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| <p style="text-align: right;">Page 1</p> <p>1       IN THE CIRCUIT COURT OF THE CITY OF ST. LOUIS<br/> 2               STATE OF MISSOURI<br/> 3<br/> 4   GLENN BROWN, et al,<br/> 5       Plaintiffs,<br/> 6   vs.                   Cause No. 862-00694<br/> 7   MONSANTO COMPANY,<br/> 8       Defendant.<br/> 9<br/> 10<br/> 11<br/> 12       Volume III<br/> 13       Continued Deposition of R. EMMET KELLY, M.D.<br/> 14       On behalf of Defendant<br/> 15       June 12, 1990<br/> 16<br/> 17<br/> 18<br/> 19<br/> 20       WALLER REPORTING, INC.<br/> 21       515 Olive Street, Suite 1506<br/> 22       St. Louis, Missouri 63101<br/> 23       (314) 621-2571<br/> 24<br/> 25<br/> 26<br/> 27<br/> 28<br/> 29</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <p style="text-align: right;">Page 3</p> <p>1           IT IS HEREBY STIPULATED AND AGREED by and<br/> 2   between Counsel for the Plaintiff and Counsel for the<br/> 3   Defendant, that this deposition continuation may be taken<br/> 4   in shorthand by TOD MINNIGERODE, a Certified Shorthand<br/> 5   Reporter and Notary Public, and afterwards transcribed<br/> 6   into typewriting, and that the deposition is to be<br/> 7   continued.<br/> 8<br/> 9<br/> 10<br/> 11           o-O-o<br/> 12<br/> 13           R. EMMET KELLY, M.D.,<br/> 14   of lawful age, being produced, sworn and examined on the<br/> 15   part of the Defendant, deposes and says:<br/> 16           EXAMINATION<br/> 17   QUESTIONS BY. MR. MC CREA:<br/> 18       Q   Dr. Kelly, how are you this morning, sir?<br/> 19       A   Fine and yourself?<br/> 20       Q   Pretty good. When we last convened we were<br/> 21   discussing Exhibit K-2, I believe, and if you would, sir,<br/> 22   turn to page 1023 as indicated by the article page number<br/> 23   at the top. The first full paragraph down about<br/> 24   two-thirds of the way, it states, "In approximately one<br/> 25   half of the workers exposed there developed comedones of a</p>                                                                                                                                                                                                                                                              |
| <p style="text-align: right;">Page 2</p> <p>1       IN THE CIRCUIT COURT OF THE CITY OF ST. LOUIS<br/> 2               STATE OF MISSOURI<br/> 3<br/> 4   GLENN BROWN, et al,<br/> 5       Plaintiffs,<br/> 6   vs.                   Cause No. 862-00694<br/> 7   MONSANTO COMPANY,<br/> 8       Defendant.<br/> 9<br/> 10<br/> 11       CONTINUED DEPOSITION OF R. EMMET KELLY, M.D.<br/> 12   produced, sworn and examined on behalf of the Defendant,<br/> 13   June 12, 1990, between the hours of eight o'clock in the<br/> 14   forenoon and five o'clock in the afternoon of that day, at<br/> 15   the offices of Communitronics, 1907 S. Kingshighway, St.<br/> 16   Louis, Missouri, before TOD MINNIGERODE, a Certified<br/> 17   Shorthand Reporter and a Notary Public within and for the<br/> 18   State of Missouri.<br/> 19<br/> 20<br/> 21       A P P E A R A N C E S<br/> 22       The Plaintiff was represented by Mr. Thomas M.<br/> 23   Carney of the law firm of Husch, Eppenberger, Donahue,<br/> 24   Cornfeld &amp; Jenkins, 100 N. Broadway, St. Louis, MO 63101.<br/> 25       The Defendant was represented by Mr. David<br/> 26   McCrea of the law firm of McCrea &amp; McCrea, 119 South<br/> 27   Walnut Street, Bloomington, Indiana 47402.<br/> 28<br/> 29<br/> 30<br/> 31</p> | <p style="text-align: right;">Page 4</p> <p>1   particularly heavy and tenacious type with resultant<br/> 2   sebaceous, abscesses containing heavy yellow pus and<br/> 3   serum." Can you again for us describe a comedone in<br/> 4   layman terminology?<br/> 5       A   It's something between a blackhead and a<br/> 6   boil. A boil is an infected comedone. A comedone is a<br/> 7   plugged up sebaceous gland.<br/> 8       Q   And when it says of a particularly heavy and<br/> 9   tenacious type, could you break that definition down for<br/> 10   us?<br/> 11       A   I don't know what he means by heavy.<br/> 12   Tenacious means like if I use a common definition means it<br/> 13   took a little while to get well. You realize here he's<br/> 14   talking about chloracne in Europe, not PCB's at all. This<br/> 15   is chlorinated naphthalene he's talking about in this.<br/> 16       Q   All right, sir, and that's identified in that<br/> 17   paragraph as chlorinated naphthalene?<br/> 18       A   Yes. He refers to it at hexachlorobenzene --<br/> 19   Well, it's all chlorinated naphthalene. In 1918, these<br/> 20   cases were long before PCB's were invented.<br/> 21       Q   Is that the same general family of chemicals,<br/> 22   chlorinated hydrocarbon family?<br/> 23       A   Well, it depends on how widespread you<br/> 24   include the family. I mean, Italians and Irish and<br/> 25   Indians are all in the same family, but chlorinated</p> |

