 17 list, but they're not all coming to mind at the 18 moment. 19 Q. Give the ones you remember, then I'll have 20 you do a list later on. 21 A. Okay. 22 Q. Which ones do you recall? 23 A. Well, the Roggli comes to mind at the 24 moment. We have any number of sort of historical 25 asbestos books. Paul Brodeur, for example, that one

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1 comes to mind. You know, most of what we deal with 2 is literature. We have many binders of articles that 3 deal with various aspects of asbestos. 4 Q. Okay. Rather than take the time here, 5 would you make me a list of the reference materials 6 you have in your office, please? 7 A. Sure. 8 Q. Okay. Did you conduct any research 9 concerning asbestos and disease as part of your work 10 on this case? 11 A. When you say "research," do you mean 12 literature research? 13 Q. Yes. 14 A. Yes. The articles that are listed in my 15 report. 16 Q. Okay. Is that the sum total of your 17 articles in your report? 18 A. Well, no. There's general literature that 19 figures in. I only cited three or four such 20 articles. 21 Q. Why did you pick those as opposed to 22 others? 23 A. They made the point that I wanted to make, 24 and I wanted to keep it reasonably simple. 25 Q. Okay. Were any articles concerning	1 Q. Thank you. 2 Have you taught any courses on asbestos 3 and disease? 4 A. I have taught AHERA related courses a 5 variety of times over the years. 6 Q. Okay. Can you tell me what professional 7 journals you've subscribed to in the last five years? 8 A. Journal of Occupational and Environmental 9 Health is the main one. 10 Q. Any others? 11 A. Not that we receive hard copy of. 12 Q. Can you detail for me the documents that 13 you were provided by the attorneys for Georgia 14 Pacific in relation to this case? 15 A. Well, we have -- I mentioned the sort of 16 industrial hygiene measurement articles that relate 17 to joint compound. There's Verma, there's Nicholson, 18 Clayton, Longo. You know, five or six historical 19 studies where people have measured exposure levels 20 relating to joint compound. 21 Q. Have you found any of those studies 22 unreliable? 23 A. No. We look at the whole collection. 24 There is certainly a range of results in that data, 25 but we're used to dealing with wide ranges of data in
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1 asbestos supplied to you by lawyers? 2 A. Over the years we have received some 3 articles from law firms. Others we find on our own. 4 And typically they come from multiple sources. 5 Q. Have you received any articles on asbestos 6 from the lawyers for Georgia Pacific? 7 A. I don't believe we received any that we 8 hadn't already -- didn't already have in our 9 collection. 10 Q. Well, which ones did they send you? 11 A. There are some of the joint compound 12 related articles, some of the industrial hygiene 13 articles. 14 Q. Which articles are they? Do you have them 15 somewhere? 16 A. Yeah. I have them in a binder at my 17 office. 18 Q. You didn't bring them with you? 19 A. I did not. 20 Q. All right, you have them in a binder. 21 Would you please produce for me a copy of the binder 22 of the articles provided to you by the attorneys? 23 A. Every page? 24 Q. Yes. 25 A. Okay.	1 industrial hygiene. 2 Q. Is Nicholson a respected authority on 3 asbestos and disease? 4 A. Yes. 5 Q. Is Selikoff a respected authority on 6 asbestos and disease? 7 A. Yes. 8 Q. Is Verma a respected authority on asbestos 9 and disease? 10 A. Yes. 11 Q. In addition to the articles that you just 12 detailed, what other records, literature, or other 13 information were provided to you by the attorneys for 14 Georgia Pacific related to this case? 15 A. I received four volumes of depositions of 16 Mr. Bird. And there was one additional, the Esay 17 Benay (phonetic), if that's how you say it. The 18 complaint, answers to interrogatories. Just this 19 morning I saw the report from Lauderdale. Just 20 scanned through that quickly. 21 Q. Do you know Mr. Lauderdale? 22 A. I don't know him personally. 23 Q. Okay. I think we can get off that. 24 Why don't you just read into the record 25 the things you have in front of you. Is this your

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1 entire file on this case, sir? 2 A. Yeah. 3 Q. Okay. Why don't you read into the record 4 what you have. 5 A. I have my expert report, a printout of an 6 e-mail about this meeting and where I was to report 7 this morning. I have the three -- three or four 8 articles that I referenced in my report, "Assessment 9 of Mortality in the Construction Industry" by 10 Robinson et al.; "Quantitative Risks of Mesothelioma 11 in Lung Cancer in Relation to Asbestos Exposure" by 12 Hodgson and Darton. I have defendant Georgia 13 Pacific's Amended Response to Plaintiff's First Set 14 of Master Interrogatories in a case that was in 15 Fulton County, Georgia, which just sets forth some of 16 Georgia Pacific's information on their products. 17 I have Notice to take Oral Deposition, a 18 videotaped deposition of Howard Bird, and then four 19 volumes of his depositions. Interrogatories to be 20 answered by plaintiffs. And this is from your firm. 21 Oh, I guess it's the complaint. 22 That's what I have. 23 Q. Okay. And is that the sum total of your 24 file on this case? 25 A. At my office I probably have an invoice or	1 A. No. 2 Q. Do you have any transcripts of any 3 testimony given in any case as an expert witness? 4 A. Yes. 5 Q. And where do you keep those transcripts? 6 A. At my office. 7 Q. And how many are there? 8 A. Oh, ten or twelve, I guess. 9 Q. Do you keep them in a file somewhere? 10 A. Yes. 11 Q. All right. I request copies of those 12 transcripts. 13 A. Even those relating to things other than 14 asbestos? 15 Q. Yes, sir. 16 A. Okay. 17 Q. Do you have any videotapes or other 18 educational materials or instruction that you relied 19 upon in forming your opinion in this case? 20 A. No, not in this case. 21 Q. Have you prepared any exhibits that you 22 intend to use to illustrate your testimony at trial? 23 A. No. 24 Q. Tell me what you generally do day to day 25 in your job.
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1 two that I sent. 2 Q. Other than the invoices at your office, is 3 there anything else? 4 A. I think that's it. I think that's it. 5 Q. Did you prepare any other documents in 6 relation to this case? 7 A. No. 8 Q. Okay. Have you attended any continuing 9 education courses over the last five years related to 10 the subject of asbestos? 11 A. Yes. 12 Q. Which ones? 13 A. Well, I try to attend the sort of major 14 industrial hygiene conference, the American 15 Industrial Hygiene Conference and exposition that 16 they hold each year; and also the Professional 17 Industrial Hygiene conference, -PIH conference, they 18 call it. 19 Q. Are you a member of the AIHA? 20 A. Yes. 21 Q. Okay. How long have you been a member? 22 A. Oh, gosh, since probably 19 -- early 80's. 23 Q. Have you authored any speeches or 24 writings, published or unpublished, concerning the 25 subject of asbestos and disease?	1 A. I have two major clients that I do general 2 industrial hygiene surveys for, actual field work, 3 Union Pacific Railroad and ConAgra Foods. At present 4 I would say about 10 to 20 percent of my time over a 5 year would be involved in legal cases, and then, you 6 know, other smaller clients that come and go. But 7 the majority of my time is actual practicing 8 industrial hygiene. 9 Q. What's a typical day for you? 10 A. Well, in the field, if I'm doing a field 11 study for either the railroad or ConAgra, it's 12 getting up early and spending a long day making 13 measurements and getting home late. Around the 14 office I would be writing reports. In the case of 15 legal cases, I would be reading materials sent and 16 perhaps writing reports. 17 Q. Tell me a little about your personal 18 background. 19 MR. HOOPER: Object to form. 20 Q. (BY MR. PLACITELLA) You can answer. 21 A. Would you like my education? Would you 22 like -- 23 Q. Yeah, where you grew up, your family 24 background. Just so I know. 25 A. I'm a Salt Lake City native, born and

5 (Pages 17 to 20)

Page 21 1 raised here. Did my education here. I'm married, 2 have two children. I like to -- 3 Q. How old are they? 4 A. My daughter is 20 and my son is 17. 5 Q. Have you ever provided advice to clients 6 on how to protect building occupants from exposure to 7 asbestos? 8 A. We have. We've done a lot of work for the 9 federal government for the General Services 10 Administration, and they have any number of federal 11 buildings and courthouses and so on that contain 12 asbestos materials. We have certainly worked with 13 the maintenance staff, custodial staff to try to show 14 them how not to disturb materials, how to assure that 15 these materials are in good condition and that any 16 problems with those materials would be reported 17 promptly so that steps could be taken to clean up any 18 problems. 19 Q. Have you done any work in connection with 20 advice on asbestos abatement? 21 A. Yes, yes. We do a lot of abatement 22 management at our firm. I've done some of it. 23 That's kind of a separate division of our company, if 24 you will. But I've certainly been involved in some 25 of those abatement projects.	Page 23 1 reports that were sent out to GSA. 2 Q. And where are those reports kept as part 3 of your business records? 4 A. They might be in our oldest archives. And 5 a lot of this work was back in the 80's. We still do 6 some GSA work that I have not been involved over the 7 last probably five or six years in those sorts of 8 surveys. 9 Q. Okay. So if I were to make a request for 10 the old reports relating to asbestos that you gave to 11 the GSA, is that something you'd be able to get? 12 A. If you'll provide the truck. 13 Q. Okay. 14 A. It's very voluminous. 15 Q. Okay. Have you ever counseled clients 16 that -- whether it's the GSA or any other clients, 17 that chrysotile asbestos is not capable of causing 18 cancer? 19 A. No, I don't believe I've said that to 20 clients. 21 Q. Have you ever counseled clients that 22 chrysotile asbestos is not capable of causing 23 mesothelioma? 24 A. I have counseled them that it's quite 25 improbable but not that it's impossible.
Page 22 1 Q. Have you personally given advice to people 2 occupying federal buildings as it relates to the 3 subject of asbestos exposure? 4 A. Mostly in the sense of maintenance 5 personnel and building, you know, personnel who would 6 be working in the physical plant where the problems 7 typically are. We have occasionally been asked to 8 give sort of general lectures, if you will, to 9 general office occupants who have had concerns about 10 these issues. 11 Q. Okay. And do you put those kinds of 12 things in reports, or are they just oral? 13 A. Yeah, they were oral. And there may have 14 been a document that was prepared for the GSA. We've 15 certainly done management plans for both government 16 buildings, schools and so on for how to keep track of 17 asbestos issues and take care of -- 18 Q. Now, when you did the work for the GSA, 19 was that -- I think you said -- was that put into a 20 report? 21 A. Well, yeah. Reports -- we did a lot of 22 what are called Facility Safety and Health 23 Inspections that involve all hazards and issues in a 24 building from an occupational perspective. And those 25 inspections were certainly turned into written	Page 24 1 Q. Have you told, you and your company told 2 the GSA that in your opinion chrysotile asbestos 3 cannot cause mesothelioma? 4 A. They have not asked us that question, and 5 I don't believe we've ever provided such guidance. 6 Q. Would that be something you would be 7 willing to do, tell the federal government that you 8 do not believe that chrysotile asbestos causes 9 mesothelioma? 10 MR. SCHMIEDER: Objection. 11 THE WITNESS: Well, I answered that 12 previously. I had said it's improbable, not 13 impossible. 14 Q. (BY MR. PLACITELLA) When you counsel the 15 federal government as a client, would you be willing 16 to tell them that in your opinion chrysotile asbestos 17 does not cause mesothelioma? 18 MR. SCHMIEDER: Objection to form. 19 THE WITNESS: I don't counsel the federal 20 government on these issues. If they were to ask me, 21 I would say what I said before, that chrysotile is 22 unlikely to cause mesothelioma and that -- 23 Q. (BY MR. PLACITELLA) Are you aware that 24 the E.P.A. is of the opinion in written documents 25 that chrysotile can cause mesothelioma?

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1 A. I am aware of some early-on documents 2 that -- and then many other documents since that time 3 that contradict your premise, I believe. 4 Q. What documents are you indicating that 5 contradict my premise? 6 A. The work by Berman and Crump. Now, again, 7 let me explain, your premise that it absolutely does 8 not cause it is my -- is not my premise. 9 Q. But that's not my question. You said that 10 there were documents that you rely upon by the E.P.A. 11 for the proposition that chrysotile is not likely to 12 cause mesothelioma. True? 13 A. That's true. 14 Q. And you cited Berman and Crump, true? 15 A. True. 16 Q. What else besides Berman and Crump? 17 A. Well, Hodgson and Darton. 18 Q. That is an E.P.A. document, sir? 19 A. No. No, it's not. 20 Q. All right. You said that there were 21 E.P.A. documents that you're aware of that indicate 22 that chrysotile is not likely to cause mesothelioma, 23 and I'm trying to find out exactly what document 24 you're referring to. 25 MR. SCHMIEDER: Objection to form.	1 thing, but I believe their feeling is similar to 2 mine, that it is very unlikely that chrysotile causes 3 mesothelioma. 4 Q. Sir, can you show me or cite me a specific 5 document where the E.P.A. says that it is, quote, 6 very unlikely, close quote, that chrysotile causes 7 mesothelioma? 8 A. Only to the extent that you accept Berman 9 and Crump as an E.P.A. document. 10 Q. And other than Berman and Crump, can you 11 cite me to a specific reference by the E.P.A. that 12 indicates, quote, chrysotile is very unlikely to 13 cause mesothelioma -- 14 A. No. 15 Q. -- close quote? 16 A. No. 17 Q. All right. So your entire reliance on the 18 position of the E.P.A. that it is very unlikely that 19 chrysotile does not cause mesothelioma is Berman and 20 Crump? 21 MR. HOOPER: Object to form. 22 MR. SCHMIEDER: Objection to form. 23 Q. (BY MR. PLACITELLA) True? 24 A. I think that's largely true. 25 Q. All right. What is the opinion of NIOSH
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1 THE WITNESS: The two volumes of Berman 2 and Crump. 3 Q. (BY MR. PLACITELLA) Are you aware that 4 Berman and Crump has been specifically rejected by 5 the E.P.A.? 6 MR. HOOPER: Objection to form. 7 THE WITNESS: I wouldn't say it's been 8 rejected. 9 Q. (BY MR. PLACITELLA) Would you agree that 10 the proposed methodologies of Berman and Crump have 11 been rejected by the E.P.A.? 12 A. No. 13 Q. So you believe that Berman and Crump is 14 the official E.P.A. position on the subject of 15 chrysotile? Is that what you're saying? 16 MR. HOOPER: Objection to form. 17 THE WITNESS: No, that is not at all what 18 I said. I said it's a good, powerful study that has 19 involved a great many experts from across the country 20 and world and that it is a good piece of work. 21 Q. (BY MR. PLACITELLA) What is the E.P.A. 22 official position, as far as you know, on whether 23 chrysotile asbestos can cause mesothelioma? 24 A. I don't know that they have an official -- 25 I don't know that they speak with one voice on this	1 as to whether chrysotile asbestos is capable of 2 causing mesothelioma? 3 A. I don't know that there is a single 4 statement by NIOSH that you could rely upon. There 5 have been a number of statements over the years. I 6 really can't speak for NIOSH on that. 7 Q. Can you cite me to a single statement or 8 publication by NIOSH that would indicate that 9 chrysotile is not likely to cause mesothelioma? 10 MR. SCHMIEDER: Objection to form. 11 THE WITNESS: No. 12 Q. (BY MR. PLACITELLA) Sir, isn't it a fact 13 that NIOSH has published repeatedly that all asbestos 14 types, including chrysotile, are capable of causing 15 mesothelioma? 16 A. Yes. And I don't disagree with the 17 statement of capable. It's an issue of probability 18 and risk. 19 Q. So you agree that exposure to chrysotile 20 asbestos is capable of causing mesothelioma? 21 MR. HOOPER: Object to form. 22 THE WITNESS: Probably at extremely high 23 levels. 24 Q. (BY MR. PLACITELLA) Do you know what the 25 position of OSHA is as it relates to whether

Page 29 1 chrysotile can cause mesothelioma? 2 A. Again, I don't know that there's a single 3 current policy statement on that. I know that their 4 standards don't make distinctions. 5 Q. In other words, when discussing who should 6 be protected from what asbestos, OSHA does not 7 distinguish between fiber types; true? 8 A. Their standards don't distinguish between 9 fiber types, that is correct. 10 Q. Am I also correct that OSHA has published 11 in a number of places that chrysotile asbestos is 12 capable of causing mesothelioma? 13 MR. SCHMIEDER: Objection to form. 14 THE WITNESS: Again, I don't doubt that 15 the statement would be that it is capable. Possibly. 16 Q. (BY MR. PLACITELLA) My question is, is it 17 OSHA's official position that chrysotile is capable 18 of causing mesothelioma? 19 MR. SCHMIEDER: Objection to form. 20 THE WITNESS: I can't speak to their 21 official position at present. 22 Q. (BY MR. PLACITELLA) Have you ever seen it 23 published anywhere that OSHA is of the opinion or 24 conclusion that chrysotile asbestos is not capable of 25 causing mesothelioma?	Page 31 1 that contained -- that had applied to it 2 asbestos-containing joint compound? 3 A. I'm sorry. I didn't understand that 4 question. 5 Q. Have you ever conducted any tests of -- 6 concerning drywall that was thought to contain 7 asbestos-containing joint compound? 8 A. Yes. 9 Q. Okay. When did you do such tests? 10 A. Well, as a matter of fact, just a month 11 ago we did a renovation of our conference room at 12 IHI's offices, and the building is old enough that we 13 felt that we should test the drywall for asbestos 14 content before we tore those walls down. 15 Q. And when was the building built? 16 A. It was early -- late 60's, I believe. Mid 17 60's. 18 Q. All right. And when you did your test, 19 what did you find? 20 A. A trace. There was not enough for it to 21 be officially considered asbestos-containing 22 material. 23 Q. All right. When you say "a trace," what 24 do you mean by that? 25 A. I mean that's what the lab reported.
Page 30 1 A. No. 2 Q. Can you cite me a single government agency 3 that has published the conclusion or opinion that 4 exposure to chrysotile asbestos is not capable of 5 causing mesothelioma? 6 A. No. 7 Q. Can you cite a single state agency 8 nationwide that has ever published the conclusion or 9 opinion that chrysotile asbestos is not capable of 10 causing mesothelioma? 11 A. I don't know of any. There are probably 12 many out there. I'm familiar with very few of them. 13 Q. When you say "there are probably many out 14 there," what do you mean by that? 15 A. Well, you said state agencies, I believe, 16 and there are 50 states. 17 Q. Are you aware of any state agency anywhere 18 that has published or concluded that chrysotile 19 asbestos is not capable of causing mesothelioma? 20 A. No. 21 Q. Are you aware of any public health 22 organization that has published anywhere that 23 chrysotile is incapable of causing mesothelioma? 24 A. No. 25 Q. Have you ever conducted tests of drywall	Page 32 1 Q. Okay. Did you do a constituent analysis 2 of what was contained in the drywall? 3 A. No, no. 4 Q. Okay. Did you then go ahead and give 5 permission to have those walls knocked down? 6 A. No. As a matter of fact, we did bring an 7 abatement company in and we removed the materials, 8 and then we -- once we -- and that was prior to 9 actually receiving the results. We didn't want to 10 hold the project up waiting for the asbestos and 11 point counting results and so on. So we went ahead 12 and had an abatement firm come in and quickly -- it 13 was just a small area, so we went ahead and had them 14 do it. 15 Q. And in the abatement, would you have -- 16 had you gotten the report before having the abatement 17 company come in, would you still use the abatement 18 company? 19 A. Probably not. Probably not. 20 Q. Okay. Have you done any other testing in 21 relation to whether joint compound on drywall 22 contained asbestos? 23 A. Yeah, we've done. And I say "we." I do 24 less of this sort of building survey work myself, but 25 we're forever measuring joint compound in building

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1 surveys that we do. 2 Q. Okay. Why do you do that? 3 A. Because it's required by regulation that 4 we be aware of those materials. It would be a 5 violation of regulation to demolish walls and drywall 6 joint compound that contains more than 1 percent 7 asbestos. 8 Q. Okay. And in any of your testing, have 9 you found that the drywall joint compound contained 10 more than 1 percent asbestos? 11 A. I think so, yeah. We've seen, you know, 12 1, 2, 3 percent at times. 13 Q. And when you find in your testing that the 14 drywall joint compound contained 1 percent or more 15 asbestos, what recommendation do you make as an 16 industrial hygienist as to what, if any, protections 17 are necessary in removing those walls? 18 A. Well, depending -- yeah. If you're 19 removing the walls, if you're going to disturb that 20 material or demolish that material, you have to use 21 full abatement techniques. 22 Q. Which includes what? 23 A. Well, negative air containment, workers 24 wearing appropriate personal protective equipment, 25 proper bagging.	1 chrysotile? 2 A. Well, again, the regulations don't specify 3 fiber type, so you have to do it for any type of 4 fiber. 5 Q. Have you ever tested tape joint compound 6 on walls that contained a fiber type other than 7 chrysotile? 8 A. I personally have not. I would have to 9 talk to our -- the folks that have done the most of 10 this to see if they've ever seen it. But I'm not 11 aware of any. 12 Q. Do people who are doing the abatement of 13 the joint compound on the walls that contain 14 asbestos, do they have to wear special suits? 15 A. Yes. They wear protective clothing and, 16 of course, respirators. 17 Q. Well, do the special suits have hoods? 18 A. Yes. 19 Q. They look essentially like white space 20 suits? 21 A. Bunny suits, we call them. 22 Q. You call them bunny suits? 23 A. Yes. 24 Q. The people who are removing the chrysotile 25 asbestos, for example, that was installed during the
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1 Q. Hold on. I'm writing them down. 2 Protective equipment, okay. 3 A. Yeah, including respirators, of course. 4 Q. Okay. 5 A. Of course, these people have to be trained 6 and certified to do such work. 7 Q. Trained, okay. 8 A. The materials have to be properly bagged, 9 removed and disposed. And then appropriate cleanup, 10 final cleanup, and then final testing of the areas 11 that were abated. 12 Q. Okay. So you have -- I'm sorry. You said 13 negative -- what was the first thing you said? 14 A. Negative air containment. So you put up 15 plastic sheeting throughout the room. 16 Q. Okay. 17 A. You put a big device, an air handling 18 device that has high efficiency filters that draws 19 air out of the space that you're working on, removes 20 all fibers, all asbestos, and then pushes clean air 21 out of the space. And that's set up so that any air 22 leakage is into the space and nothing is getting away 23 from the abatement job. 24 Q. Okay. And would you do that whether or 25 not the fiber type that you found with asbestos was a	1 1970's, the protection that they require in order to 2 make sure they're protected are space suits with 3 respirators, right? 4 MR. HOOPER: Objection to form. 5 MR. SCHMIEDER: Objection to form. 6 THE WITNESS: It's not a space suit, it's 7 a Tyvek disposable fabric material. 8 Q. (BY MR. PLACITELLA) Yes, sir. And the 9 reason you have disposable fabric material is to make 10 sure that none of the tape joint compound containing 11 asbestos leaves the contaminated area. True? 12 A. I'm sorry -- 13 MR. SCHMIEDER: Objection. 14 A. -- I didn't follow that. 15 Q. Well, one of the reasons you've given for 16 special clothing is so they don't bring that asbestos 17 from that joint compound home to the families. True? 18 A. No, no. Not true. 19 Q. So it would be okay, in your opinion, for 20 them to bring that tape joint compound asbestos home 21 to their families? 22 A. That is absolutely not what I said. 23 Q. Okay, that's what I'm asking. Do you 24 believe in your opinion as an industrial hygienist 25 that it would be prudent and safe for the people who

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1 are doing the abatement work of the tape joint 2 compound to wear the same clothing home to their 3 families? 4 A. No, and that would be a violation of 5 regulations. 6 Q. Yes. And what are the procedures that are 7 used to make sure -- by the way, do you know -- 8 scratch that. Do you know what -- scratch that. 9 Somebody who is performing an abatement operation for 10 tape joint compound, would you consider that a 11 significant potential exposure? 12 MR. SCHMIEDER: Objection to form. 13 THE WITNESS: "Significant" is a loaded 14 word. I don't know how to answer -- I would have to 15 have your definition of significant. 16 Q. (BY MR. PLACITELLA) Well, what does 17 significant mean to you, sir, as an industrial 18 hygienist in relation to exposure to asbestos? 19 A. It means many things. There's 20 significance -- statistical significance is the main 21 thing that comes to mind. Other than that, it's just 22 a word that we use in general language as well. And 23 we struggle with the definition of that word. 24 Q. In describing exposures to asbestos, do 25 you ever use the word "significant"?	1 Now, we have had other situations, unusual 2 abatement jobs where we have been in -- I remember an 3 electrical vault at one location that had a good deal 4 of amosite insulation. There was no possibility of 5 using water because of the electrical aspect of that 6 room. You'd have a big short if you used any water. 7 We had to work -- we had to abate amosite and we had 8 to work it dry, and in that situation we put people 9 in supplied air respirators. I would consider that 10 as significant exposure. I'll use the word for that 11 situation, because we had amosite and it was dry. 12 And that was why we put people in supplied air 13 respirators, which go beyond the normal requirement 14 for a half face respirator that you would use in a 15 drywall job. So there are jobs and there are jobs. 16 Q. Okay, let me go back. In your report you 17 used the word "intermittent." My question to you is, 18 is the kind of exposure that someone abating tape 19 joint compound does on a single event intermittent? 20 A. It is intermittent in the sense that 21 they're not always in there. There will be times 22 when they're out of the containment, there will be 23 times when they're showering out. So yes, it is 24 intermittent. 25 Q. All right. So for the person who
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1 A. I'm very careful about that word. 2 Q. I mean, you don't use it or you do use it? 3 A. I try not to use it. 4 Q. Okay. And why is that? 5 A. Because it's a loaded word. 6 Q. Do you use the word "intermittent"? 7 A. Sure. 8 Q. Okay. Would the exposure that occurs to 9 somebody abating tape joint compound be considered 10 intermittent? 11 A. If you're in an abatement condition, if 12 you're in a room, say, that has been taped off and 13 sealed with plastic, any work within that room, it 14 has to be assumed that there is some level of 15 exposure. The exposure varies depending on what's 16 being done at any given moment, varies widely. But 17 overall it's fairly low. 18 In that situation we would put workers in 19 with, say, a half mask HEPA filtered respirator. We 20 would work wet. We would do everything we can to 21 keep exposures very low. 22 Regardless of what the average exposures 23 are in that room, even if they are below the OSHA 24 permissible exposure limit, it is required by OSHA 25 regulations that respirators be worn at all times.	1 encounters intermittent exposure during the abatement 2 of drywall, you provide them negative air 3 containment; true? 4 MR. SCHMIEDER: Objection to form. 5 THE WITNESS: Yeah. I specified the 6 requirements for abatement of asbestos-containing 7 materials. 8 Q. (BY MR. PLACITELLA) Well, do you disagree 9 with any of the requirements? 10 A. No, no. They're required by law. 11 Q. No, but do you agree that they are 12 appropriate requirements, in your professional 13 opinion as an industrial hygienist, that they are an 14 appropriate requirement to protect people abating 15 tape joint compound? 16 A. Yes. They're appropriate in the sense 17 that, you know, to have any other sort of regulations 18 would invite chaos. Other air contaminants that OSHA 19 regulates, the approach is keep the levels below the 20 permissible exposure limits, and we won't require 21 people to wear respirators. 22 To take that approach with asbestos 23 abatement would be very chaotic. You'd have all 24 sorts of people doing all sorts of things that would 25 not be protective of workers. There would be

Page 41 1 situations where there might be problems. So I think 2 OSHA decided to make this an ironclad requirement for 3 all asbestos abatements regardless of the air levels 4 that are measured. 5 Q. All right. Well, I guess -- here's my 6 question. Putting aside the OSHA regulations, in 7 your opinion as a trained professional industrial 8 hygienist, what procedures should be employed by a 9 worker charged with abating asbestos-containing joint 10 compound from drywall? 11 MR. SCHMIEDER: Objection to form. 12 THE WITNESS: They should follow the 13 requirements of the standard. 14 Q. (BY MR. PLACITELLA) I'm saying -- put the 15 standards aside, sir. I'm asking, based upon your 16 training as an industrial hygienist, what protections 17 should someone use who is abating tape joint compound 18 in order to protect their personal health? 19 MR. HOOPER: Object to form. 20 THE WITNESS: I think I've already 21 answered that several times. I agree -- 22 Q. (BY MR. PLACITELLA) Please answer the 23 question. 24 A. I went through the steps you would take, 25 and I can repeat them all again, but you have them.	Page 43 1 MR. SCHMIEDER: Objection to form. 2 THE WITNESS: No. You'd have to follow 3 the standard. You have to follow the standard. 4 Q. (BY MR. PLACITELLA) And you believe in 5 that standard? 6 A. I believe it's a real standard that has 7 very real consequences if you don't follow it in 8 terms of breaking the law. 9 Q. But does it also have real consequences in 10 terms of potential risks to health and safety? 11 A. It depends upon the conditions. It 12 depends on the percentage of asbestos and the type of 13 asbestos and the extent to which it is released into 14 the air. In other words, it depends on the exposure 15 with regard to health. 16 Q. Have you ever done any testing of exposure 17 levels when mixing asbestos-containing joint 18 compound? 19 A. I have not personally. 20 Q. Has your company ever done it? 21 A. I don't believe so. 22 Q. Have you ever conducted any tests or 23 studies of exposure levels when sanding 24 asbestos-containing joint compound? 25 A. I don't believe so.
Page 42 1 You know them. 2 Q. This is what I want to -- this is what I 3 want to be clear on. Putting what OSHA requires 4 aside, in your opinion as a trained industrial 5 hygienist, what steps are necessary to safeguard the 6 health of a worker whose job it is to abate tape 7 joint compound that contains asbestos? 8 MR. HOOPER: Object to form. 9 THE WITNESS: You would take appropriate 10 steps to assure that their exposures are less than 11 the standards in effect at the time. 12 Q. (BY MR. PLACITELLA) Okay. And tell me 13 specifically what those steps are. 14 A. The simplest way to do it is the sort of 15 brute force method of the standard, which is to do 16 negative air containment, wear respirators, wear 17 protective clothing, and the entire list of things 18 I've mentioned two or three times now. 19 Q. Okay. Would you ever -- as an experienced 20 industrial hygienist, would you ever counsel an 21 abatement worker who is charged with removing tape 22 joint compound not to protect themselves with 23 negative air and all the other things that you've 24 discussed because the asbestos that's being abated is 25 chrysotile?	Page 44 1 Q. Have you ever done any testing of exposure 2 levels when sweeping up asbestos-containing joint 3 compound? 4 A. Well, only to the extent that there might 5 be some measurements -- but this would be in 6 containment under abatement conditions, so it would 7 not be the same as, you know, the exposures that 8 might occur during application of those materials. 9 Q. Okay. Well, in the abatement process, is 10 part of the process to clean up the material that is 11 taken down? 12 A. Yes, absolutely. 13 Q. Does that in any way resemble the cleanup 14 of the process of a room after asbestos-containing 15 joint compound is applied? 16 A. Not typically. Because number one, you're 17 working wet. Those materials should be like mud in 18 an abatement job, and you have the flow of air 19 through the system. So it would be different. 20 Q. Okay. Before the product is wet down, are 21 the conditions of the abated joint compound similar 22 in any way to the conditions that exist with the tape 23 joint compound after it's applied? 24 A. No. Because in an abatement job the first 25 thing you do is start applying water before you even

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1 disturb the material. 2 Q. Okay. So when cleaning up joint compound 3 that's been abated, you have to wet it down? 4 A. Well, that would be good practice. 5 Q. Would you also have to wear a respirator? 6 A. Again, you have to wear a respirator the 7 entire time you're in the containment regardless of 8 what you're doing. 9 Q. When you're cleaning up asbestos- 10 containing joint compound, would you have to wear 11 special clothing? 12 A. Well, you know, that's an interesting 13 question, because the important thing about the 14 containment process is the shower. The guys are 15 going to take all these things they're wearing inside 16 containment off and put them in a drum, and they're 17 going to go through a shower before they get out of 18 the containment. You know, essentially, from a 19 health perspective, as long as you wore the 20 respirator, you could work with probably no clothes 21 at all. It wouldn't make any difference in terms of 22 fibers getting away. Everybody has to shower out and 23 essentially strip down before they leave. So what 24 they wear within containment is kind of a matter of 25 convenience and cost and protection against physical	1 Longo's studies of joint compound, his results have 2 been consistent with other published reliable 3 studies. Do you agree? 4 MR. HOOPER: Object to form. 5 THE WITNESS: I need to look back at that 6 before I make that statement. The numbers he came up 7 with are not coming to mind right at the moment. 8 Q. (BY MR. PLACITELLA) Well, did you take 9 any exception to the conclusions reached by Longo in 10 the study that you looked at -- 11 MR. SCHMIEDER: Objection to form. 12 Q. -- related to tape joint compound? 13 A. I haven't looked at Longo for a while, so 14 I would have to pull that study out and look at it 15 more carefully. 16 Q. As an industrial hygienist, are you 17 familiar with something known as the Tyndall effect? 18 A. Yes. 19 Q. What is the Tyndall effect? 20 A. It's an effect that Longo et al. like to 21 use to make clouds of aerosol very visible to the 22 human eye. 23 Q. Well, the Tyndall effect is not something 24 that Longo dreamed up, right? 25 A. Well, his use of it is not any kind of
Page 46	Page 48
1 trauma, that sort of thing. 2 Q. Okay. Have you ever -- are you familiar 3 with any studies concerning the mixing of 4 asbestos-containing joint compound? 5 A. Yes, the sort of historical or simulation 6 studies that we talked about earlier. 7 Q. That would be Nicholson and Verma? 8 A. Yeah. 9 Q. And Longo? 10 A. Right. And -- 11 Q. Who else? 12 A. There was a study by Clayton. There are 13 certain studies that were done by some industries. I 14 forget the names of those. U.S. Gypsum I think had a 15 study done. That may have been the Clayton study. 16 You can look back at those. You know, and Longo more 17 recently has done a study, simulation study. 18 Q. And do you find Longo's study reliable? 19 MR. SCHMIEDER: Objection to form. 20 THE WITNESS: His data on that study 21 seemed to fall more or less in line with others. 22 He's done some studies that he's been kind of an 23 outlier, but I don't recall that he's too far out of 24 the norm on the joint compound studies. 25 Q. (BY MR. PLACITELLA) All right. So on	1 scientific measurement. It's for demonstration 2 purposes. 3 Q. But the Tyndall effect is something that 4 has been utilized or recognized by industrial 5 hygienists historically, correct? 6 A. I wouldn't say that. 7 Q. So an industrial hygienist has never 8 relied upon the Tyndall effect as an indication of 9 whether exposure was significant or not? Is that 10 what you're saying? 11 MR. HOOPER: Object to form. 12 MR. SCHMIEDER: Objection to form. 13 THE WITNESS: We have a number of 14 instruments that make use of light scattering to 15 measure aerosol in air. There's a device called an 16 integrating nephelometer that essentially measures 17 the reflectance and scattering of light particles 18 within an instrument. That's a fairly good machine 19 and it gives you reasonable data. You don't just 20 shine a bright light in a room and expect to have any 21 kind of quantification of airborne levels of aerosol. 22 Q. (BY MR. PLACITELLA) But you agree when 23 you shine a light in a room it does show -- it does 24 show dust that you can't otherwise see with the naked 25 eye?