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| <p style="text-align: right;">Page 5</p> <p>1 naphthalene is a different thing entirely than chlorinated<br/>2 diphenyl.<br/>3 Q What are the chemical elements in chlorinated<br/>4 naphthalene?<br/>5 A Chlorine, hydrocarbon -- chlorine, hydrogen,<br/>6 carbon.<br/>7 Q And those would be the same chemical elements<br/>8 in a PCB, correct?<br/>9 A Oh, yes, but it depends how they're --<br/>10 Q Arranged?<br/>11 A Arranged. Coal is carbon, diamonds are<br/>12 carbon, but they're a little different.<br/>13 Q Could chlorinated naphthalene be accurately<br/>14 described as chlorinated hydrocarbon?<br/>15 A In one sense, yes. Usually people do not<br/>16 refer to a ring compound, which the naphthalene is, as a<br/>17 hydrocarbon. It's usual, the usual termination --<br/>18 terminology for hydrogen is a straight chain carbon with<br/>19 chlorine on it. But you could use that as a definition,<br/>20 yes.<br/>21 Q In manufacturing chlorinated naphthalene do<br/>22 you begin the process with benzene as you do with PCB's?<br/>23 A I don't know how they make it.<br/>24 Q It also states in that sentence, "With<br/>25 resultant sebaceous abscesses." Can you define that for</p> | <p style="text-align: right;">Page 7</p> <p>1 MR. McCREA: Yes, I presume that we're still<br/>2 talking --<br/>3 Q (By Mr. McCrea) That still relates to<br/>4 chlorinated naphthalenes, does it not, Doctor?<br/>5 A Yes.<br/>6 MR. CARNEY: I'm going to object to the<br/>7 relevancy of that as opposed to the case we're involved<br/>8 in, which is PCB's, and PCB's in any case are not the same<br/>9 as chlorinated naphthalene.<br/>10 Q (By Mr. McCrea) Dr. Kelly was there--Were<br/>11 there varying opinions as to the manner in which<br/>12 chlorinated naphthalenes caused the eruption on the skin?<br/>13 Did some authors believe it was an irritation, did some<br/>14 believe it was the elimination of the chemical through the<br/>15 sweat glands and did others believe it involved liver<br/>16 enzymes?<br/>17 A I don't know where the enzymes are, but that<br/>18 was a later belief. The first two beliefs I believe about<br/>19 such as Teleky in 1918 was discarded sometime around the<br/>20 1960's or seventies. But to answer your questions; yes,<br/>21 with the exception that it was believed that there was<br/>22 some change in the fat metabolism and the enzyme activity<br/>23 of the body, yes.<br/>24 Q And Teleky, his belief was what, that was<br/>25 later changed in the sixties or seventies?</p> |
| <p style="text-align: right;">Page 6</p> <p>1 us?<br/>2 A An abscess is a boil. Sebaceous means a<br/>3 sweat gland.<br/>4 Q And then it said --<br/>5 A An oily gland of the skin. It's an oil gland<br/>6 of the skin.<br/>7 Q Containing heavy yellow pus and serum?<br/>8 A Once it's infected, that's what the pus is.<br/>9 Q Then it states in the next sentence that --<br/>10 and I'm having a little difficulty reading, it looks like<br/>11 Teleky, T-e-l-e-k-y?<br/>12 A Yes, sir.<br/>13 Q "Believes that the disease was due directly<br/>14 to the halogen content of the substance," and by that is<br/>15 he referring to the chlorine content?<br/>16 A Yes.<br/>17 Q Turning over to page 1024 -- Well, actually<br/>18 down to the bottom of 1023, it says, "Others," and then a<br/>19 series of names, "Consider it to be dermatitis due to the<br/>20 absorption of chemical compounds by the lungs or<br/>21 gastrointestinal tract with elimination by way of the<br/>22 sebaceous glands."<br/>23 MR. CARNEY: I'm going to object to this line<br/>24 of questioning. Are we still talking about a condition<br/>25 with exposure to chlorinated naphthalenes?</p>                                | <p style="text-align: right;">Page 8</p> <p>1 A Well, I don't know exactly what Teleky<br/>2 thought back there in 1918; but at that time the people<br/>3 believed that this material got on your skin, plugged up<br/>4 the sweat glands and caused it that way.<br/>5 Q And could --<br/>6 A I think that was pretty rudimentary<br/>7 approach to it.<br/>8 Q And could that be described as more of an<br/>9 irritant effect rather than a systemic effect?<br/>10 A Well, irritant has a particular definition.<br/>11 If you put paint remover into your skin you get red,<br/>12 that's an irritation. Here we are not talking<br/>13 particularly about irritation, we're talking about<br/>14 chloracne.<br/>15 Q Then below that on page 1024 is, "Report of a<br/>16 Case," and in somewhat fine print it has, "History," of a<br/>17 case, and it describes the actual symptoms of a worker who<br/>18 was employed for Swann Chemical, is that correct?<br/>19 A That is correct.<br/>20 Q And does this article then go on -- does it<br/>21 just have the one case history, Doctor?<br/>22 A Well, it gives a short sketch of the sixteen<br/>23 cases but they just gave the detailed history of Mr. O.D.,<br/>24 whoever he was.<br/>25 Q Would O.D. be the initials of an individual?</p>                                              |