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1 A. It's just like a spotlight on a smoky 2 stage, absolutely. You can see that cone of light 3 even from cigarette smoke, for example. 4 Q. Okay. Now, can the mixing of 5 asbestos-containing joint compound create a dangerous 6 situation, in your opinion? 7 MR. SCHMIEDER: Objection to form. 8 MR. HOOPER: Object. 9 THE WITNESS: I don't know what you mean 10 by "dangerous situation." 11 Q. (BY MR. PLACITELLA) Well, what do you 12 mean by dangerous when you talk about exposure to 13 asbestos? 14 A. In excess of occupational standards. 15 Q. Okay. So in your mind, if there's an 16 exposure less than occupational standards to 17 asbestos, it is not dangerous? 18 MR. HOOPER: Objection to form. 19 A. Again, I don't know what you mean by 20 dangerous. 21 Q. Well, I'm trying to use your definition, 22 sir. 23 MR. SCHMIEDER: Objection. 24 THE WITNESS: I agree with all industrial 25 hygienists that less exposure is nearly always better	1 A. I don't believe that one was. 2 Q. That was a study, am I correct, that was 3 done by the Gypsum Association of which Georgia 4 Pacific was a member? 5 A. Yes, I think that's right. 6 Q. Do you have an opinion as to whether it 7 would have been helpful in terms of public health to 8 have had that study published when it was done? 9 MR. HOOPER: Object to form. 10 THE WITNESS: Generally I -- my general 11 feeling is that good studies should be published and, 12 you know, put up to the scrutiny of peer review. I 13 think that's better for everybody when that occurs. 14 Q. (BY MR. PLACITELLA) Did you believe that 15 was a good study from what you reviewed? 16 A. Well, it seemed to be a good study based 17 on what I saw and based on Clayton's reputation. 18 Q. So given to the fact Clayton did the study 19 for an industry trade group involved in the 20 manufacture of joint compound, is it your opinion 21 from a public health perspective that it would have 22 been helpful to have that study published? 23 MR. HOOPER: Object to form. 24 THE WITNESS: I like to see things 25 published.
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1 than more exposure. And whatever the air contaminant 2 is, it makes sense to reduce exposures to the extent 3 feasible. That's just a general ironclad rule of 4 industrial hygiene. Less exposure is better, 5 whatever you want to talk about. 6 Q. (BY MR. PLACITELLA) Okay. But my 7 question to you is, you've defined dangerous as above 8 the occupational -- 9 A. I just lost your picture. 10 MR. PLACITELLA: Hold on just one second. 11 We've been going here for a little over an 12 hour. Do you want to take a five-minute break and 13 we'll get this thing going and come back? 14 THE WITNESS: Sure. 15 MR. PLACITELLA: Okay. Please don't 16 discuss your testimony. Thank you. We'll take a 17 five-minute break. 18 (Recess from 10:12 a.m. to 10:21 a.m.) 19 Q. (BY MR. PLACITELLA) We're back. Are you 20 ready to proceed? 21 A. Yes. 22 Q. You mentioned the Clayton study. Is that 23 the study performed by the U.S. Gypsum Association? 24 A. I have to look back at those. 25 Q. Was that study published anywhere?	1 Q. (BY MR. PLACITELLA) So is the answer yes? 2 A. Yeah. 3 Q. Okay. Now, do you have any idea why 4 Georgia Pacific chose to keep that study secret and 5 only give it to their experts? 6 MR. HOOPER: Object to form. 7 THE WITNESS: I don't know that they did 8 that, and I can't speak for them. 9 Q. (BY MR. PLACITELLA) Would you have 10 countenanced or approved of Georgia Pacific keeping 11 that study secret? 12 MR. HOOPER: Object to form. 13 THE WITNESS: How would I know if they'd 14 kept it secret? 15 Q. (BY MR. PLACITELLA) Well, assume that it 16 wasn't published and it wasn't given to anybody who 17 was using the joint compound. Would you have 18 approved of that kind of conduct? 19 MR. SCHMIEDER: Object to form. 20 THE WITNESS: Depends on what the study 21 said, I guess. 22 Q. (BY MR. PLACITELLA) Well, you saw the 23 study. You know what it said. Given the study that 24 you reviewed, do you think it was good public health 25 for Georgia Pacific not to expose that study to

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1 people potentially exposed to their joint compound? 2 MR. HOOPER: Object to form. 3 THE WITNESS: Well, I don't know. That 4 seems hypothetical to me. I don't know what occurred 5 with the study. 6 Q. (BY MR. PLACITELLA) Well, assuming the 7 study was not published and not provided to any 8 workers who were using their joint compound, do you 9 believe that would have been good public health as a 10 trained industrial hygienist? 11 A. Well, I don't believe their study showed 12 anything different from the other studies that were 13 published, so I'm not sure how it has any effect. 14 Q. Well, the other studies weren't published, 15 right, until 1975 or 1976? 16 A. Some of them weren't even done until then. 17 Q. Right. But this study was done actually 18 in 1972, correct? 19 A. I would have to look back at it. I don't 20 remember the date. 21 Q. Well, let's assume it was 1972, 1973, and 22 it was the first such study done. Do you believe 23 that it would have been helpful from a public health 24 perspective to have that study published? 25 MR. HOOPER: Object to form.	1 and/or sponsored by the very companies who were 2 making the tape joint compound, true? 3 A. Correct. 4 Q. If you were an industrial hygienist in the 5 field in 1972, would you have given credence to a 6 study that was done by the makers of the product and 7 done in conjunction with Clayton? 8 MR. SCHMIEDER: Objection to form. 9 THE WITNESS: Yeah, if it were done by a 10 reliable contractor, in this case Clayton, and on 11 assessing and looking at the study it appeared that 12 proper techniques had been used, then yes. 13 Q. (BY MR. PLACITELLA) When you looked at 14 the study did you see anything in it that would make 15 it unreliable? 16 A. I don't recall that I did. 17 Q. Okay. So my question to you is, would it 18 have been helpful to the public health, in your 19 opinion, to have that study published for industrial 20 hygienists like yourself to review back in 1972, 21 1973? 22 A. Well, I'm not sure it would have hurt 23 anything, and I'm not sure it would have changed 24 techniques or approaches to the problem. 25 Q. What do you mean by that?
Page 54	Page 56
1 THE WITNESS: I don't know that it showed 2 anything that suggested overexposures to the 3 permissible exposure limits at that time, so I'm not 4 sure how it would have changed things. 5 Q. (BY MR. PLACITELLA) Well, sir, if the 6 study showed that people who were sanding tape joint 7 compound were being exposed to asbestos, would that 8 have been important from a public health perspective? 9 A. It depends on the levels and how they 10 compared to the standards of the existing time. 11 Q. Well, let's assume that it was above the 12 standards of the existing time. Would that have been 13 important to publish? 14 MR. HOOPER: Object to form. 15 THE WITNESS: It depends on the study and 16 how good a simulation it was of what is occurring out 17 in the industry. 18 Q. (BY MR. PLACITELLA) Okay. Well, this was 19 a study that was done in conjunction with Clayton, 20 correct? 21 A. As far as I know, yes. 22 Q. They were a reliable and respected 23 environmental hygiene organization, true? 24 A. Yes. 25 Q. And it was a study that was conducted	1 A. Well, if indeed it showed levels generally 2 in compliance with the existing standards of the 3 time, it probably would not have much effect on 4 changing people's opinion about how to do those 5 things. 6 Q. All right. But if the study showed that 7 there were -- there were practices for dealing with 8 tape joint compound that created exposures above the 9 permissible levels, would that have been something 10 that would be important to have been published back 11 at that time? 12 MR. HOOPER: Object to form. 13 THE WITNESS: I'm not sure it did show 14 that; but in general, if you have studies that are 15 showing overexposures, that would be good to know. 16 Q. (BY MR. PLACITELLA) So it would have been 17 important from a public health perspective to be 18 published? 19 MR. HOOPER: Object to form. 20 THE WITNESS: I said "if." I qualified 21 that. 22 Q. (BY MR. PLACITELLA) The qualification is, 23 sir, if the Clayton study that was done in 24 conjunction with the Gypsum Association showed that 25 people who were dealing with asbestos-containing

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1 joint compound could be exposed over the permissible 2 limits, that would have been a study that should have 3 been published; true? 4 MR. SCHMIEDER: Objection to form. 5 THE WITNESS: If your premise is true, and 6 as I just said a moment ago, any industrial hygiene 7 study that shows overexposures against eight-hour TWA 8 permissible exposure limits, that's a good thing to 9 have out, to get that knowledge out into the 10 industry, sure. 11 Q. (BY MR. PLACITELLA) So it should have 12 been published? 13 MR. HOOPER: Object to form. 14 MR. SCHMIEDER: Objection to form. 15 THE WITNESS: I answered it before, I 16 think. 17 Q. (BY MR. PLACITELLA) Do you know what an 18 excursion limit is? 19 A. Yes. Yes, I do. 20 Q. What's an excursion limit? 21 A. It's a limit -- it's kind of specific to 22 asbestos. It's a 30-minute exposure level. In the 23 general parlance we have a thing called the 24 short-term exposure limit, which is normally a 25 15-minute exposure. So in other words, you're	1 in this case that I was not going to be able to come 2 up with a real quantitative assessment of exposure 3 for Bird, because there was so little information 4 about times and the actual exposure situations. So I 5 didn't try to use any numerical data on these various 6 operations. 7 Q. Are you aware that there were studies 8 published by Selikoff indicating that there were 9 exposures in adjacent rooms where joint -- 10 environments where joint compound was being used, 11 asbestos joint compound was being used? 12 MR. HOOPER: Object to form. 13 THE WITNESS: Yeah, I'm aware of his 14 study. It's very hard to understand what they did in 15 that study, how far away they were and what the air 16 currents were and so on, but I know that was part of 17 his study or role. 18 Q. (BY MR. PLACITELLA) Okay. Did you 19 disagree with any of that? 20 A. I find it surprising based on other data 21 that has come along since that time. 22 Q. What other data? 23 A. Well, the other studies, Verma and some of 24 these other folks. 25 Q. Did Verma test, to your knowledge, what
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1 specifying a period of time less than the full 2 eight-hour shift and you're allowing a higher 3 standard to exist during that period of time as 4 compared to the eight-hour permissible exposure 5 limit, and you're trying essentially to control peak 6 exposures or short-term exposures by that mechanism. 7 Q. Do you know whether the Clayton study 8 showed that peak exposures when dealing with 9 asbestos-containing joint compound were exceeded? 10 A. I don't believe there was an excursion 11 limit at the time that study was done. I would have 12 to look back at that. 13 Q. You indicated that this study by Clayton 14 was one of the studies you relied upon in reaching 15 your opinion. True? 16 A. In this case? 17 MR. SCHMIEDER: Objection to form. 18 THE WITNESS: Yes. 19 A. (BY MR. PLACITELLA) No, I didn't cite it 20 as part of my report in this case. 21 Q. Well, I thought you indicated that there 22 were a number of studies that dealt with exposures or 23 potential exposures to tape joint compound that were 24 relevant to this case. Did you say that? 25 A. Not exactly. Because I concluded early on	1 kind of exposures would happen to people in adjacent 2 rooms where the joint compound was not applied? 3 A. I don't recall. It's a situation that's 4 going to be highly variable. 5 Q. Okay. Did you review any documents from 6 Georgia Pacific relating to their asbestos-containing 7 joint compound? 8 A. Well, the document that I referenced in my 9 report that just gives some basic information on what 10 the products were, when they were made, when they 11 contained asbestos, that sort of thing. 12 Q. Other than the answers to interrogatories 13 that you reference in your report, have you reviewed 14 any documents of Georgia Pacific or concerning 15 Georgia Pacific relating to tape joint compound? 16 A. It seems like there was one other document 17 that was very similar to what's in this one that I 18 cited. It wasn't any different information about 19 products. 20 Q. Did you interview any witnesses or 21 employees of Georgia Pacific concerning their tape 22 joint compound? 23 A. No. 24 Q. Did you review any depositions of any 25 employees of or former employees of Georgia Pacific

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1 relating to their tape joint compound? 2 A. I'm trying to remember if early on I might 3 have seen one. If I did, the name doesn't come to 4 mind. 5 Q. Is that something that you maintained or 6 is that something you discarded? 7 A. I don't believe I have any such document 8 at this point. I'm vague on that. I'm sorry. 9 Q. No problem. Did you examine any packaging 10 of Georgia Pacific joint compound at any point in 11 time? 12 A. I have a photograph that shows various 13 bags and boxes and containers of products. I'm not 14 sure exactly when it was taken, but it was -- I think 15 it represented the period of time we're interested in 16 here. 17 Q. Who supplied that photograph to you? 18 A. Mr. Hooper. 19 Q. And Mr. Hooper is who? 20 A. Jim Hooper with -- 21 MR. HOOPER: The Georgia Pacific lawyer 22 sitting beside him. 23 Q. (BY MR. PLACITELLA) All right. Okay. 24 And when was that photograph supplied to you? 25 A. I believe it was in the Kerns case.	1 Q. Do you know whether the labeling ever 2 mentioned the word "asbestos"? 3 A. Yes, it did. Again, according to this 4 interrogatory, after 1974. 5 Q. Okay. Do you know what it said? 6 A. Let me turn to that. Somewhere in the 7 file. Which product are you interested in? They all 8 have a section in this document. 9 Q. Well, let me ask the question this way. 10 Maybe it will be easier. Do you know whether the 11 labeling on the Redi-Mix joint compound relating to 12 asbestos, do you know where that appears on the can 13 or bucket? 14 A. Oh, no. Not exactly, no. 15 Q. Do you know whether it appeared on the 16 front, the top, or the side? 17 MR. SCHMIEDER: Object to form. 18 THE WITNESS: I do not. 19 Q. (BY MR. PLACITELLA) Do you have an 20 opinion as an industrial hygienist as to where a 21 label should appear so as to inform the user about 22 whether that product is potentially dangerous or not? 23 A. Well, the general rules of labeling are 24 that to be effective they need to be visible and they 25 need to be readily noticed by the user. So other
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1 Q. And do you have a copy of that photograph 2 at your office? 3 A. Yes. 4 Q. I'll make a request for that photograph. 5 A. Okay. 6 Q. Did you ever physically, other than a 7 photograph, see actual packaging of Georgia Pacific 8 joint compound? 9 A. Well, except for what they sell now, but 10 none of the old stuff, no. 11 Q. None of the old stuff. Have you ever been 12 given any bags or cans or buckets of 13 asbestos-containing joint compound for testing? 14 A. No. 15 Q. Are you familiar with where -- with the 16 labeling of the asbestos-containing joint compound 17 sold by Georgia Pacific? 18 A. Somewhat. 19 Q. When you say "somewhat," what do you mean 20 by that? 21 A. Well, I have the photograph that shows 22 various examples. I am by no means an expert in how 23 the labeling has been over the years except to the 24 extent that it's either in that photograph or listed 25 in the document I cited.	1 than that, specifically, you know, which side of the 2 bag do you put it on? As long as it's of sufficient 3 size to be seen, the user would be likely to 4 encounter that in using the product. 5 Q. Okay. Now, where would it be better to 6 put a warning label relating to asbestos, in your 7 opinion -- 8 MR. SCHMIEDER: Object to form. 9 Q. -- the top of the can or the front of the 10 can? 11 A. Now, you're talking about a can -- 12 Q. Can or a bucket. 13 A. Well -- 14 MR. SCHMIEDER: Object to form. 15 A. -- normally you don't see any labeling on 16 the top. Even today, by today's standards, it's 17 normally on the side of the container with all the 18 other writing and information. 19 Q. Where would it be better if you wanted to 20 alert somebody to a hazard of a product to put a 21 warning about asbestos? On the front or on the top, 22 in your opinion as an industrial hygienist? 23 A. I would say either. The front or the top 24 would be good. 25 Q. All right. Would it be better to put the

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1 warning about the dangers of asbestos on the front or 2 on the side of the can? 3 MR. SCHMIEDER: Objection to form. 4 THE WITNESS: It would be better to put it 5 where it's likely to be seen. I don't know what the 6 difference is. 7 Q. (BY MR. PLACITELLA) Well, is it more 8 likely to be seen on the front of the can or on the 9 side of the can or bucket? 10 MR. HOOPER: Object to form. 11 Q. (BY MR. PLACITELLA) In your opinion. 12 A. I don't know that there's a difference. 13 You'd normally put it by the directions, I would 14 think, for use. 15 Q. If I were somebody who had used joint 16 compound on many occasions, would you agree with me 17 that there would be little need for me to go back and 18 read the direction each and every time that I was 19 going to use the joint compound? 20 MR. SCHMIEDER: Objection to form. 21 THE WITNESS: I would agree that people 22 who use the product frequently are not going to read 23 anything. 24 Q. (BY MR. PLACITELLA) My question is, would 25 you agree with me that if I had used the product	1 today that are quite clear about the use of signal 2 words -- you know, danger, warning, caution, that 3 sort of thing. Those standards have developed over 4 the years and are pretty well codified now. There 5 are ANSI standards for labeling. There are OSHA 6 requirements for labeling. 7 Q. Do you agree with me, sir, that from an 8 industrial hygiene perspective the signal words 9 "danger," "caution," and "warning" have been 10 recognized since at least the 1960's? 11 MR. SCHMIEDER: Objection to form. 12 THE WITNESS: I am not a labeling expert, 13 so I can't answer that. 14 Q. (BY MR. PLACITELLA) In your training as 15 an industrial hygienist, tell me what your 16 understanding is of when you use the words "caution" 17 versus "label" versus "warning." 18 MR. HOOPER: Object to form. 19 THE WITNESS: You said "label." I don't 20 think that's what you meant to say. 21 Q. (BY MR. PLACITELLA) When you want to 22 alert -- when you're using a -- scratch that. When 23 you are using a -- when you're trying to determine 24 what is the proper signal word when it comes to 25 relating a potential hazard, when do you use the
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1 before and was familiar with how to use the product, 2 it would be unlikely that I would go back and re-read 3 the directions every time I would go to apply the 4 product? 5 A. That's probable. 6 Q. All right. And would you agree with me 7 that if I was trying to decide where to put a warning 8 for somebody who was using the product for multiple 9 times, that the better place to put the warning would 10 be on the front or the top where it would be more 11 readily noticeable? 12 A. I suppose. 13 MR. SCHMIEDER: Objection. 14 Q. (BY MR. PLACITELLA) You suppose? 15 A. I suppose. 16 Q. Okay. Because if I was somebody who had 17 used the product before or familiar with a product, 18 it would be unlikely that I would go back to the side 19 of the can and read the directions. True? 20 A. I guess so. 21 Q. Okay. Now, does an industrial hygienist 22 recognize the difference between using a caution 23 label and a warning label? 24 A. Well, I think that -- I can't speak for 25 all industrial hygienists, but there are standards	1 words "warning" versus "caution" versus "danger"? 2 MR. SCHMIEDER: Objection. 3 THE WITNESS: I don't know that there's a 4 clear-cut line between those, but danger is normally 5 for something that can cause rather immediate acute 6 effects, something that can knock you down and kill 7 you rather quickly. And then, you know, it lowers 8 down. Then warning is something that's less acutely 9 hazardous; and caution, of course, something that you 10 don't need to be quite as careful about. But that's 11 about all -- 12 Q. (BY MR. PLACITELLA) In your opinion as an 13 industrial hygienist trained in protecting public 14 health, is it more appropriate to use the 15 word "warning" or "caution" when you're talking about 16 exposure to a potential carcinogen? 17 MR. SCHMIEDER: Objection. 18 MR. HOOPER: Object to form. 19 THE WITNESS: You know, I'm trying to 20 remember back to that first OSHA standard for 21 asbestos that required the wording, and I don't 22 recall which they used on that first example label at 23 the moment. 24 Q. (BY MR. PLACITELLA) But I'm asking you, 25 in your opinion as an industrial hygienist trained to

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1 protect public health, what is the more appropriate 2 word to use, "caution" or "warning," when talking 3 about potential exposure to a carcinogen? 4 MR. SCHMIEDER: Objection to form. 5 THE WITNESS: Well, I would use "warning" 6 over "caution" for a carcinogen. 7 Q. (BY MR. PLACITELLA) Now, do you know 8 whether Georgia Pacific used the words "warning" 9 or "caution" on its asbestos-containing joint 10 compound? 11 A. I need to look into that. 12 Q. Would it matter to you from a public 13 health perspective as to whether or not Georgia 14 Pacific used "warning" versus "caution" on its 15 asbestos-containing joint compound? 16 A. I don't think it would make much 17 difference from a public health point of view, nor 18 probably from a worker health. I'm not sure that 19 those subtleties have any effect on workers' 20 behavior. 21 Q. Do you know -- and you've never conducted 22 any studies on the effect of warnings on worker 23 behavior, true? 24 A. No. I'm not a warnings expert. 25 Q. Okay. Now, you do comment on the	1 sure. 2 Q. And what did the lawyer for Georgia 3 Pacific tell you about the contents of the 4 asbestos-containing joint compound? 5 MR. HOOPER: Object to form. 6 MR. SCHMIEDER: Objection. 7 THE WITNESS: Well, as stated in my 8 report, it was normally -- you know, I think we said 9 zero to 7 percent was kind of the range of content of 10 products during that period from I guess '65 through 11 the mid 70's. 12 Q. (BY MR. PLACITELLA) But my question is 13 specifically, what did the Georgia Pacific lawyers 14 tell you about the asbestos content of the Georgia 15 Pacific joint compound? 16 MR. SCHMIEDER: Same objection. 17 THE WITNESS: Well, that, you know, there 18 were varying percentages, usually in the low, you 19 know, 3, 4, 5 percent area; that starting about '72, 20 '73 they began to work on asbestos-free substitutes 21 for those products and that they phased them in kind 22 of one at a time as they were able to develop 23 products that worked without asbestos that worked 24 well, then the asbestos started to come out of these 25 products.
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1 likelihood of seeing warnings in your report; true? 2 A. Yeah, to the extent that Bird had not 3 mentioned seeing warning signs on the products that 4 he used. 5 Q. But it could very been possible that Bird 6 did not read directions on the side where warnings 7 could have been placed. True? 8 A. That's possible. 9 Q. All right. Now, and the reason he 10 wouldn't have seen directions on the side is if he's 11 familiar with the product, there would be no reason 12 to read the directions. True? 13 MR. SCHMIEDER: Objection to form. 14 THE WITNESS: Yeah, I can't speak to what 15 he would have done. I don't know how often he used 16 joint compound to -- didn't seem like it was that 17 often. 18 Q. (BY MR. PLACITELLA) Okay. Now, the 19 information you had on the content of the Georgia 20 Pacific joint compound, that was information that 21 came from the interrogatories that you referenced? 22 A. Yes. 23 Q. Was that information that was related to 24 you by the lawyer for Georgia Pacific? 25 A. Well, I assume that's where I got it,	1 The other -- 2 Q. (BY MR. PLACITELLA) Sir, were you told by 3 Georgia Pacific that in fact in 1970 a decision was 4 made by executives to get the asbestos out of the 5 joint compound? Do you recall that? 6 MR. SCHMIEDER: Objection to form. 7 THE WITNESS: I forget the dates, but I do 8 recall seeing that there was a decision that they 9 would begin to remove asbestos from their products 10 before they were required to do so by law. 11 Q. (BY MR. PLACITELLA) And sir, you're aware 12 that it took seven years to remove the asbestos from 13 the Redi-Mix joint compound? You're aware of that? 14 MR. HOOPER: Object to form. 15 THE WITNESS: I don't know specifically 16 about Redi-Mix. There were others that were asbestos 17 free by '73, '74, and so on. 18 Q. (BY MR. PLACITELLA) Which others? 19 A. Well, you know, I'd have to look through 20 one by one to find that. 21 Q. Do you think it would have been good from 22 a public health perspective to take seven years to 23 remove asbestos from the Redi-Mix joint compound when 24 there was a concern expressed by executives of 25 Georgia Pacific to get the asbestos out of the joint

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1 compound? 2 MR. HOOPER: Object to form. 3 THE WITNESS: They were moving toward that 4 goal, as I understand it, as best they could. There 5 were problems with coming up with formulations that 6 people liked and that they would buy. The 7 professional drywallers didn't like the substitutes 8 as well, as I understand it. And it wasn't -- it 9 wasn't a simple problem to simply take it out. You 10 had to come up with replacement materials; you had to 11 prove that the product would work well. 12 Q. (BY MR. PLACITELLA) Where did you get all 13 that information, sir? 14 A. Through information I have received in the 15 course of these various Georgia Pacific cases. 16 Q. Well, where did you get that? Because so 17 far you told me the only thing you looked at was 18 interrogatory answers. Was all that information 19 provided to you verbally by the Georgia Pacific 20 lawyers? 21 A. I mentioned one other document, and I need 22 to try to find that. I know I have another one that 23 discusses this. 24 Q. But you told me that that came -- that was 25 just another set of interrogatory answers. True?	1 Q. (BY MR. PLACITELLA) And when you make 2 that statement, sir, what do you rely upon, there was 3 not much data to suggest that these people would not 4 be exposed to asbestos problems? 5 A. You rely upon the literature of the time. 6 Q. And did you review that literature, sir? 7 A. Well, I've read a lot of Selikoff's stuff 8 and materials from those times, yes, in other cases. 9 Q. So you have reviewed the literature that 10 was available during the time that Georgia Pacific 11 was selling asbestos-containing joint compound? 12 A. To some extent, yes. 13 Q. And you concluded based upon reviewing 14 that literature that it was reasonable for Georgia 15 Pacific to take seven years to take the asbestos out 16 of the joint compound once they decided it was time 17 to do it? 18 MR. SCHMIEDER: Objection. 19 THE WITNESS: I'm saying that my 20 understanding of those times, and having lived 21 through that time and probably having used a lot of 22 these same products myself, that there was not the 23 sense of urgency, the sense of danger, the clear-cut 24 picture that this was causing disease to even workers 25 who used this stuff all the time. There were no
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1 A. Well, there are other things. I'm trying 2 to remember. I know there was a report by Mort Corn 3 that talked about some of this history. I haven't 4 looked at that for some time. And I have been told 5 things through my counsel. I have asked those 6 questions as it's come up on specific cases. 7 Q. Just to be specific: Georgia Pacific's 8 lawyer is not your lawyer, right? 9 A. Correct. I'm sorry. 10 Q. So the information that you're relating to 11 me about what Georgia Pacific did and the decisions 12 it made to get asbestos out of joint compound, that 13 came from Georgia Pacific's lawyer, not your own 14 lawyer? 15 A. Correct. 16 Q. And do you believe that it's reasonable as 17 an industrial hygienist to take seven years to remove 18 a carcinogen from a product that would be used by a 19 consumer when you have reason to believe that that 20 product is potentially dangerous for public health? 21 MR. HOOPER: Object to form. 22 THE WITNESS: It depends on the degree of 23 danger that is recognized at that point in time. 24 There was not much data to suggest that these types 25 of users of asbestos products were having problems.	1 epidemiological studies. There still is not an 2 epidemiological study that shows increased rates of 3 mesothelioma or cancer in this cohort. 4 Q. (BY MR. PLACITELLA) What cohort is that, 5 sir? 6 A. The cohort of drywall installers. 7 Q. Why do you believe that drywall installers 8 were the ones who used the asbestos-containing joint 9 compound? 10 A. They used the most of it. 11 Q. How do you know that, sir? 12 A. Because they do it day in and day out. 13 And as compared to -- to use my word again, 14 intermittent users, they had much more exposure. 15 Q. Okay. Did painters use 16 asbestos-containing joint compound? 17 A. I can't speak to painters. I mean, what 18 is a painter? A painter might be a handyman who does 19 the whole thing. 20 Q. I'm asking somebody as a trained -- a 21 painter. Did they -- as part of their job did they 22 ever use asbestos-containing joint compound? 23 MR. SCHMIEDER: Objection to form. 24 THE WITNESS: I would think that if you've 25 been hired to paint a building or a house and you saw

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1 imperfections in the wall, you would go ahead and 2 slap up a little drywall compound to fill in those 3 holes and problems before you would paint. 4 Q. (BY MR. PLACITELLA) Do you know whether 5 members of the painters union as part of their job 6 regularly used asbestos-containing joint compound? 7 MR. SCHMIEDER: Objection. 8 THE WITNESS: I do not. 9 Q. (BY MR. PLACITELLA) Do you know whether 10 the members of the spacklers union as part of their 11 job use asbestos-containing joint compound? 12 A. I've never heard of a spacklers union. 13 Q. Have ever you heard of the plasterers 14 union? 15 A. I am familiar with general job titles. 16 And for example, the reference that I put in my 17 report to the NIOSH study by Robinson where he lists 18 a great many different job titles related to 19 construction. I'm not familiar with all the 20 different unions out there. 21 Q. Okay. And you don't know what any 22 particular union did as part of -- a member did as 23 part of job requirements. True? 24 MR. SCHMIEDER: Objection to form. 25 THE WITNESS: Well, that seemed like a	1 A. I agree with everything except the 2 product. 3 Q. Is it an amphibole form of asbestos? 4 A. Yes. I don't believe it's ever been a 5 commercial product. 6 Q. Okay. Do you understand that Canadian 7 chrysotile is contaminated with tremolite? 8 MR. SCHMIEDER: Objection. 9 THE WITNESS: That's a very broad 10 statement. And I believe there is data out there to 11 show that it's quite variable, that typically it is 12 not contaminated with tremolite. 13 Q. (BY MR. PLACITELLA) What data 14 specifically are you referring to, sir? 15 A. I will have to dig that up, but there have 16 been a number of studies published over the last few 17 years that have tried to get at that issue. 18 Q. Can you cite me any data as you sit here 19 today? 20 A. No. 21 Q. All right. Do you know whether or not the 22 Canadian chrysotile that went into the Georgia 23 Pacific joint compound was contaminated with 24 tremolite? 25 A. I don't know of objective data on that. I
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1 rather broad statement there. There are some unions 2 I understand what they do quite well. But I don't 3 know the ones you talked about, like spacklers versus 4 painters versus whoever else. 5 Q. (BY MR. PLACITELLA) Are you aware of the 6 sources of the asbestos that went into the Georgia 7 Pacific joint compound? 8 A. Not entirely. My general understanding is 9 that it was Canadian and U.S. sources, that they 10 would get the material as cheaply as they could. And 11 there were plentiful supplies in both Canada, 12 California, other parts of North America. 13 Q. What is the basis for that information, 14 sir? 15 A. Just what I've learned over the course of 16 the last ten years or so, looking at, you know, where 17 materials came from. I've seen some information on 18 the stuff that Johns Manville purchased and 19 CertainTeed and some other manufacturers like that. 20 Q. Okay. We'll get to that in a bit. 21 Are you familiar with substance known as 22 tremolite? 23 A. Yes. 24 Q. Is tremolite an amphibole asbestos 25 product?	1 don't know that they would have sampled each batch of 2 asbestos that they got in. I can't speak to that 3 specifically. 4 Q. But my question is, as you sit here, do 5 you know one way or the other whether the Canadian -- 6 you do know that Canadian chrysotile went into the 7 Georgia Pacific joint compound; true? 8 A. Well, I think so. Depending on the plant 9 that was manufacturing it. I think they had several 10 plants. If they had something on the West Coast 11 they'd probably be using Union Carbide material. 12 It's going to vary with the plant. 13 Q. Okay. Do you know whether the Canadian 14 chrysotile incorporated into the Georgia Pacific 15 joint compound was contaminated with tremolite? 16 A. I don't know specifically, but I think 17 it's unlikely based on the general data I've seen. 18 And also the fact that -- 19 Q. What data is that, sir? 20 A. Well, and from our own experience. We've 21 sampled a great deal of joint compound over the 22 years, you know, taking bulk samples of in-place 23 material, and we do see chrysotile asbestos. I don't 24 know that we have a single sample where we've ever 25 seen tremolite contaminants.

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1 Q. Do you ever look for it? 2 A. They do look for it, yes. 3 Q. And what kind of magnification do you use? 4 A. Well, I don't use it. We use certified 5 asbestos laboratories. 6 Q. Well, do you use a transmission electron 7 microscope? SEM? What do you use? 8 MR. SCHMIEDER: Objection to form. 9 A. (BY MR. PLACITELLA) It varies. It 10 varies. 11 Q. (BY MR. PLACITELLA) Do you have -- as you 12 sit here today, can you tell me one way or the other 13 what is the methodology that your company uses to 14 determine whether or not tremolite is in joint 15 compound that you've removed? 16 A. Well, we'd have to speak to the labs that 17 we use; but, you know, normally they start out with 18 polarized light microscopy, and then they can go on 19 to transmission electron microscopy. 20 Q. Do you know whether transmission electron 21 microscopy has ever been used when looking at joint 22 compound to see if there's tremolite, by you or the 23 company that you hire? 24 A. I'll have to check into that. I'm not 25 directly involved in those studies.	1 A. Not yet. 2 Q. Have you ever asked Georgia Pacific to 3 test their joint compound that contained asbestos? 4 A. I don't know how much they have. I don't 5 know what's available. 6 Q. Have they ever provided you with any 7 tests? 8 A. Not that I recall as I sit here. 9 Q. Have you ever asked for any tests? 10 A. No. 11 Q. Okay. Do you know whether the Georgia 12 Pacific joint compound contain talc? 13 A. I don't. 14 Q. Do you know whether talc is contaminated 15 with tremolite? 16 MR. SCHMIEDER: Objection to form. 17 THE WITNESS: I don't. 18 Q. (BY MR. PLACITELLA) Do you know whether 19 talc is ever considered an asbestiform material? 20 A. I don't believe it is as such. It could 21 be contaminated with asbestiform materials. 22 Q. Do you know whether any of the talc that 23 was included in the Georgia Pacific joint compound 24 contain talc? 25 A. No.
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1 Q. Okay. So as you sit here today, you don't 2 know one way or the other whether the asbestos- 3 containing joint compound sold by Georgia Pacific was 4 contaminated with tremolite. True? 5 MR. HOOPER: Object to form. 6 THE WITNESS: That oversimplifies what I 7 think about that. I think there is -- I think 8 there's data out there. I think that studies have 9 been done to look for amphibole contamination, and I 10 think it's unlikely. 11 Q. (BY MR. PLACITELLA) But sir, can you 12 point to me as you sit here a single study to prove 13 that the tape joint compound sold by Georgia Pacific 14 was not contaminated with tremolite? 15 A. I can't as I sit here, but I will work on 16 seeing what I can find. 17 Q. All right. Then we'll continue your 18 deposition if you find such a study. 19 A. Okay. 20 Q. Have you ever heard of any tests done by 21 Georgia Pacific to determine whether the -- or seen 22 any tests done by Georgia Pacific to determine 23 whether their joint compound had tremolite in it? 24 A. I have not seen such studies. 25 Q. Okay. Have you ever asked for them?	1 Q. Do you know whether any of the talc 2 contained in the joint compound was contaminated with 3 tremolite? 4 MR. SCHMIEDER: Objection to form. 5 THE WITNESS: No. 6 Q. (BY MR. PLACITELLA) Do you know how much 7 talc was included, if at all, in Georgia Pacific 8 joint compound? 9 A. I don't have that information. 10 Q. Do you know that Georgia Pacific was 11 warned in 1975 that the talc that was being 12 distributed by R.T. Vanderbilt was asbestos- 13 containing talc? 14 MR. HOOPER: Object to form. 15 THE WITNESS: No. 16 Q. (BY MR. PLACITELLA) Would that have been 17 something you wanted to know in forming your opinions 18 in this case? 19 A. It depends on the amount of such 20 contamination. I'd have to see the data. 21 Q. Okay. Let's talk a little bit now about 22 your specific report. Do you have it in front of 23 you? 24 A. Yes. 25 Q. Okay. Look at page 1, if you will.