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| <p style="text-align: right;">Page 9</p> <p>1 A That's correct.</p> <p>2 Q And then on page 1025 it gives a summary of</p> <p>3 the symptoms and treatment in sixteen cases of acneform</p> <p>4 eruption, is that correct?</p> <p>5 A Yes, sir.</p> <p>6 Q Was it this author's belief that the acneform</p> <p>7 eruptions were the result of exposure on the surface of</p> <p>8 the skin, and that it was not the result of systemic</p> <p>9 poisoning?</p> <p>10 A I'll have to look, I don't think he has come</p> <p>11 out with anything. He does say that some of the problem</p> <p>12 may have been due to skin irritation of -- He doesn't make</p> <p>13 any positive statement of what he thinks is the cause,</p> <p>14 whether it's systemic or local action.</p> <p>15 Q All right, sir. In the report of a case</p> <p>16 which is described on page 1024, in the first paragraph it</p> <p>17 gives a description of blackheads on his face, neck, arms</p> <p>18 and legs. Does that fairly well speak for itself?</p> <p>19 A Yes, sir.</p> <p>20 Q In your opinion would that be an indication</p> <p>21 of chloracne?</p> <p>22 A Not of and by itself. It depends really on</p> <p>23 what they looked like.</p> <p>24 Q What would indicate to you that that</p> <p>25 condition of blackheads on his face, neck, arms and legs</p>          | <p style="text-align: right;">Page 11</p> <p>1 Q If an individual is working in PCB's and</p> <p>2 experiences a condition of itching would that then</p> <p>3 indicate exposure of the skin to PCB's?</p> <p>4 A Again it depends on what else he might be</p> <p>5 exposed to. Maybe he was exposed to chlorine, maybe he</p> <p>6 was exposed to solvents.</p> <p>7 Q If there was no other chemical which by</p> <p>8 history could explain the itching, would itching of the</p> <p>9 worker's skin be an indication that there has been PCB</p> <p>10 contamination of the skin?</p> <p>11 MR. CARNEY: Are you excluding anything</p> <p>12 outside the work place, like poison ivy or some other</p> <p>13 condition that might cause itching.</p> <p>14 MR. McCREA: Right.</p> <p>15 Q (By Mr. McCrea) If no other history of being</p> <p>16 PCB's cause itching?</p> <p>17 A I think if you get enough of it on you it</p> <p>18 may.</p> <p>19 Q Can itching result from systemic involvement?</p> <p>20 A Of what?</p> <p>21 Q PCB's.</p> <p>22 MR. CARNEY: I'm going to object to the</p> <p>23 question; it's vague and ambiguous to me.</p> <p>24 A If the person has developed chloracne from a</p> <p>25 systemic involvement from PCB he may get itching.</p>                                                                                       |
| <p style="text-align: right;">Page 10</p> <p>1 would be chloracne?</p> <p>2 A If it started around the cheekbones. If</p> <p>3 there were some pigmentation, it's -- Mr. O.D., being a</p> <p>4 black man, I don't know of how well pigmentation could</p> <p>5 have been observed.</p> <p>6 Q Is it your opinion that if the condition does</p> <p>7 not present itself initially on the cheekbones that you do</p> <p>8 not have chloracne?</p> <p>9 A No. No, I don't say that; but the majority</p> <p>10 of them do start around the cheeks, around the eyes and</p> <p>11 around the ears.</p> <p>12 Q The next phrase states, "These areas itched</p> <p>13 slightly." In your opinion could slight itching of the</p> <p>14 skin of a worker exposed to PCB's be an indication of</p> <p>15 chloracne?</p> <p>16 A I don't think so. It all depends on what</p> <p>17 else he might be exposed to, how long the PCB's were on</p> <p>18 his skin. Itching in a chemical plant could come from a</p> <p>19 great number of things.</p> <p>20 Q Is itching a condition caused by an irritant</p> <p>21 effect on the skin or a systemic involvement of the</p> <p>22 chemical?</p> <p>23 A In a worker it's due to the action on the</p> <p>24 skin. In some cases there are allergic reactions that are</p> <p>25 systemic that are accompanied by itching.</p> | <p style="text-align: right;">Page 12</p> <p>1 Q (By Mr. McCrea) Then it states, "In a short</p> <p>2 time blackheads began to appear on the chest, back and</p> <p>3 lower part of the abdomen, around the navel and on the</p> <p>4 scrotum and penis." Do you believe -- do you know of any</p> <p>5 other conditions which can cause blackheads in those</p> <p>6 particular areas of the body other than exposure to PCB's</p> <p>7 or related chlorinated hydrocarbons? For instance, can a</p> <p>8 teenager experience conditions in those areas?</p> <p>9 A I have never seen teenage acne on the scrotum</p> <p>10 and penis. There are any number of chemicals ranging from</p> <p>11 wood treating chemicals to agricultural chemicals that can</p> <p>12 cause widespread chloracne which is -- could be in those</p> <p>13 areas.</p> <p>14 Q And which wood treating chemicals and</p> <p>15 which -- what was the other chemical?</p> <p>16 A Pentachlorophenol.</p> <p>17 Q All right, is that --</p> <p>18 A 2,4,5-T.</p> <p>19 Q And those chemicals can also produce</p> <p>20 blackheads on the scrotum and penis?</p> <p>21 A Yes.</p> <p>22 Q What other skin conditions can appear on the</p> <p>23 scrotum and penis as a result of exposure to PCB's,</p> <p>24 related chlorinated hydrocarbons, pentachlorophenol,</p> <p>25 2,4,5-T?</p> |

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| <p style="text-align: right;">Page 13</p> <p>1 A I don't know of any.</p> <p>2 Q Could boils appear in those areas?</p> <p>3 A Well, it all depends. I mean, what you mean</p> <p>4 by a boil, if you have chloracne there and these areas get</p> <p>5 infected obviously you've had an abscess. A boil is</p> <p>6 usually referred to as an abscess in a hair follicle, but</p> <p>7 these are not in the hair follicles but you get pustules</p> <p>8 and infected comedones is an abscess. It's pretty close</p> <p>9 to a boil. It's not exactly a boil in the terminology but</p> <p>10 it's close.</p> <p>11 Q If you examined a worker and he had</p> <p>12 blackheads on his scrotum and penis would you suspect</p> <p>13 chloracne?</p> <p>14 A No, not necessarily. I guess, I'd have to</p> <p>15 say where else it was, if that's all the place – the only</p> <p>16 place it was I would not suspect chloracne.</p> <p>17 Q If it was on other areas of his body, such as</p> <p>18 his arms, his trunk, his face, would you suspect</p> <p>19 chloracne?</p> <p>20 A I would if there was any history of exposure</p> <p>21 to any chlorinated compounds.</p> <p>22 Q If you observed abscesses on his scrotum and</p> <p>23 penis and he had other skin problems would you suspect</p> <p>24 chloracne?</p> <p>25 A And a history of exposure to chlorinated</p> | <p style="text-align: right;">Page 15</p> <p>1 A Certainly more rare to find it there than on</p> <p>2 the face and arms and back.</p> <p>3 Q The next sentence or at the bottom of that</p> <p>4 paragraph said, "When seen in December 1933 the patient</p> <p>5 complained of lassitude, loss of appetite and loss of</p> <p>6 libido and said that his cutaneous condition seemed to be</p> <p>7 improving." What is lassitude?</p> <p>8 A Tiredness.</p> <p>9 Q And can that be -- that condition would have</p> <p>10 to involve systemic, that would be a systemic involvement,</p> <p>11 would it not?</p> <p>12 A Could be systemic, could be psychological.</p> <p>13 Q And what is loss of appetite? Speaks for</p> <p>14 itself?</p> <p>15 A I think so.</p> <p>16 Q And loss of libido, what is that?</p> <p>17 A Loss of sexual drive.</p> <p>18 Q And that would have to be systemic, would it</p> <p>19 not?</p> <p>20 A Not necessarily. It could any number of</p> <p>21 reasons, it could be social, it could be psychological,</p> <p>22 could be due to domestic trouble.</p> <p>23 Q If those symptoms corresponded in time to the</p> <p>24 chloracne would you suspect a systemic poisoning?</p> <p>25 A No. I would not.</p>                                                                                                                                                                                                                                                                                                                              |
| <p style="text-align: right;">Page 14</p> <p>1 compounds, yes, I'd suspect it.</p> <p>2 Q Do you know of any condition resulting from</p> <p>3 normal biological functions that can result in comedones</p> <p>4 or boils on the scrotum and penis?</p> <p>5 A Sure. You get jockstrap itch, and if you get</p> <p>6 jockstrap itch and you scratch it and it becomes infected</p> <p>7 you get boils and abscesses on the penis and scrotum.</p> <p>8 Q Any other conditions?</p> <p>9 A There may be some but that's the most common</p> <p>10 one.</p> <p>11 Q Have you ever seen it there as a result of</p> <p>12 acne, teenage acne?</p> <p>13 A No. I haven't seen very many teenage acnes,</p> <p>14 either.</p> <p>15 Q Have you ever seen it reported as a result of</p> <p>16 teenage acne?</p> <p>17 A Not that I recall.</p> <p>18 Q Have you ever seen it reported as a result of</p> <p>19 acne fulminans, fulminans?</p> <p>20 A That means a pretty serious acne. Fulminans</p> <p>21 means a fulminating acne and I don't know whether that</p> <p>22 refers to teenage acne or chloracne. Could be referred to</p> <p>23 both, either one.</p> <p>24 Q So is it fair to say it's rare to find</p> <p>25 comedones and boils on the scrotum and penis?</p>                                                                                                       | <p style="text-align: right;">Page 16</p> <p>1 Q Why not?</p> <p>2 A Because these symptoms are very common in</p> <p>3 almost any number of occupational and non-occupational</p> <p>4 conditions. Tiredness, loss of appetite, that can</p> <p>5 occur -- loss of libido, it can occur for any number of</p> <p>6 reasons. The largest percentage is psychological in these</p> <p>7 cases.</p> <p>8 Q If the worker had no history of complaints of</p> <p>9 lassitude, loss of appetite and loss of libido before the</p> <p>10 onset of the chloracne would you find that to be</p> <p>11 significant from the standpoint of cause and effect?</p> <p>12 A No, I wouldn't; because here a man has been</p> <p>13 presumably off work, he's been going to several doctors.</p> <p>14 He's got a lot of changes in his before and after pattern.</p> <p>15 So I don't believe that one could just say that these</p> <p>16 symptoms, and remember these are symptoms, there's nothing</p> <p>17 objective that you can look at. These are symptoms that</p> <p>18 are very common and are seen in all sorts of instances.</p> <p>19 Q Could it be the result of systemic poisoning,</p> <p>20 lassitude, loss of appetite and loss of libido?</p> <p>21 A I would think you would have to know more</p> <p>22 about the case to know that. After all, there has been</p> <p>23 nothing else in here on these because the next sentence he</p> <p>24 says, "On examination he seemed to be in good general</p> <p>25 health." Dr. Jones in the next sentence did not ascribe</p> |