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1 A. Okay. 2 Q. You say in the third sentence, "I have 3 been asked by counsel for Georgia Pacific to render 4 opinions regarding potential exposure to asbestos 5 that might have arisen from use of Georgia Pacific 6 drywall joint compound in home renovation projects." 7 Do you see that? 8 A. Yes. 9 Q. And you also say at the end, "And through 10 alleged secondary or bystander exposure during a 11 career as an electrician." Do you see that? 12 A. Yes. 13 Q. What do you mean by that? 14 A. Well, this is all based on his deposition, 15 that he talked about using joint compound himself, 16 mostly, it seems, in his -- in home renovation 17 projects. He talked about building a big home in 18 1976 or whenever it was. He talked about some other 19 jobs that he did for other people where he himself 20 made use of joint compound. 21 Q. Okay. 22 A. Then beyond that, he talks about when he 23 would do his electrician work in new construction 24 that he might be involved in I think it was mostly 25 residential, in homes where other work might be going	1 demonstrate epidemiologically the take-home theory, 2 as far as I know. There are a number of studies, 3 there are a number of case reports that are perhaps 4 suggestive, but there are many other factors that go 5 into those people's exposures. It's a controversial 6 area, to my way of thinking. 7 Q. Well, let me understand your opinion, 8 then. Is it your opinion that people who are 9 exposed, family members who are exposed as a result 10 of asbestos brought home on people's clothing are not 11 at risk for mesothelioma? 12 MR. SCHMIEDER: Objection. 13 A. Very low risk, especially with chrysotile. 14 Q. I didn't ask you about very low risk. I 15 said, is it your opinion that people who are exposed 16 to asbestos as a result of asbestos brought home on 17 people's clothing are at no risk for developing 18 mesothelioma? 19 MR. HOOPER: Objection. Form. 20 THE WITNESS: I'm not going to say no 21 risk, but I'm going to say extremely low risk. There 22 are no -- 23 Q. (BY MR. PLACITELLA) Is there an exposure 24 to asbestos, in your opinion, below which there is no 25 risk for mesothelioma?
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1 on, drywall work might be going on while he was 2 present. 3 Q. Okay. You indicated in that sentence, 4 "through alleged secondary or bystander exposures." 5 What do you mean by "secondary or bystander"? 6 A. That he is not the one who is specifically 7 mixing the dry compound, for example, with water; 8 that he's not the one who is specifically sanding the 9 compound; that he is at some distance away doing 10 whatever he was doing as an electrician. But his job 11 was not to apply or mix or sand drywall compound. 12 Q. Okay. Somebody who -- does secondary or 13 bystander exposure include exposure that may occur as 14 a result of bringing the asbestos home on one's 15 clothing? 16 A. Well, that wouldn't be meaningful for 17 Mr. Bird. He's already been exposed, and I don't 18 think we can argue that he would have any meaningful 19 additional exposure from anything that might have 20 been on his clothes. 21 Q. Well, you're aware of the fact that 22 families of asbestos-exposed workers get 23 mesothelioma, true? 24 A. Well, just about anybody can get 25 mesothelioma. There have not been good studies to	1 A. Yes. 2 Q. And what is that? 3 A. What type of asbestos? 4 Q. Any kind of asbestos. 5 A. If you want to talk about crocidolite, 6 which is certainly the most potent form of asbestos 7 for causing mesothelioma, it's probably on the order 8 of low, you know, low fiber years per CC. At the 9 current standard of .1 fiber per CC over 40 years, 10 you would have four fiber years per CC. 11 With crocidolite there is some chance, in 12 my mind, that that could cause mesothelioma. But if 13 you get down well below that level, the odds decrease 14 considerably the lower you go. With -- 15 Q. Is there an -- 16 MR. HOOPER: Wait. He's not finished with 17 his answer. 18 Q. -- exposure to chrysotile asbestos below 19 which there is no risk for mesothelioma, in your 20 opinion? 21 MR. HOOPER: He wasn't finished with his 22 answer to the previous question, Chris. 23 MR. PLACITELLA: I thought he was. I 24 didn't see his lips moving. 25 Q. (BY MR. PLACITELLA) Are you through with

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1 your previous answer? 2 A. No, I can be finished. 3 Q. Okay. Is there an exposure below which -- 4 is there exposure to chrysotile below which there is 5 no risk for mesothelioma, in your opinion? 6 A. No increased risk, yes. 7 Q. And what exposure is that? 8 A. Well, certainly background exposure. 9 There is no zero exposure anywhere on this planet, 10 and at background you're not going to have any 11 increased risk compared to everybody else in the 12 world. 13 Q. All right. Is there an exposure above 14 background to chrysotile asbestos that does not 15 present a risk for mesothelioma? 16 A. I think so. 17 Q. What is that? 18 A. I think that the existing OSHA standard 19 does a pretty good job of protecting everyone from 20 mesothelioma due to chrysotile. 21 Q. So do you believe that the intent of the 22 OSHA standard was to protect people from exposure to 23 chrysotile from getting mesothelioma? 24 MR. SCHMIEDER: Objection to form. 25 THE WITNESS: Not initially. I mean, the	1 Q. So what you're saying is Hodgson and 2 Darton say that exposure below the OSHA standard will 3 not present a risk of mesothelioma if the asbestos is 4 chrysotile type? 5 A. Yeah, not a meaningful risk. 6 Q. What's not meaningful? It's meaningful to 7 somebody who gets it, isn't it? 8 A. It is very low, very low. 9 Q. You would agree that if someone develops 10 mesothelioma from exposure to chrysotile, their 11 exposure was meaningful? 12 MR. HOOPER: Object to form. 13 THE WITNESS: We don't know that they 14 developed mesothelioma as a result of low exposures 15 to chrysotile. 16 Q. (BY MR. PLACITELLA) So we're clear: in 17 reaching your opinions in this case, you did not 18 consider any exposure that would occur inside the 19 Bird home as a result of bringing asbestos home on 20 the clothing? 21 MR. SCHMIEDER: Objection to form. 22 THE WITNESS: No. It would be meaningless 23 to him, because to the extent that he got exposure 24 out in the world doing his job, that would have been 25 far greater than any secondary -- or tertiary
Page 90	Page 92
1 standard has changed considerably over the years as 2 we've learned more about lung cancer and 3 mesothelioma. 4 Q. (BY MR. PLACITELLA) Do you believe the 5 current OSHA standard is intended to protect people 6 exposed to chrysotile from mesothelioma? 7 A. Well, if not, it's not much of a standard. 8 Q. That's not my question. My question is 9 yes or no. Do you believe that the current exposure 10 standard for chrysotile from OSHA is protective of 11 mesothelioma? 12 MR. HOOPER: Object to form. 13 THE WITNESS: That is my opinion. 14 Q. (BY MR. PLACITELLA) And you base that on 15 what? 16 A. On a good deal of recent epidemiological 17 studies and studies of existing epidemiological 18 studies. 19 Q. Cite that for me, please. 20 A. Hodgson and Darton, Berman and Crump. 21 Q. Hodgson and Darton referred to the OSHA 22 standards? 23 A. Well, they refer to potency and levels at 24 some -- to some extent, yes. They don't 25 necessarily --	1 exposure to stuff that would be on his clothes. I 2 mean, if you postulate that he's being exposed to 3 asbestos, he's breathing it in at a rate of two 4 liters per minute or whatever through the course of 5 an eight-hour day and perhaps some small amount of 6 asbestos has gotten onto his clothing, you can 7 postulate that if he comes home and shakes his 8 clothes real hard and then breathes that air, that he 9 would get some slight additional exposure. But it 10 would be minuscule. 11 Q. (BY MR. PLACITELLA) So as an industrial 12 hygienist, would you counsel people that it's okay to 13 shake out asbestos-containing chrysotile clothing in 14 your laundry room and breathe it in? 15 A. Nobody has had chrysotile-contaminated 16 clothing in their laundry room for 30 years. 17 Q. Oh, really? Well, let me ask you this 18 question. As an industrial hygienist, would you 19 counsel someone who was shaking out clothing 20 contaminated with chrysotile that it was okay to 21 breathe in that dust? 22 MR. SCHMIEDER: Objection to form. 23 THE WITNESS: Okay. So hypothetical 24 chrysotile asbestos on hypothetical clothing being 25 shaken.

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1 Q. (BY MR. PLACITELLA) It's not funny. 2 A. Well -- I'm sorry. 3 Q. Okay? My question is simply this. So let 4 me repeat it again. As an industrial hygienist, 5 would you counsel or advise people that it's okay to 6 shake out chrysotile-contaminated clothing in their 7 homes? 8 MR. SCHMIEDER: Objection to form. 9 THE WITNESS: I would respond as I did 10 earlier, that in industrial hygiene less exposure is 11 always better; and if there are simple steps people 12 can take to reduce their exposure to anything, any 13 sort of toxin, you should do that. So of course I 14 would not counsel them to do such a thing. 15 Q. (BY MR. PLACITELLA) All right. Would you 16 tell of people that it is okay to shake out 17 chrysotile-contaminated clothing in their home? 18 A. As an industrial hygienist, I would say 19 there is no reason why anybody should be taking 20 asbestos home on their clothing, and that is the 21 first thing I would attack. If we're talking about 22 an industry 40, 50 years ago where people are being 23 exposed to asbestos and we know now -- knew then what 24 we know now, we would say, let's not let this stuff 25 get away on people's clothes, and let's stop the	1 MR. SCHMIEDER: Objection to form. 2 THE WITNESS: Let's see. That has two 3 parts. I would tell them to limit exposure as best 4 they can, but if such a thing had happened, I would 5 counsel them that it's probably very unlikely that 6 they're going to get mesothelioma from that having 7 happened. 8 Q. (BY MR. PLACITELLA) And suppose it 9 happened day after day. Would you counsel them that 10 it would be very unlikely that they could get 11 mesothelioma from exposure to chrysotile-contaminated 12 clothing? 13 MR. SCHMIEDER: Objection. 14 THE WITNESS: I think it's such a low 15 exposure that it's very unlikely. 16 Q. (BY MR. PLACITELLA) Would you tell them 17 it's impossible? 18 A. No, no. 19 Q. So if asked in a courtroom, is it possible 20 that family members could develop mesothelioma from 21 exposure to asbestos-containing chrysotile on 22 clothing, you would say yes; correct? 23 MR. SCHMIEDER: Objection to form. 24 THE WITNESS: I would not simply say yes. 25 I would say it's very improbable and we have not seen
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1 problem where it makes sense by not letting stuff go 2 home. 3 And that's common industrial hygiene 4 practice in any industry where people are -- you 5 know, we don't allow people to wear their own clothes 6 home these days, right? That's where that whole 7 practice has come from of, let's control these things 8 to the workplace and protect our families as best we 9 can from whatever toxic material might be out there. 10 Q. Okay. You'd agree with me, sir, that the 11 principle of not wearing toxins home on people's 12 clothing was recognized by industrial hygienists 13 going back to the 1930's, true? 14 A. Sure, at some level. At some -- in some 15 form of toxin I suppose that's true. It wasn't 16 necessarily acted upon very well. 17 Q. Well, it was certainly known by the 1960's 18 in industrial hygiene circles that people should not 19 wear carcinogens home on their clothing; true? 20 A. Yeah, I would think that would be a good 21 idea. 22 Q. Now, so I go back to my question. Would 23 you tell a jury that it's okay to shake chrysotile 24 asbestos out in their homes and that they would not 25 be at any risk for developing mesothelioma?	1 evidence in any sort of epidemiological study that 2 that has been a problem, even back in the days when 3 people did come home heavily contaminated with 4 asbestos. 5 Q. (BY MR. PLACITELLA) Sir, do you believe 6 that epidemiology is necessary to prove causation? 7 A. No. In fact, you generally cannot prove 8 causation with epidemiology. You have to have 9 additional information on mechanisms and biology 10 and -- you know, there's a whole -- I forget the man 11 who published the eight or so tenets of proving 12 causation. 13 Q. Would you agree with me that you could 14 prove causation without epidemiology? 15 A. Well, when you're able to test animals, 16 for example, you know, you instill a given toxin, you 17 see what happens. And then to the extent that you 18 can translate that animal model into a human model, 19 that's one way to get information on toxicity. 20 Q. You're aware that there are animal studies 21 proving that chrysotile can cause mesothelioma; true? 22 MR. HOOPER: Object to form. 23 THE WITNESS: Well, like -- I guess that's 24 true. I'm not sure which forms of asbestos you're 25 talking about there.

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1 Q. (BY MR. PLACITELLA) I'm saying, are you 2 aware that there are animal studies -- there are 3 studies of animals exposed to chrysotile asbestos 4 that develop mesothelioma? 5 MR. SCHMIEDER: Objection to form. 6 THE WITNESS: That's possible. It may be 7 at extremely high exposure levels. And again, you 8 always have this question of how well that 9 information translates over to the human lung and the 10 differences in the human lung and, say, the rat lung. 11 Q. (BY MR. PLACITELLA) Well, let's go back 12 to my original question. You agree with me that you 13 do not need epidemiology to prove causation; true? 14 MR. SCHMIEDER: Objection to form. 15 THE WITNESS: You have to be very careful. 16 There may be some clear-cut cases. You know, if 17 we're talking about asbestos, it's tricky. There are 18 problems with the animal models, and, you know, we do 19 rely on epidemiology as being an important part of 20 our knowledge base. 21 Q. (BY MR. PLACITELLA) Sir, if I'm hit by a 22 Ford Mustang on the main road, do I need epidemiology 23 to prove that the Ford Mustang caused my injury? 24 MR. SCHMIEDER: Objection to form. 25 THE WITNESS: No, but that's not science.	1 THE WITNESS: I'm sorry. You said -- I 2 need to hear that again. 3 Q. (BY MR. PLACITELLA) You say in your first 4 statement, "there is no corroborative evidence." Do 5 you see that? 6 A. Yes. 7 Q. "That he was exposed." Do you see that? 8 A. Right, right. 9 Q. My question is, did you speak with any 10 Georgia Pacific witnesses to see if the description 11 of exposure provided by Pastor Bird was the same as 12 theirs? 13 MR. SCHMIEDER: Objection to form. 14 MR. HOOPER: Objection to form. 15 Q. (BY MR. PLACITELLA) Or similar to theirs? 16 A. I don't know there were -- were there 17 Georgia Pacific witnesses in this case? Is that what 18 you mean? 19 Q. Yeah. I mean, there are plenty of people 20 from Georgia Pacific who have seen how joint compound 21 is applied. Do you agree with that? 22 A. Well, not how Mr. Bird used it. 23 Q. Generally speaking, there are many 24 employees of Georgia Pacific that would be familiar 25 with how the joint compound was applied; correct?
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1 Q. (BY MR. PLACITELLA) Okay. Just logic, 2 right? 3 MR. SCHMIEDER: Objection to form. 4 THE WITNESS: It's a greatly simplified 5 form of logic. 6 Q. (BY MR. PLACITELLA) In your report, I'm 7 looking at your section that talks about opinions on 8 page 2. Do you see that? 9 A. Okay. 10 Q. Your first heading is, "Beyond Mr. Bird's 11 recollection." Do you see that? 12 A. Yes. 13 Q. Do you believe it's your function as an 14 expert witness to assess the veracity of Mr. Bird's 15 testimony? 16 MR. SCHMIEDER: Objection to form. 17 THE WITNESS: No. I'm just trying to take 18 the information that's available to me and try to 19 make some sense of it. 20 Q. (BY MR. PLACITELLA) Did you speak with 21 any Georgia Pacific witnesses to see if the 22 description provided by Pastor Bird about how he was 23 exposed to Georgia Pacific joint compound matches 24 their description? 25 MR. SCHMIEDER: Objection to form.	1 A. Well, of course. Of course. 2 Q. Did you speak with any of them to see 3 whether their descriptions of how it was applied 4 would support the description provided by Pastor Bird 5 about how it was applied? 6 A. I have not, no. 7 Q. Okay. When you say there is no 8 corroborative evidence, you haven't spoken to a 9 single witness to determine whether there is 10 corroborative evidence. True? 11 MR. HOOPER: Objection to form. 12 THE WITNESS: Well, what I mean is that 13 there weren't other -- I did not receive other 14 depositions in this case of coworkers or anyone else 15 who said, yeah, that was Georgia Pacific that we saw. 16 I mean, he's remembering back a long time, and I know 17 if you ask me what joint compound did I use 20 years 18 ago when I redid my kitchen, I wouldn't have the 19 slightest idea. 20 So I'm just saying, could it have been 21 U.S. Gypsum? Could it have been other products? We 22 don't know. I'm just speculating about the human 23 memory, I guess, and the things that we remember. 24 And I'm not an expert in that. I certainly admit 25 that. I just think it's hard to remember back