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| <p style="text-align: right;">Page 17</p> <p>1 lassitude to the PCB's. I believe that Dr. Jones made a<br/> 2 statement that would not be said today, in the next<br/> 3 sentence, but he did not agree that this was due to his<br/> 4 PCB exposure.<br/> 5 Q In the next sentence Dr. Jones states that,<br/> 6 "His —" meaning O.D. -- "complaint of lassitude was not<br/> 7 borne out by anything more than the usual temperament of<br/> 8 the Negro toward work." Dr. Kelly, isn't that flat-out a<br/> 9 racist statement?<br/> 10 A It certainly is, and remember this is Dr.<br/> 11 Jones, back in Georgia in 1935. So this is not my<br/> 12 statement.<br/> 13 Q Did Monsanto ever correct that statement by<br/> 14 confronting Dr. Jones and pointing out to him that that<br/> 15 statement was racist and had no basis whatsoever in fact?<br/> 16 MR. CARNEY: Let me object to this question.<br/> 17 It's an obvious attempt by Mr. McCrea to try to attribute<br/> 18 a very racist statement made by a doctor that had nothing<br/> 19 to do with Monsanto back in the 1930's in the South and to<br/> 20 somehow try to attribute or connect that statement, which<br/> 21 is abhorrent to Monsanto and to Dr. Kelly, as he's<br/> 22 indicated, to Monsanto and it has no place in this lawsuit<br/> 23 and to try to inject that to in this lawsuit is -- it's<br/> 24 very repugnant.<br/> 25 MR. McCREA: Well, lassitude is a symptom</p>    | <p style="text-align: right;">Page 19</p> <p>1 McCrea, two that I know. Do you want to break it down or<br/> 2 do you want me to --<br/> 3 Q (By Mr. McCrea) No. Just answer the last<br/> 4 one.<br/> 5 A Well, in the first place before I answer the<br/> 6 last one, you talked about the PCB's in Yusho. You must<br/> 7 realize that that has been acknowledged to be due to the<br/> 8 presence of dibenzofurans in the PCB's.<br/> 9 Now to answer the last question, I would have to<br/> 10 take a symptom into account with other -- with the<br/> 11 physical examination and the laboratory studies and the<br/> 12 general -- what other findings there were, if there<br/> 13 were -- Well, that's the answer.<br/> 14 Q Dr. Kelly, you and your attorney acknowledge<br/> 15 that this was a racist statement by Dr. Jones in ascribing<br/> 16 lassitude and stating it was not borne out by anything<br/> 17 more than the usual temperament of the Negro toward work;<br/> 18 and I know that you don't believe that and I know that no<br/> 19 one believes that statement. Isn't it a fact then that<br/> 20 lassitude was a documented symptom of this individual who<br/> 21 was exposed to the chemicals in the workplace at Swann?<br/> 22 A Yes, sir. He did tell Dr. Jones I feel<br/> 23 tired.<br/> 24 Q And that there was no explanation for that as<br/> 25 Dr. Jones suggested, I mean, that is just totally outside</p> |
| <p style="text-align: right;">Page 18</p> <p>1 which Dr. Kelly acknowledged was caused by the exposure of<br/> 2 the Japanese to the Yusho PCB in 1968. Lassitude is<br/> 3 clearly documented in this article written in 1933. The<br/> 4 point is, what credence did the PCB industry give to this<br/> 5 account of lassitude.<br/> 6 Q (By Mr. McCrea) Dr. Kelly, did you at any<br/> 7 point in time as medical director of Monsanto believe that<br/> 8 lassitude could be a symptom caused by exposure to<br/> 9 chlorinated hydrocarbons from 1936 forward?<br/> 10 MR. CARNEY: I'm going to object to the<br/> 11 speech you made. Move to strike.<br/> 12 A Let's have that question over please.<br/> 13 MR. McCREA: Could you read it back please?<br/> 14 (Reporter read back from the record as directed:<br/> 15 MR. McCREA: "Well, lassitude is a symptom<br/> 16 which Dr. Kelly acknowledged was caused by the exposure of<br/> 17 the Japanese to the Yusho PCB in 1968. Lassitude is<br/> 18 clearly documented in this article written in 1933. The<br/> 19 point is, what credence did the PCB industry give to this<br/> 20 account of lassitude?<br/> 21 Q (By Mr. McCrea) Dr. Kelly, did you at<br/> 22 any point in time as medical director of Monsanto believe<br/> 23 that lassitude could be a symptom caused by exposure to<br/> 24 chlorinated hydrocarbons from 1936 forward?")<br/> 25 A You have a multiple question there, Mr.</p> | <p style="text-align: right;">Page 20</p> <p>1 the realm of any validity, correct?<br/> 2 A No. I don't know what you mean. It's<br/> 3 totally outside the realm of any validity; I don't know.<br/> 4 I can't make sense of that statement.<br/> 5 Q Well, he ascribed that to the fact that this<br/> 6 man was black?<br/> 7 A Well, he did say he could find no reason for<br/> 8 the lassitude.<br/> 9 Q Well, isn't there --<br/> 10 A Wait, just a minute, let me finish. He said<br/> 11 this complaint was not borne out by anything, now, okay.<br/> 12 He didn't find anything else. He ascribed it to -- in a<br/> 13 racist manner which I disagree with; but I have to agree<br/> 14 with this first part when he said he didn't find anything<br/> 15 to bear out the tiredness.<br/> 16 Q Well, isn't it a fact that the man had just<br/> 17 been exposed to PCB's, contaminated with whatever and had<br/> 18 a horrible skin condition and was complaining of lassitude<br/> 19 and shouldn't the doctor have considered lassitude as a<br/> 20 consequence of the exposure?<br/> 21 A I would not --<br/> 22 MR. CARNEY: Let me just object; to have Mr.<br/> 23 Kelly or Dr. Kelly speculate as to what was inside Dr.<br/> 24 Jones' mind at that time --<br/> 25 A Well, that's what I was going to say. I have</p>                                                                                                               |

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| <p style="text-align: right;">Page 21</p> <p>1 no idea what Dr. Jones' thoughts were in 1935. I don't<br/> 2 know what he thought of, I cannot put myself inside his<br/> 3 head.<br/> 4 Q (By Mr. McCrea) But we know it's not related<br/> 5 to the reason ascribed by Dr. Jones, agreed?<br/> 6 A Yes.<br/> 7 Q We know that the man had exposure to PCB's<br/> 8 and had a skin condition that was very obvious, correct?<br/> 9 A Yes.<br/> 10 Q Doesn't that give medical credibility to the<br/> 11 fact that the lassitude could be the result of the<br/> 12 exposure to the chemical?<br/> 13 A It's possible, but it could also as I said<br/> 14 earlier it could be due to a great number of psychological<br/> 15 problems. Here a man is off work, here a man is making<br/> 16 trips to the doctor, here a man is hanging around the<br/> 17 house. I don't know what was happening to him. I don't<br/> 18 know what made him tired; but you can see people who are<br/> 19 ill that feel tired, and this man was in good general<br/> 20 health according to what he seen, in good general health.<br/> 21 I can't say any more than that. The general physical<br/> 22 examination revealed nothing of importance outside of the<br/> 23 skin condition.<br/> 24 Q Describe to the jury your interpretation of<br/> 25 the finds of lassitude in this article.</p> | <p style="text-align: right;">Page 23</p> <p>1 exposure to the chemicals. How would you go about<br/> 2 determining that medically?<br/> 3 A I don't think you can.<br/> 4 Q Would you take a history and ask him if<br/> 5 during his twenty-six years he had ever felt tiredness<br/> 6 before?<br/> 7 A I may have -- I certainly might, yes.<br/> 8 Q And in --<br/> 9 A This doesn't say whether he had ever felt<br/> 10 tired before, either.<br/> 11 Q Wouldn't that be something that you would<br/> 12 want to know as a doctor in trying to determine if the<br/> 13 chemicals caused lassitude?<br/> 14 A I am saying that, yes, but you have to<br/> 15 remember that the question is: Did the chemical cause the<br/> 16 lassitude? Did the man's illness and the sociological<br/> 17 changes in his environment cause the lassitude? Did being<br/> 18 out of work cause the lassitude? I don't think anybody<br/> 19 can say this caused it, and this didn't cause it.<br/> 20 Q But if in fact the chemicals are causing<br/> 21 lassitude then that means there is a systemic involvement<br/> 22 that is of significant, correct?<br/> 23 A No, not correct; because in the absence of<br/> 24 any physical signs, in the absence of any laboratory work,<br/> 25 just the fact that a man feels tired is not a significant</p> |
| <p style="text-align: right;">Page 22</p> <p>1 A Well, this article states that Mr. O.D. had<br/> 2 lassitude, which meant he felt tired. Dr. Jones says a<br/> 3 general physical examination revealed nothing of<br/> 4 importance. Dr. Jones said he seemed in good general<br/> 5 health and his complaint of lassitude was not borne out.<br/> 6 Now if he stopped there that would be fine, he couldn't<br/> 7 find the cause of the lassitude. Well, he proceeded on<br/> 8 what we know is a racist type of mindset, and that's all I<br/> 9 can say about it.<br/> 10 Q If I called you and asked you after you read<br/> 11 this article if you felt lassitude could be a consequence<br/> 12 of this man's exposure to the chemicals, what would your<br/> 13 answer be?<br/> 14 A Say that over. I want to get this exactly<br/> 15 right.<br/> 16 THE WITNESS: Could you read it please?<br/> 17 MR. McCREA: Read that back.<br/> 18 (Reporter read back from the record as directed:<br/> 19 Q "If I called you and asked you after<br/> 20 you read this article if you felt lassitude could be a<br/> 21 consequence of this man's exposure to the chemicals, what<br/> 22 would your answer be?"<br/> 23 A It might and it might not.<br/> 24 Q (By Mr. McCrea) What would you, Dr. Kelly,<br/> 25 do to determine if in fact the lassitude was caused by the</p>    | <p style="text-align: right;">Page 24</p> <p>1 symptom, no, sir.<br/> 2 Q What about the libido, loss of libido? Have<br/> 3 you seen that reported in the literature, other than this<br/> 4 article?<br/> 5 A I've seen it reported in the literature for<br/> 6 probably fifty chemicals.<br/> 7 Q How does chemical exposure result in loss of<br/> 8 libido?<br/> 9 A I don't think it's known and it's also -- I<br/> 10 don't think it's known whether it does.<br/> 11 Q Well, you stated that you have seen it<br/> 12 reported as a result of exposure to some fifty chemicals?<br/> 13 A No. I didn't say as a result of exposure.<br/> 14 Said in connection with.<br/> 15 Q Can you describe some of those chemicals for<br/> 16 us, list some of them?<br/> 17 A No, I can't, but you can go through almost<br/> 18 any trial and you will find that loss of libido is a very<br/> 19 prominent symptom, no matter what the chemical is.<br/> 20 Q Describe to the jury your interpretation of<br/> 21 the report of this worker that he experienced loss of<br/> 22 libido, based on all the knowledge which you have right up<br/> 23 to this date?<br/> 24 A Will you repeat that again?<br/> 25 MR. McCREA: Could you read it back?</p>                                                                                           |