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1 precisely what products you used those many years 2 ago. And to the extent we could, we'd love to be 3 able to get additional evidence. 4 One way we -- 5 Q. (BY MR. PLACITELLA) Well, you have a 6 picture of the Georgia Pacific joint compound, true? 7 A. Which one? 8 Q. At your office. 9 A. Yeah. It shows, I don't know, eight or 10 ten different products. 11 Q. Did the description provided by Pastor 12 Bird match the description of any of the pictures in 13 any of the pictures? 14 MR. SCHMIEDER: Objection to form. 15 THE WITNESS: I would have to look again 16 at the picture. I don't recall that it did. 17 Q. (BY MR. PLACITELLA) Well, would that be 18 corroborative evidence, if his description of a joint 19 compound was accurately depicted in the picture that 20 you have? 21 A. Not necessarily. I mean, he -- 22 Q. So unless somebody else came in and said 23 "I can prove it," it's not good enough for you, 24 right? 25 MR. SCHMIEDER: Objection to form.	1 would be his testimony. 2 Q. Okay. 3 A. Can I take a break? 4 Q. Sure. 5 A. Okay, thank you. 6 (Recess from 11:28 a.m. to 11:34 a.m.) 7 Q. (BY MR. PLACITELLA) Looking at your 8 report, bottom of page 2. 9 A. Okay. 10 Q. You say, "GP used or did not provide 11 information on container labeling or warning." Do 12 you see that? 13 A. Right. 14 Q. Okay. Did Pastor Bird identify the 15 picture of Georgia Pacific joint compound? 16 A. I don't know what you mean. 17 Q. Did he identify a picture of Georgia 18 Pacific joint compound saying, that's the one I used? 19 A. I don't know. 20 Q. Would that have been significant in terms 21 of this report? 22 A. It would have been considered, but -- you 23 know, it's one thing to remember -- you know, I know 24 that today Georgia Pacific joint compound has -- 25 comes in a green can, a green plastic bucket, green
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1 THE WITNESS: Well, there's a better way. 2 There's a better way to prove it, and that is to go 3 back to the house that he worked in and take some 4 samples. That can be done, and it has been done in 5 some cases. And I think that would be very -- a very 6 interesting way to corroborate some of these issues. 7 Doesn't generally happen in cases, but as an 8 industrial hygienist I wish it could happen. 9 Q. (BY MR. PLACITELLA) We got what we got. 10 A. By the way, I need -- excuse me. 11 Q. Would you say it would have been of no use 12 to you to look at the pictures of the labels and the 13 cans that you had in your possession and see if 14 Pastor Bird accurately describes what those cans look 15 like? That would have been no use to you? 16 MR. HOOPER: Object to form. 17 MR. SCHMIEDER: Objection. 18 THE WITNESS: I wouldn't say no use. I 19 would take it along with other pieces of information. 20 But, you know, he may -- 21 Q. (BY MR. PLACITELLA) Would you agree that 22 it would have been some corroborative evidence if his 23 description matched the actual pictures that you had 24 in your possession? 25 A. No, it would not be corroborative. It	1 lettering on white. That doesn't mean that I know 2 what I used five years ago on a specific -- 3 Q. But I'm looking at your report. You said 4 he didn't provide any information on container 5 labeling. I said, did he identify a picture in his 6 deposition. 7 A. Perhaps. 8 Q. Did he describe a logo? 9 A. Yeah; but, you know, again, I think that 10 logo has been pretty consistent. 11 Q. I'm just going to your statement, he 12 provided no information. Is describing the logo no 13 information? 14 MR. SCHMIEDER: Objection. 15 THE WITNESS: Maybe I should say no useful 16 information. I don't know. 17 Q. (BY MR. PLACITELLA) So what would be 18 useful to you, sir? What would be useful 19 information? 20 A. It would be nice, and I admit that it's 21 difficult to get, but it would be nice if we had 22 another worker, a supervisor, someone at one of these 23 jobs he was on who said, yeah, I remember that and I 24 remember that that was GP product we used. 25 Q. Okay, but you're talking about Pastor

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1 Bird. You said he didn't give any information, but 2 he did, didn't he? 3 A. Well, not on warnings, for example. 4 Q. Well, you say with regard to bystander 5 exposure, warnings with regard to bystander 6 exposures. Do you see that? 7 A. Well, no, as well as his own personal use. 8 Q. No. You say in your report, "warnings 9 with regard to bystander exposures." Do you see 10 those words? 11 A. Where? 12 Q. In your report, bottom of page 2. 13 A. He did not provide -- 14 Q. The words "did not provide information on 15 container labeling or warnings with regard to 16 bystander exposures," are they your words, sir? 17 A. No, no, no. The next sentence that goes 18 on to page 3 says, with regard to bystander 19 exposures -- okay. "He claims to remember seeing GP 20 products on at least one occasion." Okay. 21 Q. That's not what I'm saying. You wrote in 22 your report, "did not provide any information 23 concerning labeling or warnings with regard to 24 bystander exposure," correct? 25 A. Okay. Maybe I should have --	1 even pay attention to that, because he's working as 2 an electrician, not as a drywall installer. And, you 3 know, how well is he going to notice what is being 4 used by others on these job sites? And again, isn't 5 this a situation where if we could find some of these 6 folks who did that work, a contractor, and he could 7 remember back and say, yeah, we always used GP or we 8 always used U.S. Gypsum or something, that would be 9 corroborating evidence to me. Or if we could 10 go back -- 11 Q. (BY MR. PLACITELLA) Move to strike. I'm 12 just looking at your words, sir. Your words say he 13 didn't provide any information on labeling or 14 warnings regard to bystander exposure. Now, my 15 question to you is, is that something that Georgia 16 Pacific should have provided labeling or warnings 17 related to bystander exposure? 18 A. Well -- 19 MR. SCHMIEDER: Objection to form. 20 A. -- that is not what I said. You're 21 misinterpreting what I said. 22 Q. I'm just reading your words, sir. 23 A. "With regard to bystander exposures while 24 working as an electrician, he claims to remember 25 seeing GP product on at least one occasion." What
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1 MR. HOOPER: Object to form. 2 THE WITNESS: Maybe I should have said 3 "very little information." 4 Q. (BY MR. PLACITELLA) Well, are you saying 5 that Georgia Pacific had warnings on its product 6 related to bystander exposure? 7 MR. SCHMIEDER: Objection to form. 8 THE WITNESS: I'm saying that there was a 9 point at which there would have been warnings about 10 asbestos at a point in time, and -- 11 Q. (BY MR. PLACITELLA) Should there have 12 been warnings about bystander exposure on the Georgia 13 Pacific products? 14 MR. SCHMIEDER: Objection to form. 15 THE WITNESS: No, no. 16 Q. (BY MR. PLACITELLA) There shouldn't have 17 been. So why are you criticizing Pastor Bird for not 18 providing information on bystander warnings? 19 MR. HOOPER: Object to form. 20 THE WITNESS: No, no, no. The point I'm 21 making -- I'm talking about the jobs where he was 22 working as an electrician and somebody else was doing 23 the drywall work. I'm saying it's unlikely, number 24 one, that he would have even seen the bags or 25 containers that these guys are using, that he would	1 does that have to do with labeling? I don't 2 understand your point. 3 Q. It's your sentence, sir. You're the one 4 that used the words "labeling" or "warnings." I'm 5 not making it up. 6 A. That's in a different statement. You're 7 mixing two -- 8 Q. It's in the same exact sentence, sir. 9 MR. SCHMIEDER: Objection to form. 10 Q. (BY MR. PLACITELLA) You're talking about 11 the same exact sentence. Let's move on, okay? 12 A. You're reading different sentences than I 13 am. 14 Q. "One occasion." You see that word that 15 says "at least one occasion"? 16 A. Yeah. 17 Q. Are you certain that he testified that he 18 only used it on one occasion or saw it on one 19 occasion? 20 A. I said "at least one." 21 Q. Well, how many, sir, did he testify to? 22 A. I don't know. We need to go back and 23 count, I guess. 24 Q. Would that have been important how many 25 occasions?

Page 109 1 A. Not hugely. 2 Q. Okay. You say that in 1973 GP started to 3 phase out the use of asbestos in joint compound under 4 your section B, page 3. Do you see that? 5 A. Yes. 6 Q. What was the reason? 7 A. The reason? 8 Q. What was the reason in 1973 they decided 9 to get the asbestos out of the joint compound? 10 A. Well, as you alluded to earlier, they 11 had -- GP had decided in '70 or the early 70's that 12 they were going to move towards asbestos-free 13 products, even though they were not yet being 14 required to do so. That was their decision. 15 Q. Was it because of the fear of cancer? 16 MR. SCHMIEDER: Objection to form. 17 THE WITNESS: And the fear about their 18 business and how the whole thing would be perceived 19 by the public, yeah. There are lots of reasons why 20 they moved toward that. 21 Q. (BY MR. PLACITELLA) Okay. You say -- let 22 me go through -- I think we went through that 23 already. 24 You indicate in paragraph B that if 25 Mr. Bird had used a joint compound in 1976, the	Page 111 1 A. That's right. 2 Q. So it is your understanding that there was 3 a warning label -- 4 A. Yes. 5 Q. -- in 1976? 6 A. No, as of 1974. 7 Q. Okay. So there was a warning label, as 8 far as you know, in 1974? 9 A. Yeah. And it was -- as I recall, it was 10 required by then. 11 Q. Right. And did the warning label warn 12 about the cancer? 13 A. Again, I need to find the exact -- the 14 actual example of what that warning said. 15 Q. Well, would it have mattered to a user in 16 terms of getting the user's attention whether the 17 warning said "cancer" or not? 18 A. Possibly. 19 Q. Okay. Do you know -- you say that if the 20 label was not present, that would have meant that it 21 was asbestos free, right? 22 A. Correct. 23 Q. Okay. Did you know of -- where did 24 Georgia Pacific put the words "asbestos free" on 25 their cans or buckets of joint compound when they
Page 110 1 container would have had an asbestos warning label 2 had it contained asbestos. True? 3 A. Correct. 4 Q. -- was on the product in 1976? 5 A. I'm sorry. I missed that first part. 6 Q. Who told you there was a warning label on 7 the product in 1976? 8 A. Georgia Pacific and the documents I've 9 talked about previously. 10 Q. So Georgia Pacific told you that they had 11 the word "warning" on their label in 1976? 12 MR. HOOPER: Object to form. 13 THE WITNESS: I don't know if they had the 14 word "warning" on it or not. 15 Q. (BY MR. PLACITELLA) What did they have on 16 it? 17 A. Well, somewhere there is an example of 18 what they put on it, and I don't know quite where to 19 lay my hands on it. 20 Q. Sir, you're the one that said it would 21 have been a certain way, and I'm asking you, what's 22 the basis for that statement? You say if Mr. Bird 23 had used a joint compound in '76, the container would 24 have had an asbestos warning label had it contained 25 asbestos.	Page 112 1 wanted people to know it was asbestos free in 1977 2 and '76? 3 A. I don't know. I'm not familiar with those 4 containers. 5 Q. Did you know that the words "asbestos 6 free" appeared on the front of the joint compound? 7 A. No. 8 Q. Would you agree with me that it would be 9 better to put it on the front of the joint compound 10 because it would be clear for people who had used the 11 joint compound before that that product no longer 12 contained asbestos? 13 A. Well, since you've come through a period 14 of three years where it said "contains asbestos" and 15 then when you removed the asbestos, I don't see any 16 need to put that information on anyway. 17 Q. So you don't think they should have put 18 the word "asbestos free" on, period? 19 A. I think it was up to them. I think if it 20 helped them sell their product, that would have been 21 fine. 22 Q. And putting the label on the product on 23 the side, that would have been fine too if it helped 24 them sell their product. True? 25 MR. SCHMIEDER: Objection to form.

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1 THE WITNESS: I can't speak to their 2 decision about that. 3 Q. (BY MR. PLACITELLA) Well, you indicate 4 that the product must have been asbestos free because 5 Pastor Bird did not see the warning related to 6 asbestos. True? 7 A. Well, I'm saying that it's possible. It's 8 probable. He seems to have a great memory for 9 labels, and perhaps he would have also noticed that 10 warning when it was on the container or if it wasn't. 11 Q. In your mind, Pastor Bird's memory is 12 reliable when it comes to what kind of label was on a 13 product? 14 MR. SCHMIEDER: Objection. 15 THE WITNESS: I can't answer that. 16 Q. (BY MR. PLACITELLA) Well, you testified 17 that Pastor Bird had a great memory when it came to 18 labeling. Is that true? Did you just give that 19 testimony? 20 A. Well, he seems to suggest that he is able 21 to remember these things. I should put it that way. 22 Q. And do you believe him? 23 MR. SCHMIEDER: Objection to form. 24 A. I have no reason not to believe him. And 25 that's why when --	1 probabilities here. 2 Q. (BY MR. PLACITELLA) Well, probabilities, 3 sir, you don't even know if the word "asbestos free" 4 appeared on the can, do you? 5 MR. SCHMIEDER: Objection to form. 6 THE WITNESS: And if it didn't -- yeah, I 7 don't know what asbestos free has to do with it. 8 That's after the fact and after the time period we're 9 interested in here. I'm trying to -- 10 Q. (BY MR. PLACITELLA) No. You say, sir, 11 that it would have been asbestos free because he did 12 not see the warning label. True? 13 A. If he had a product from Georgia Pacific 14 between the time period of 1974 and '76 or '77, if it 15 contained asbestos it would have had that information 16 on the container somewhere. 17 Q. Where? On the bottom? 18 A. I'm not sure. It may have differed by 19 containers, and we can probably find some old 20 pictures of those things if we -- 21 Q. Sir, the truth of the matter is, you're 22 not qualified to talk about the placement of warnings 23 on Georgia Pacific joint compound, are you? 24 A. No, and that's not what my report 25 discusses.
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1 Q. Now, if -- 2 A. I wasn't finished. I wasn't finished 3 answering. You keep stepping on me before I can 4 finish. 5 MR. HOOPER: Finish your answer. 6 THE WITNESS: Now I have to remember where 7 I was. 8 Q. (BY MR. PLACITELLA) I'll ask you the next 9 question. If the label was put on the side of the 10 can and Pastor Bird had used the product on multiple 11 occasions before that, he would have no reason to 12 look on the side of the can, would he? 13 A. I can't answer to his state of mind. 14 Q. Well, did you not tell me before that 15 there would be no reason to go look at the directions 16 on the side of the can had you used the product 17 multiple times before then? Did you not tell me that 18 under oath? 19 A. I said that's possible. 20 Q. Okay. So your statement that the product 21 would have been asbestos free because he didn't see 22 the words "asbestos free," that's a suspect 23 statement. Would you agree with that? 24 MR. SCHMIEDER: Objection to form. 25 THE WITNESS: I'm talking about	1 Q. All right. And you're not an expert on 2 warnings, are you? 3 A. No, and that's not what my report 4 discusses. 5 Q. You're also not qualified to comment on 6 what Pastor Bird recalls or doesn't recall. True? 7 MR. SCHMIEDER: Objection to form. 8 THE WITNESS: Yeah. Nobody can make sense 9 of that. His testimony is what it is. 10 Q. (BY MR. PLACITELLA) Yes, sir. 11 Now, on paragraph -- page No. 3. 12 A. Okay. 13 Q. Subsection 2. Do you see that? 14 A. Uh-huh. 15 Q. It says "sufficient information" -- 16 "insufficient information." Do you see that? 17 A. Yes. 18 Q. "Is available." What would be sufficient? 19 A. Let's see. 20 Q. If somebody's got their Blackberry or 21 something on, please, could you mute or shut it off? 22 Because it's interfering. 23 For the record, you indicate in the 24 sentence, "sufficient information is available in the 25 record" -- "insufficient information is available in

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1 the record to provide a quantitative estimate of 2 cumulative exposure to asbestos that could have 3 arisen from any direct use of GP products by Bird or 4 through secondary exposure due to the use of such 5 products by others." Do you see that? 6 A. Yes. 7 Q. What do you mean by -- what do you mean by 8 "insufficient information"? 9 A. Well, we don't have a specific number of 10 times. For example, it would be impossible, 11 probably, for him to recall how many times was he 12 working as an electrician in close proximity to 13 people doing drywall. Was it once a week? Was it 14 once a month? You know, how often was it? And I 15 can't tell from reading his testimony, and, you know, 16 maybe he could be questioned further if that's 17 possible. But I was not able to tell how often and 18 for how many hours a day, say, when this did occur 19 when he was working. 20 And the other, even to back up from that, 21 what percentage of his time did he spend doing new 22 electrical installation where he could potentially be 23 exposed to drywall dust versus going off and 24 repairing, you know, electrical appliances and all 25 the other things he did. Was it 50 percent of his	1 only exposed for 865 hours to drywall dust. I mean, 2 that's what we'd like to be able to do in trying to 3 reconstruct exposures. And I'm just saying the 4 information available to me didn't support that sort 5 of detailed analysis. 6 Q. How many exposures to the drywall dust 7 would have been significant, in your mind, in terms 8 of increasing the risk of mesothelioma? 9 MR. SCHMIEDER: Objection to form. 10 THE WITNESS: Well, nothing like what he 11 had. You know, if he'd worked his entire career as a 12 drywall installer for these years of, what, '65 13 through whatever it was, '78 or whenever that he sort 14 of stopped doing that sort of work, it would be 15 extremely unlikely for him to have sufficient 16 chrysotile exposure to cause the disease. He's only, 17 you know, getting 1/100th of the exposure that these 18 drywall installers got. So I just don't see how it 19 can add up to being an exposure that would be likely 20 to cause mesothelioma. 21 Q. (BY MR. PLACITELLA) You say -- your 22 comment is "insufficient information," and I'm trying 23 to figure out what is sufficient information for you 24 so you would be able to form an opinion one way or 25 the other.
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1 time in construction? Was it 20 percent? I can't 2 tell from the testimony. 3 Q. Sir, you're aware that the lawyers for 4 Georgia Pacific had the opportunity to ask Pastor 5 Bird anything they wanted to know about exposure to 6 their product. You're aware of that, right? 7 A. Yeah, and I'm not sure he would have been 8 able to even provide that information. 9 Q. Well, what information -- if you were to 10 ask Pastor Bird the question, what questions would 11 you ask? 12 A. I would ask him, first of all -- and I 13 believe this may actually be somewhere in the 14 testimony where he tried to estimate percentages, you 15 know, did you do appliance repair 20, 30 percent of 16 the time. It seemed to vary through the course of 17 the four volumes. I think these things were asked, 18 and it's certainly very hard to remember that kind of 19 thing and put percentages on it and put frequency and 20 how long did it last that you were breathing the 21 dust, et cetera, et cetera. 22 And so that's all I'm trying to say here 23 is that in reading the transcript as it came to me, I 24 didn't feel like it had come up with a factor that 25 would be accurate or meaningful that, gee, he was	1 A. Well, if he had a journal, a daily work 2 log journal, that would certainly be sufficient 3 information. 4 Q. Okay. So without a work log journal, 5 you're unable to form an opinion one way or another 6 as to whether his exposure contributed to his 7 mesothelioma when it comes to joint compound? 8 MR. HOOPER: Object to form. 9 MR. SCHMIEDER: Objection to form. 10 THE WITNESS: No, that is absolutely not 11 true. 12 Q. (BY MR. PLACITELLA) Well, you said 13 "insufficient information," and I'm trying to 14 understand what you mean is sufficient in order to 15 arrive at -- to be good enough for you to make a 16 judgment. 17 A. I said, "insufficient information to 18 provide a quantitative estimate of cumulative 19 exposure from GP products." 20 Q. All right. 21 A. I didn't say insufficient information to 22 have an opinion about whether such exposures caused 23 him problems or not. 24 Q. Do you believe that Pastor Bird's 25 mesothelioma was related to asbestos exposure,

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1 occupational? 2 A. I don't know. 3 Q. Okay. And you're not qualified to give 4 that opinion, are you? 5 MR. SCHMIEDER: Objection. 6 THE WITNESS: I'm not a physician, no. 7 Q. (BY MR. PLACITELLA) You are not qualified 8 to provide an opinion as to whether a specific 9 exposure to a specific product caused Pastor Bird's 10 mesothelioma. True? 11 A. I am qualified to put it in the 12 perspective of the existing standards and knowledge. 13 Q. That's not my question. My question is, 14 you are not qualified to provide an opinion as to 15 whether a specific exposure to a specific product was 16 responsible partly or entirely for Pastor Bird's 17 mesothelioma? 18 A. I am not qualified to give medical opinion 19 about his mesothelioma. 20 Q. All right. And that includes what the 21 cause was, true? 22 A. Yeah, sure. 23 Q. Okay. Now, you say in your sentence, "a 24 quantitative estimate of cumulative exposure." Do 25 you see that?	1 Q. Let's go to the next page of your report, 2 okay? One of the things you rely upon is the study 3 by Robinson as referenced in paragraph B; correct? 4 A. Yes. 5 Q. Okay. The study by Robinson was done -- 6 did not -- was done for people exposed up to 1986. 7 True? 8 A. Yeah. It was a cohort of these folks over 9 a three-year period, I believe, '84 to '86. 10 Q. What is your understanding, sir, of the 11 latency period necessary for developing mesothelioma? 12 A. Well, typically we talk about at least 13 15 years, extending up to 30, 40 years. 14 Q. So at a minimum it would be 15 years, 15 correct? 16 A. Yeah, typically. 17 Q. Would you agree with me, sir, that it 18 would be highly unlikely that people who were exposed 19 to Georgia Pacific joint compounds from 1970 to 1977 20 would be included as part of this analysis? 21 A. Well, you have to understand that these 22 people's exposures go way back. You know, some of 23 these guys who were studied in '84 to '86 might have 24 been working for 30, 40 years. 25 Q. Yes, sir. But exposures that happened in
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1 A. Yes. 2 Q. And do you agree from an industrial 3 hygienist perspective that it's the total exposure 4 that you have to look at? 5 A. That's what cumulative means. 6 Q. Right. In other words, it's the total 7 dust that causes the disease. True? 8 A. Yeah. I mean, that's one of our best 9 measures in terms of assessing risk in these things 10 is to be able to add up cumulative exposure. 11 Q. All right. So what you do is you add up 12 all the exposures to determine whether there's an 13 elevated risk. True? 14 A. Yeah. And you compare that against the 15 knowledge base that we have about risk of that level 16 of exposure. 17 Q. So each and every exposure is significant 18 when determining what the cumulative exposure is that 19 contributes to the risk for mesothelioma; true? 20 MS. KRIEGSTEIN: Objection to form. 21 THE WITNESS: It all adds up in a nice 22 linear way. 23 Q. (BY MR. PLACITELLA) Is the answer to my 24 question yes? 25 A. I think so, yes.	1 the 1970's would not have been responsible for 2 mesothelioma developing from 1984 to 1986. Do you 3 agree with that? 4 A. Well, that's true. From '70 on you 5 wouldn't see much effect in this cohort. 6 Q. So this particular cohort doesn't directly 7 apply to people using asbestos-containing joint 8 compound sold by Georgia Pacific between 1970 and 9 1977; true? 10 MR. HOOPER: Object to form. 11 THE WITNESS: That's true. I mean, any of 12 these studies have to be lagged for the latency 13 years. 14 Q. (BY MR. PLACITELLA) Now, the study also 15 doesn't look at anybody who did construction work in 16 the state of New Jersey. True? 17 A. Let's see. Yeah, it was a number of 18 states, 19 states. And I can't remember if they're 19 listed or not. 20 Q. Yeah, they're listed. 21 A. Okay. 22 Q. In fact, the study does not even refer to 23 any people studied in the entire Northeast, does it? 24 A. Well, no; but, you know, most of these 25 products are nationwide.

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1 Q. So are you saying that the work practices 2 for people exposed to drywall are the same no matter 3 what state they work in, generally speaking? 4 A. There would obviously be some little 5 differences based on weather and things like that. 6 But, you know, the study is what it is. They studied 7 a big cohort of people from 19 states. 8 Q. Okay. Now, does the study indicate that 9 people were being exposed to asbestos after 1977, 10 construction workers? 11 A. No, I doubt that it says anything -- I 12 don't know that it says anything about that. 13 Certainly the exposures would have gone down, but 14 probably not to zero. 15 Q. Do you recall where in the study it 16 indicated there were exposures, significant exposures 17 after 1977? 18 A. Let's see. Perhaps. But as you already 19 pointed out, they wouldn't be meaningful to 20 development of meso, anyway. 21 Q. All right. In that particular study? 22 A. That's right. 23 Q. Right. But it would have been meaningful 24 20, 30 years later. 25 MR. SCHMIEDER: Objection.	1 this study? 2 A. Yeah. There were 14 cases. 3 Q. Okay. And in this study did the plumbers 4 get mesothelioma? 5 A. Yeah. 6 Q. Did the plasterers get mesothelioma? 7 MR. HOOPER: Object to form. 8 THE WITNESS: It's not listed. 9 Q. (BY MR. PLACITELLA) Can't tell one way or 10 the other? 11 A. Well, yeah. I think they only listed 12 where the PMR was -- yeah. They have cancer of lung, 13 but there's no cancer of pleura under plasterers. 14 Q. Okay. Go to -- let me see your page. 15 Hold on. The last page where it says "conclusion." 16 A. Okay. 17 Q. See where it says "during health hazard 18 evaluation"? 19 A. I'm sorry. What section is that under? 20 Q. It's under conclusion at the bottom of the 21 page, the first page where it says "Conclusion." 22 Says, "during health hazard evaluation." Do you see 23 that? 24 A. Oh, I'm sorry. I was in the wrong place 25 here. Okay.
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1 THE WITNESS: Yeah. I mean, the thing is 2 that with respect to joint compounds, since we now 3 don't have asbestos in joint compound after the late 4 70's, that particular exposure would have largely 5 gone away. 6 Q. (BY MR. PLACITELLA) Except for the people 7 that were knocking down walls, right, sir? 8 MR. SCHMIEDER: Objection. 9 THE WITNESS: That's right. So you may 10 see that as showing up in other job tasks that show 11 up here, people doing demolition or whatever. 12 Q. (BY MR. PLACITELLA) Right. People 13 demolishing walls with joint compound could develop 14 mesothelioma 20, 30 years later; right? 15 MR. HOOPER: Object to form. 16 THE WITNESS: Well, hypothetical. 17 Q. (BY MR. PLACITELLA) Hypothetically? 18 A. Well, I don't think so. I don't think 19 those exposures would normally cause that. 20 Q. All right. So this study indicates that 21 people that were carpenters had mesothelioma, true? 22 A. Let's see them. Boilermakers, tile 23 setters. A lot of pages here to this table. They've 24 got a PMR of 163, so small -- 25 Q. Well, did carpenters get mesothelioma in	1 Q. See that? 2 A. Conclusions, the patterns -- let's see. 3 Q. "During health hazard evaluation," do you 4 have that? 5 A. Not yet. You're talking about -- is it 6 page 68? 7 Q. It's hard to read, to tell you the truth. 8 A. Yeah. 9 Q. It looks to me like it was page 64. Under 10 discussion. 11 A. Oh, okay. Under discussion. 12 Q. My fault. 13 A. Okay, yeah. "During health hazard 14 evaluations conducted between '81 and '83." 15 Q. During health hazard evaluations? 16 A. Uh-huh. 17 Q. "Between 1981 and 1983 by the National 18 Institute for Occupational Safety and Health, NIOSH." 19 See that? 20 A. Right. 21 Q. "Elevated ambient asbestos levels were 22 reported for several construction occupation sites 23 involving skilled trade workers." Do you see that? 24 A. Yeah. 25 Q. And that included electrical work, right?

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1 A. Right. 2 Q. Drywalling? 3 A. Uh-huh. 4 Q. Right? 5 A. Right. 6 Q. Insulation, carpentry, and roofing, right? 7 A. Yeah, I see that. 8 Q. So people, according to this study that 9 you rely upon, were exposed to elevated levels of 10 asbestos doing drywalling even after 1977. True? 11 MR. HOOPER: Object to form. 12 THE WITNESS: Well, yeah. It says 13 reported for several construction occupation sites. 14 So that means -- 15 Q. (BY MR. PLACITELLA) These included. 16 Isn't that what it says? 17 A. Yeah. And of course -- and the next 18 question is, what do they mean by elevated? They 19 don't tell us that. 20 Q. Well, elevated at least would be above 21 background, would you agree? 22 A. Sure. 23 Q. Okay. So after 1977, people doing drywall 24 continued to be exposed to asbestos, according to 25 this article. True?	1 Q. Let me just ask you some questions about 2 some of the adjectives that you use in your report. 3 A. Okay. 4 Q. On page 3 of your report, at the bottom of 5 the page you say, "Mr. Bird's direct work with joint 6 compound does appear to be very intermittent." Do 7 you see that? 8 A. Yes. 9 Q. Why do you use the word "very"? What 10 qualitative meaning is the word "very" to you? 11 A. Yeah. I mean, it's true that 12 "intermittent" is kind of an imprecise word to begin 13 with. What I'm trying to say is that it was maybe a 14 once a year kind of frequency at most. 15 Q. Okay. And if it was more than once a 16 year, would that have been significant? 17 MR. SCHMIEDER: Objection to form. 18 THE WITNESS: Not unless it got a lot 19 more. 20 Q. (BY MR. PLACITELLA) Well, how much more? 21 A. Well, if he were a full-time drywaller, 22 it's still not all that significant with respect to 23 mesothelioma. 24 Q. So in your opinion, if he went to work 25 every day and was exposed to Georgia Pacific joint
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1 A. Yeah, I would need to see these studies, 2 because they say elevated ambient levels were 3 reported for several construction occupation sites 4 that in turn involved certain kinds of work. Now, 5 does that mean that they measured a drywaller and 6 found an elevated level, or just that they found it 7 on this general site? I can't tell what that means. 8 Q. I understand. But it says that 9 drywallers -- that's presumably people who use joint 10 compound, according to your testimony. True? 11 A. I'm sorry. I didn't follow that. 12 Q. Drywallers, according to your testimony, 13 were people who use joint compound; true? 14 A. Yeah, sure. 15 Q. And drywallers, according to the study you 16 rely upon, were exposed to asbestos after 1977, true? 17 MR. HOOPER: Objection to form. 18 THE WITNESS: I'm not sure this says that. 19 Q. (BY MR. PLACITELLA) Okay. 20 A. What I would need to see is measurements 21 that are actually taken on drywallers at these sites 22 that show some elevation. And again, was it a 23 renovation site? Maybe it wasn't new construction at 24 all. Maybe they were tearing into old drywall. Who 25 knows.	1 compound for his whole career and he breathed in the 2 dust from that joint compound every day, it would 3 still be unlikely that that exposure would have 4 contributed to his mesothelioma. Is that what you're 5 saying? 6 MR. SCHMIEDER: Objection to form. 7 THE WITNESS: Yeah. And in fact, the most 8 it could have been would have only been about ten 9 years in any case with Georgia Pacific 10 asbestos-containing drywall. 11 Q. (BY MR. PLACITELLA) So your opinion is, 12 just so we're clear, that if Pastor Bird went to work 13 every day and inhaled and ate asbestos dust generated 14 from Georgia Pacific joint compound, that would not 15 be enough to contribute to his mesothelioma. True? 16 A. That's what the epidemiology tells us, 17 yes. 18 Q. Tell me what epidemiology you rely upon, 19 sir, that focuses on asbestos dust generated 20 specifically from Georgia Pacific joint compound. 21 A. Well, it's not specific to Georgia 22 Pacific; but we know from studies like the Rohl study 23 where he looked at eight or ten different compounds 24 that, you know, they were roughly the same kind of 25 material and the same sort of asbestos content. So I

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1 don't think it -- epidemiology doesn't require it 2 being only Georgia Pacific compound. You would never 3 find a cohort of people who only used Georgia Pacific 4 product. 5 Q. Well, you said the Rohl study. That's an 6 epidemiologic study? 7 A. Well, no. I'm sorry. What the Rohl study 8 tells us is something about the products at that 9 time, that there were many products -- 10 Q. It doesn't talk about whether people are 11 getting mesothelioma, right? 12 A. No, and I didn't suggest that it did. 13 Q. Are you aware of a single study that 14 looked to see specifically whether people using joint 15 compound were getting mesothelioma? 16 A. Yeah. The one we just looked at, the 17 Robinson study. 18 Q. Show me where in this study it talks about 19 people using joint compound getting or not getting 20 mesothelioma. Where in that study is the word "joint 21 compound"? 22 A. Well, the word "drywallers" is in there. 23 Q. Yes, sir. Where does it say that that 24 study looked at whether people using joint compound 25 were getting mesothelioma?	1 A. I don't know of the study we would really 2 like to see, which, unfortunately, is a study that 3 would have been almost impossible to do, to find a 4 big cohort of people who just do that. That's the 5 problem. 6 Q. What you're saying is, it would be 7 impossible to study somebody who just installed joint 8 compound to determine whether they were at risk of 9 mesothelioma. True? 10 A. Yeah. The best we can do, as in the 11 Robinson study where we identify people who are 12 drywall installers and look at as many of them as we 13 can. 14 Q. All right. Do carpenters install drywall 15 with joint compound? 16 A. They certainly could. 17 Q. Did you ever look at the study of New 18 Jersey carpenters to determine whether they were 19 found to be at an elevated risk for joint compound? 20 MR. SCHMIEDER: Objection. 21 THE WITNESS: I don't know if I have that 22 one, no. 23 Q. (BY MR. PLACITELLA) Is that a study that 24 Georgia Pacific did not give to you, the study of New 25 Jersey carpenters in terms of whether they were at
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1 A. Under the listing "drywall installers." 2 Drywall installers -- 3 Q. It says that they use joint compound, sir? 4 A. We already discussed the fact that -- you 5 pointed that out to me that drywallers use joint 6 compound. 7 Q. Sir, I'm saying to you -- I'm saying to 8 you -- I don't really think it's that funny. It's 9 specifically this question. I'm asking you, sir, 10 name me a specific study that was done that you're 11 aware of that looked at people using joint compound 12 to determine whether they got mesothelioma. 13 A. It's right here on page 61 of Robinson's 14 study where he -- 15 Q. Is that the only study you rely upon for 16 that proposition? 17 A. It is one that I relied upon. 18 Q. Is that the only study that you rely upon? 19 MR. SCHMIEDER: Objection. 20 THE WITNESS: It's the only one I cite in 21 my report, that is correct. 22 Q. (BY MR. PLACITELLA) And as you sit here 23 today, are you aware of any other study that 24 specifically addresses whether people installing 25 joint compound are at risk for mesothelioma?	1 risk for mesothelioma? 2 MR. SCHMIEDER: Objection. 3 THE WITNESS: Well, it wasn't a function 4 of who gave it to me. I have not run across that 5 study. 6 Q. (BY MR. PLACITELLA) All right. So just 7 to be clear: the only study that you're aware of that 8 in your mind relates to whether people using joint 9 compound are at risk for mesothelioma is the Robinson 10 study in front of you? 11 A. It's the one I relied on. There could be 12 some others. 13 Q. But you're not aware of any others? 14 A. Not that come to mind right now. 15 Q. Well, not that come to mind now, or have 16 you seen them in the past? 17 A. Well, there is one other Robinson study 18 that I think is a followup on this one. I haven't 19 looked at that for a while. But -- 20 Q. Why didn't you cite that? 21 A. I don't know. I don't know. 22 Q. So other than the studies done by 23 Robinson, you're not aware of another study that 24 addresses the issue, in your mind, of whether people 25 exposed to joint compound are at risk for

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1 mesothelioma; true? 2 A. Yeah. I'm not aware of a real blockbuster 3 study that just looks at those folks with sufficient 4 power to give us what we'd like to see. 5 Q. You are aware that electricians can be 6 exposed to joint compound on the job; true? 7 A. Well -- 8 MR. SCHMIEDER: Objection. 9 A. -- to the extent that they are present 10 when others are generating dust, there would be some 11 exposure. 12 Q. And in this study that you rely upon, 13 electricians were found to have elevated levels of 14 mesothelioma. True? 15 A. Yeah, they had a PMR of 331 or something. 16 It's based on six cases. It is a small number of 17 cases. 18 Q. Well, is a 331 risk high or low, in your 19 opinion? 20 A. Well, it's a little elevated. I don't 21 think it was -- was that one significant? Yeah, I 22 think that one is significant. So yeah, it's 23 elevated. 24 Q. Now, with respect to page 5 of your 25 report, you are discussing current scientific studies	1 Q. You understand that CertainTeed made 2 transite siding? 3 A. Yes. 4 Q. Okay. Is it your opinion that the 5 exposure to CertainTeed transite siding was a 6 significant factor in causing Pastor Bird's 7 mesothelioma? 8 Let me put it this way, because you're not 9 a causation expert. Is it your opinion that exposure 10 to transite siding by CertainTeed elevated Pastor 11 Bird's risk of developing mesothelioma? 12 MR. SUSS: Objection to form. 13 THE WITNESS: Only by a very small amount, 14 very small amount. 15 Q. (BY MR. PLACITELLA) Well, did it or 16 didn't it? 17 A. Well, I just said by a very small amount. 18 Q. But in terms of assessing cumulative 19 exposure that we discussed before, would that have 20 been part of the cumulative exposure that would have 21 contributed to his risk of mesothelioma? 22 A. Yes. 23 MS. KRIEGSTEIN: Objection to form. 24 A. That's why I mentioned it. 25 Q. All right. So in your opinion, the
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1 and you talk about Hodgson and Darton. Do you see 2 that? 3 A. Yes. 4 Q. That was year 2000, right? 5 A. Correct. 6 Q. That was nine years ago; true? 7 A. True. 8 Q. Okay. Are there other respected 9 scientists that differ with Hodgson and Darton in 10 terms of the relative potential of chrysotile 11 asbestos to cause mesothelioma? 12 A. There are undoubtedly those who have 13 different opinions. 14 Q. All right. And are there respected 15 scientists of the opinion that chrysotile can cause 16 mesothelioma? 17 A. Well, certainly. Even Hodgson and Darton 18 think it's possible. 19 Q. Okay. Now, in the last paragraph, under 20 No. 3 you talk about transite siding. Do you see 21 that? 22 A. Yes. 23 Q. And I think before you used the 24 word "CertainTeed." Do you recall that? 25 A. Yeah, I mentioned that.	1 exposure to CertainTeed transite siding would have 2 been part of the cumulative risk elevating Pastor 3 Bird's risk of mesothelioma? 4 A. Slightly elevated, yes. 5 Q. Okay. And how many times did he do that? 6 A. Just a couple that I recall, two or three 7 different projects. There was the one where the 8 house had burned or something and they had to remove 9 it. Then I think they applied it on a new house, and 10 there may have been a third. 11 Q. So in your opinion, the exposure to 12 CertainTeed transite siding on just a couple of 13 occasions contributed to an overall risk of 14 developing mesothelioma? 15 MR. SUSS: Objection to form. 16 Mr. KRIEGSTEIN: Join. 17 THE WITNESS: It contributes to his 18 cumulative exposure. It's still, you know -- and 19 this is another instance where we don't know the 20 exact duration, so again, it's hard to come up with 21 any kind of quantitative exposure assessment on that 22 process. 23 Q. (BY MR. PLACITELLA) But I didn't put it 24 in my report. You're the one that mentioned the 25 siding and what its role was. So my question is, do