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| <p style="text-align: right;">Page 25</p> <p>1 MR. CARNEY: Yeah. Let me just for the<br/> 2 record object to the question on the ground that I think<br/> 3 it's vague and ambiguous.<br/> 4 (Reporter read back from the record as directed:<br/> 5 Q "Describe to the jury your<br/> 6 interpretation of the report of this worker that he<br/> 7 experienced loss of libido, based on all the knowledge<br/> 8 which you have right up to this date?")<br/> 9 A Well, I can't describe what he -- because I<br/> 10 didn't take the history, I don't know how much loss of<br/> 11 libido he had. I don't know how his libido was five years<br/> 12 before this, and I don't think any -- When you say the<br/> 13 knowledge I have up to this present date, my knowledge of<br/> 14 libido being lost by workers who have alleged loss of<br/> 15 libido as a symptom, that's a pretty hard thing to prove.<br/> 16 Q (By Mr. McCrea) But the complaint is one<br/> 17 that's very specific, is it not?<br/> 18 A Specific as to what, the chemical?<br/> 19 Q As to symptom?<br/> 20 A Well, certainly, it's --<br/> 21 Q And it's one that you take seriously, if<br/> 22 someone reports that to you and they report a chemical<br/> 23 exposure, you know from your experience that loss of<br/> 24 libido has been associated with exposure to some fifty<br/> 25 chemicals?</p>                                                | <p style="text-align: right;">Page 27</p> <p>1 A I don't know what you mean, serious about<br/> 2 what? So this man had some symptoms, yes, but his main<br/> 3 problem was his skin. He came in, and was treated for his<br/> 4 skin. He was in pretty good, quite -- nothing of<br/> 5 importance in his physical examination outside the skin,<br/> 6 and he got well. I didn't pay a great deal of attention<br/> 7 to the symptoms, no. That's a whole -- you're picking one<br/> 8 small item out of the whole makeup of the individual.<br/> 9 Well, I'm not saying that libido isn't important, let me<br/> 10 get that right, but --<br/> 11 Q I don't know that lassitude, loss of appetite<br/> 12 and loss of libido are any less significant than<br/> 13 chloracne, Doctor.<br/> 14 MR. CARNEY: Well, I'm going to object to<br/> 15 what's more significant. I don't know what's more<br/> 16 significant than what. I don't know how you compare loss<br/> 17 of libido to loss of appetite in terms of -- I don't know<br/> 18 what you're trying to get him to compare them to.<br/> 19 MR. McCREA: Well, he said that it's one<br/> 20 small item.<br/> 21 A Did I say small?<br/> 22 Q (By Mr. McCrea) I thought you said one small<br/> 23 item.<br/> 24 A Well, then I went to correct it. I do not<br/> 25 want to minimize loss of libido.</p> |
| <p style="text-align: right;">Page 26</p> <p>1 A In conjunction with exposure, yes. I do not<br/> 2 know that it has -- I certainly did not say that that loss<br/> 3 of libido has been caused by exposure to these fifty<br/> 4 chemicals. I said that loss of libido is a symptom that<br/> 5 is prominent in histories of people alleging injury from<br/> 6 chemicals.<br/> 7 Q This article dismissed outright those<br/> 8 symptoms of lassitude, loss of appetite and loss of<br/> 9 libido, did it not, it gave them no credence?<br/> 10 A I don't know what your interpretation is<br/> 11 there. It gave them no credence what? He put it down, he<br/> 12 said, "This man told me that he has loss of libido."<br/> 13 Q Does he ever discuss it?<br/> 14 A No, he doesn't discuss it, no.<br/> 15 Q But that was essentially documented in 1933<br/> 16 in this article which you have relied on in your direct<br/> 17 examination as I recall and there's no other explanation<br/> 18 other than the chemical exposure or his being fatigued as<br/> 19 a result of being out of work?<br/> 20 MR. CARNEY: I'm going to object to the form<br/> 21 of the question. It's compound, it's vague and ambiguous.<br/> 22 Q (By Mr. McCrea) Let me ask this, I agree<br/> 23 with that. Did you take those symptoms seriously when you<br/> 24 read this article, loss of libido, loss of appetite and<br/> 25 lassitude?</p> | <p style="text-align: right;">Page 28</p> <p>1 Q Right. Did you service the workers at<br/> 2 Monsanto Company for loss of lassitude who were exposed to<br/> 3 PCB's?<br/> 4 A No. The physicians did, examining<br/> 5 physicians.<br/> 6 MR. CARNEY: I'm going to --<br/> 7 Q (By Mr. McCrea) And did you instruct them to<br/> 8 look for this condition?<br/> 9 A For what condition?<br/> 10 Q Lassitude?<br/> 11 A No, sir, because a physician knows when he's<br/> 12 examining a man, he asked him, "How have you been feeling?<br/> 13 Are you tired?" He goes through a whole gamut of<br/> 14 questions.<br/> 15 Q With this report in 1933 why didn't you<br/> 16 direct your physicians to look for those symptoms in the<br/> 17 workers?<br/> 18 MR. CARNEY: Well, I'm going to object. I<br/> 19 think he's already answered that they knew how to take a<br/> 20 history which would include those questions.<br/> 21 A These physicians are people who have examined<br/> 22 workers all their life. They are experts at it. They<br/> 23 don't need to be told to look for one or two isolated<br/> 24 symptoms. You are picking one or two symptoms out of a<br/> 25 whole category of questions that people ask during the</p>                                                                                                                  |