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1 you believe that the CertainTeed siding exposure 2 contributed to his risk of mesothelioma? 3 A. Very slightly, yeah. 4 Q. Yes, the answer is yes? 5 A. Very slightly. 6 Q. Very slightly yes? 7 A. Well, obviously. 8 Q. Okay. Now, are there generally recognized 9 principles of industrial hygiene concerning 10 protecting a worker from industrial hazards? 11 A. Sure. 12 Q. Okay. And is there a code of ethics 13 followed by industrial hygienists in terms of 14 protecting worker health and safety? 15 A. Absolutely. 16 Q. Okay. And what is that code of ethics -- 17 is that published by the American Industrial Hygiene 18 Association? 19 A. Well, yeah, the American Board of 20 Industrial Hygiene. 21 Q. What does that code of ethics say in terms 22 of the responsibility for protecting worker health 23 and safety? 24 A. Oh, that we should and we must whenever we 25 can.	1 A. Well, as far back as there have been 2 people that we could call industrial hygienists, 3 that's always been our first question is, you know, 4 what are these people working with and what are the 5 toxicological properties and do we have a problem. 6 Q. Okay. Is it a recognized principle in 7 industrial hygiene that engineering controls should 8 be used to prevent the inhalation of asbestos- 9 containing dust? 10 MR. SCHMIEDER: Objection. K 11 THE WITNESS: Well, where feasible, you 12 know, understanding that there are many situations 13 where the engineering control part is problematic, 14 and we sometimes have to go to personal protective 15 equipment like respirators. 16 Q. (BY MR. PLACITELLA) Yes, sir. And was it 17 recognized as far back as the 1930's that engineering 18 controls should be used to prevent the inhalation of 19 asbestos- containing dust whenever possible? 20 A. Sure. When you're in, like, a 21 manufacturing situation like the asbestos textile 22 mills, asbestos mines and so on, all did their best 23 to eventually, when they recognized the problem, 24 began to install ventilation systems wherever they 25 could.
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1 Q. Okay. Are there general principles in 2 industrial hygiene concerning the protecting of a 3 worker from hazards of industrial dust? 4 A. Sure. 5 Q. Are asbestos and industrial dust covered 6 by these principles? 7 A. Yeah, in the workplace. 8 Q. Is it a recognized principle of industrial 9 hygiene that an investigation should be done to 10 determine whether material is used in a product that 11 would present a risk to a worker? 12 A. Well, as of the mid to late 80's on, we 13 had the hazard communication standard that OSHA 14 promulgated which says, yes, we must find the 15 identity, the composition of products, the chemical 16 products that are sold and used; and we must, you 17 know, pass that information on to employers and 18 employees in the form of material safety data sheets, 19 warnings, and so on. So yeah, that has been a 20 principle. 21 Q. Okay. Am I correct that the principle, 22 the industrial hygiene principle that the product 23 should be investigated to determine whether it poses 24 a risk to the worker goes back well before the 25 1960's?	1 Q. So was it a recognized principle of 2 industrial hygiene going back to the 1930s that you 3 should use ventilation or engineering controls to 4 prevent asbestos-containing dust exposure if 5 possible? 6 A. Sure, sure. 7 Q. Is it a recognized principle of industrial 8 hygiene going back to the 1930's that you should 9 attempt to remove hazardous ingredients from products 10 encountered in the workplace whenever possible? 11 MR. HOOPER: Object to form. 12 THE WITNESS: Yeah. You know, what we 13 call substitution, it's been a principle that when 14 you can remove something hazardous, that's the best 15 way to control it, if you have some alternative that 16 does as good a job. 17 Q. (BY MR. PLACITELLA) And that principle 18 has been recognized going back to the 1930's by 19 industrial hygienists; true? 20 A. Yeah, I would think that's true. 21 Q. Is it a recognized principle of industrial 22 hygiene that workers should be told about the risk of 23 the products they're asked to work with? 24 A. Yeah, it's always been part of industrial 25 hygiene. Again, I mentioned the hazard communication

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1 standard which didn't come out until the mid to late 2 80's, which actually codified that into the 3 regulations. It's surprising that it took so long, 4 but that is the case. 5 Q. But was it a recognized principle of 6 industrial hygiene going back to the 1930's that 7 workers should be told about the risks of the 8 products they were asked to work with? 9 MR. HOOPER: Objection. 10 THE WITNESS: Yes. 11 Q. (BY MR. PLACITELLA) Yes, sir? 12 A. Yes. 13 Q. Was it a recognized principle of 14 industrial hygiene that if you could not eliminate 15 hazards, you needed to warn the workers of the 16 hazards going back to the 1930's? 17 A. Yeah. You know, in theory that was true. 18 In practice we know various anecdotal stories where 19 even early inspectors from, you know, prior to OSHA 20 would be very careful about what they said to workers 21 for fear of causing an uproar. So theoretically 22 that's true. Unfortunately, that wasn't always 23 followed. 24 Q. Would you agree with me that by at least 25 the 1930's it was recognized as a principle of	1 five million particles per cubic feet. 2 Q. Kind of like what Dr. Longo did? 3 A. I'm telling you that it depends on a great 4 many factors. The whole science of the visibility 5 and interactions of light with aerosol particles is 6 very complex, and it's a pet peeve of mine the way 7 that information gets misused in the science of 8 industrial hygiene. So I'll get off my soapbox, 9 but -- 10 Q. All right. When is the first time it was 11 technologically possible to monitor exposure for 12 asbestos-containing dust? 13 A. Well, back in the -- I would say roughly 14 the 30's where you came in with the old midget 15 impinger and pulled air through a liquid-containing 16 impinger and then looked at it under a microscope. 17 Q. Do you agree with me that at least by the 18 1930's it was a recognized principle of industrial 19 hygiene that a worker should have explained to him or 20 her the reason why they would be given a respirator? 21 A. Yeah. It's hard for me to speak to people 22 in the 30's, but I think that would have been how 23 most industrial hygienists, if they were even called 24 that in those days, that they would try to give some 25 explanation.
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1 industrial hygiene that if you could not eliminate an 2 industrial hazard of asbestos-containing dust by 3 engineering controls that a worker should be given a 4 respirator? 5 A. To the extent that exposures were 6 considered to be hazardous, you know, there were 7 those industries back in those days where nobody 8 considered these sort of secondary asbestos exposures 9 to be of concern. You know, we had the old five 10 million particle per standard, million particles per 11 cubic foot standard, and people felt that it was 12 unlikely that operations that didn't directly involve 13 asbestos, but only, you know, components of products 14 containing asbestos were not of concern. We were 15 concerned initially about the textile workers and 16 later insulators and people like that, but the 17 knowledge evolved over a long period of time. 18 Q. Well, five million particles per cubic 19 foot, that is visible to the naked eye, is it not? 20 A. Not in all cases, no. 21 Q. What point -- at what point can you see 22 industrial dust with the naked eye? 23 A. I can see dust in a train station in the 24 sunlight streaming through the windows. That's 25 nowhere near an industrial level and nowhere near	1 Q. From a principle of industrial hygiene, 2 would you agree a company should warn consumers about 3 the dangers associated with the use of its products? 4 A. Did you say consumers? 5 Q. Right. 6 A. Well, that's somewhat out of our 7 bailiwick. We're more concerned with worker health. 8 Q. Well, let me rephrase the question. Do 9 you agree with me that as a principle of industrial 10 hygiene a company should warn workers about the 11 dangers associated with the use of its products? 12 A. Yeah, to some extent, and that's certainly 13 what we try to do these days. 14 Q. Would you agree with me as a principle of 15 industrial hygiene that a company should test its 16 products to determine if they are dangerous before 17 selling them? 18 MR. HOOPER: Object to form. 19 THE WITNESS: They are required to do that 20 under hazard communication. Other than that, you 21 know, in the past if it was not -- well, OSHA didn't 22 exist, of course, but it wasn't their bailiwick to 23 look into computer -- I'm sorry -- consumer product 24 safety issues. 25 Q. (BY MR. PLACITELLA) Well, was it a

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1 recognized principle of industrial hygiene that a 2 company should test its products to determine if they 3 were dangerous before selling them if they were 4 encountered by a worker? 5 MR. HOOPER: Object to form. 6 THE WITNESS: Well, it certainly is today. 7 And how far back that sentiment goes in our society, 8 I can't speak exactly. 9 Q. (BY MR. PLACITELLA) Would you agree it 10 goes back at least to the 1960's? 11 MR. SCHMIEDER: Objection. 12 MR. HOOPER: Object to form. 13 THE WITNESS: I'd say 70's, certainly by 14 the time OSHA came around. 15 Q. (BY MR. PLACITELLA) Well, at least by the 16 early 70's it was a recognized principle of 17 industrial hygiene that a company should test its 18 products to determine if they were dangerous before 19 putting them in the workplace true? 20 MR. HOOPER: Object. 21 THE WITNESS: I guess as a general 22 principle you could say that. 23 Q. (BY MR. PLACITELLA) Would you agree that 24 as a general principle of industrial hygiene that a 25 company should inform workers if it learned a product	1 workers? 2 MR. HOOPER: Objection to form. 3 THE WITNESS: I'm not sure exactly what 4 that means. 5 Q. (BY MR. PLACITELLA) Well, would you agree 6 with me as a principle of industrial hygiene that a 7 company should always tell the truth about the risks 8 and benefits of a product it puts in the workplace? 9 MR. HOOPER: Objection to form. 10 THE WITNESS: That would be an ideal to 11 the extent that they know those things. 12 Q. (BY MR. PLACITELLA) And that ideal would 13 go back at least to the 1960's. Would you agree? 14 A. I don't know. I don't know. I'm not a 15 sociological expert. 16 Q. Well, would you agree with me as a 17 principle of industrial hygiene that a company should 18 never withhold information about product dangers used 19 in the workplace? 20 MR. HOOPER: Objection to form. 21 THE WITNESS: I mean, I think that's a 22 nice ideal. 23 Q. (BY MR. PLACITELLA) Well, it's something 24 you believe in, sir? 25 A. Yeah, I do today and in my practice.
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1 is dangerous after it puts it in the workplace? 2 A. Yeah. You know, that later became a 3 standard or requirement to go back on certain kinds 4 of exposures that could have occurred historically 5 and to track down workers and let them know. 6 Q. So for example, if a company sold a 7 product that was determined to be dangerous, should 8 that company as a general principle of industrial 9 hygiene go back and try to warn people where that 10 product was installed or used? 11 MR. HOOPER: Object to form. 12 THE WITNESS: Well, it's an interesting 13 goal, but clearly there's huge impracticalities. You 14 would have to set some criteria for deciding who was 15 sufficiently exposed to go to all that trouble. You 16 know, I don't know what you could do in terms of 17 locating everyone who had used or come in contact 18 with a particular product. 19 Q. (BY MR. PLACITELLA) Well, you could give 20 generalized warnings in the media, couldn't you? 21 A. Well, that's certainly occurred, and 22 societal view has certainly changed on all these 23 things. 24 Q. Would you agree with me that safety is a 25 primary concern when selling products to be used by	1 Q. Do you agree, sir, as a general principle 2 industrial hygiene, a company should never put 3 profits before worker safety? 4 MR. HOOPER: Objection to form. 5 THE WITNESS: I don't know if that's a 6 principle of industrial hygiene or just a sort of a 7 moral value. 8 Q. (BY MR. PLACITELLA) So as a moral -- from 9 a moral perspective, a company should never put 10 profits before worker safety. True? 11 MR. SCHMIEDER: Objection. Form. 12 THE WITNESS: You know, it depends on what 13 you mean by worker safety. There is some inherent 14 risk in any profession in any industry, and I'm not 15 sure that we should shut all industry down because 16 there is the possibility of accident or illness. We 17 have to -- 18 Q. (BY MR. PLACITELLA) That's not what I 19 asked. I said, in terms of -- well, let me just move 20 on. 21 Would you agree that the greater the 22 danger inherent in the product, the stronger the 23 warning is necessary? 24 A. Well, that's a general precept, sure. 25 Q. And the principle that the greater the

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1 danger inherent in the product, the stronger the 2 warning is necessary, dates back at least to the 3 1960's. Would you agree with that? 4 A. I don't -- I can't put a date on it 5 exactly. I don't know that there's a specific point 6 in time when that was accepted. 7 MR. PLACITELLA: If you want to take a 8 five-minute break, I'm going to look at my notes, but 9 I think I'm almost done. 10 (Recess from 12:40 p.m. to 12:45 p.m.) 11 Q. (BY MR. PLACITELLA) I've looked at my 12 notes. You've been very patient, and I don't have 13 any other questions at this time other than to ask 14 you to take a look at the stuff we asked you to look 15 for, okay? 16 A. Okay. 17 Q. All right. I appreciate your time. 18 A. Yeah, thank you. 19 MR. PLACITELLA: I'm done with my 20 questioning. 21 MR. HOOPER: Anybody else have questions 22 for the witness? 23 MR. SUSS: Yeah. This is Ron Suss. I 24 have a couple of questions for the witness. 25	1 MR. SCHMIEDER: Objection to form. 2 MR. HOOPER: Object to form. 3 THE WITNESS: Well, again, as of '85 to 4 '86, that time period, the hazard communications 5 standard required that chemical products be evaluated 6 with respect to hazard and that that information be 7 provided to all purchasers, at least all businesses 8 that purchase those products. 9 Q. (BY MR. PLACITELLA) Let me ask the 10 question this way. Have the OSHA regulations ever 11 absolved a manufacturer from providing warnings to 12 workers about the use -- about the dangers posed by 13 products? 14 MR. SCHMIEDER: Objection to form. 15 MR. HOOPER: Object to form. 16 THE WITNESS: Well, they didn't have a 17 regulation that they could enforce until hazard 18 communication came along. Back in the 70's, if 19 people wanted to say you're going to use this 20 chemical Z and you don't need to know what it is, 21 it's part of your job, use it, you're going to be 22 fine, then that was that. And OSHA nor anybody else 23 could say anything about that. OSHA could come in 24 and monitor for specific compounds that had standards 25 and determine if there were over exposures, but
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1 EXAMINATION 2 BY MR. SUSS: 3 Q. Mr. White, you've testified that you have, 4 based upon your career and work, familiarity with 5 OSHA regulations. Is that correct? 6 A. Yes. 7 Q. Under OSHA regulation, is there an 8 obligation on the employer of a worker to provide 9 warnings and monitor the safety at the worker's 10 workplace? 11 A. Yeah. It is the responsibility of the 12 employer to assure that all of the OSHA regulations 13 are met, and in general to be responsible for the 14 safety and welfare of those workers. 15 MR. SUSS: Thank you, sir. 16 MR. PLACITELLA: That's it, Ron? 17 MR. SUSS: That's it. 18 MR. PLACITELLA: Okay. Anybody else? 19 Now I have one question. 20 FURTHER EXAMINATION 21 BY MR. PLACITELLA: 22 Q. Mr. White, do the OSHA regulations absolve 23 a manufacturer from providing proper warnings 24 concerning the dangers inherent in the use of its 25 products?	1 beyond that, they could not require the employer or 2 manufacturer to provide that information. 3 MR. PLACITELLA: Okay, that's all the 4 questions. Thank you. 5 (Deposition was concluded at 12:50 p.m.) 6 * * * 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

REPORTER'S CERTIFICATE
STATE OF UTAH)
) ss.
COUNTY OF SALT LAKE)

I, Vicky McDaniel, Registered Professional
Reporter and Notary Public in and for the State of
Utah, do hereby certify:

That prior to being examined, the witness,
KENNETH L. WHITE, was by me duly sworn to tell the
truth, the whole truth, and nothing but the truth;

That said deposition was taken down by me
in stenotype on February 6, 2009, at the place herein
named, and was thereafter transcribed and that a true
and correct transcription of said testimony is set
forth in the preceding pages;

I further certify that, in accordance with
Rule 30(e), a request having been made to review the
transcript, a reading copy was sent to Mr. Hooper for
the witness to read and sign before a notary public
and then return to me for filing with Mr. Placitella.

I further certify that I am not kin or
otherwise associated with any of the parties to said
cause of action and that I am not interested in the
outcome thereof.

WITNESS MY HAND AND OFFICIAL SEAL this
13th day of February, 2009.

Vicky McDaniel, CSR, RMR
Notary Public
Residing in Salt Lake County

Case: Bird vs. 3M, et al.
Case No.: L-3599-08 AS
Reporter: Vicky McDaniel
Date taken: February 6, 2009

WITNESS CERTIFICATE

I, KENNETH L. WHITE, HEREBY DECLARE:

That I am the witness in the foregoing
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