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| <p style="text-align: right;">Page 29</p> <p>1 course of a history and physical examination.</p> <p>2 Q (By Mr. McCrea) Lassitude is one of those</p> <p>3 symptoms which you stated earlier in your deposition was</p> <p>4 related to the Japanese exposure to the Yusho oil,</p> <p>5 correct?</p> <p>6 A Yes, the Yusho oil.</p> <p>7 Q Dr. Kelly, going down to physical</p> <p>8 examination, it says, "On the forehead extending within</p> <p>9 the hairline and on the cheeks, chin, nose and neck were</p> <p>10 numerous small very black tenacious comedones, their</p> <p>11 distribution being best described as peppered within the</p> <p>12 skin." Could you explain that description to the jury</p> <p>13 in any more detail other than what is stated there?</p> <p>14 A No, sir. I don't know what he meant.</p> <p>15 Q When it says within the hairline, what does</p> <p>16 that mean?</p> <p>17 A Well, I think everybody knows what a hairline</p> <p>18 is. That's where your scalp stops and your forehead</p> <p>19 starts.</p> <p>20 Q So there would have been according to this</p> <p>21 observation small very black tenacious comedones within</p> <p>22 the hairline itself?</p> <p>23 MR. CARNEY: Well, I'm going to object.</p> <p>24 You're asking this witness to possibly speculate as to</p> <p>25 what those words mean and what Dr. Jones meant. I</p>                                                                                         | <p style="text-align: right;">Page 31</p> <p>1 poison ivy get a symptom of itching, some people don't.</p> <p>2 Q And that's just because we don't all react in</p> <p>3 the same way, fair statement?</p> <p>4 A Yes. But that's over-simplistic, it all</p> <p>5 depends on how much you get. Some people -- The same</p> <p>6 person might react to a good-sized dose of poison ivy, and</p> <p>7 he wouldn't react at all to a small dose of poison ivy.</p> <p>8 Q Have you ever seen two cases of chloracne</p> <p>9 which are just identical?</p> <p>10 A No.</p> <p>11 Q There is some variability to all of them, is</p> <p>12 that a fair statement?</p> <p>13 A Oh, yes, from insignificant to severe.</p> <p>14 Q What would be an example of an insignificant</p> <p>15 case of chloracne?</p> <p>16 A Something a man doesn't know he has until a</p> <p>17 doctor looks at it and says, "I think you've got</p> <p>18 chloracne."</p> <p>19 Q What would those signs be of an insignificant</p> <p>20 case?</p> <p>21 A Small blackheads around the cheekbones.</p> <p>22 Q Anything else?</p> <p>23 A That's it.</p> <p>24 Q Then the next, it says, "Many of the</p> <p>25 comedones surmounted firm shot-like cysts which in some</p>                                                                                                                             |
| <p style="text-align: right;">Page 30</p> <p>1 think -- I don't know that this witness is any better at</p> <p>2 reading those words than the jury or the lawyers are.</p> <p>3 MR. McCREA: I agree, I think it pretty well</p> <p>4 speaks for itself.</p> <p>5 Q (By Mr. McCrea) But I would like to clarify,</p> <p>6 doctor, if in fact there were small very black tenacious</p> <p>7 comedones inside the hairline. In other words --</p> <p>8 A That's what he said.</p> <p>9 Q Have you seen that reported in other cases of</p> <p>10 chloracne?</p> <p>11 A I may or I may not have. It's not a very</p> <p>12 prominent -- it doesn't stand out very much in my mind.</p> <p>13 Q But it did in this case?</p> <p>14 A Did and he reported it.</p> <p>15 Q Isn't it true, Dr. Kelly, that there's a</p> <p>16 great variability among people to symptoms, for instance,</p> <p>17 I could walk through a patch of poison ivy and break out,</p> <p>18 and somebody else could lie down in the stuff and not be</p> <p>19 effected, is that generally safe -- Is that fair to say?</p> <p>20 A Well, no, because first of all you're</p> <p>21 confusing terms. A symptom is a complaint that's not</p> <p>22 objective. You can't see it. A sign is what you would</p> <p>23 get when you go into poison ivy. You would get a blister,</p> <p>24 you would get redness. A symptom would be itching. Now</p> <p>25 to answer your question, yes, some people when exposed to</p> | <p style="text-align: right;">Page 32</p> <p>1 areas contained viscid yellow pus." What does that, break</p> <p>2 that down for us?</p> <p>3 A This means that these blackheads were sitting</p> <p>4 on top of a cyst. A cyst is a collection of liquid or</p> <p>5 semi-viscous material or pus in these cases. So here we</p> <p>6 have these little blackheads sitting on top of a circular</p> <p>7 area that contained yellow pus.</p> <p>8 Q Next sentence, "The pustular elements were</p> <p>9 more noticeable on the neck." Can you tell the jury what</p> <p>10 that would appear to be?</p> <p>11 A It means whatever he had were more noticeable</p> <p>12 in his neck than anyplace else.</p> <p>13 Q What does it mean, pustular?</p> <p>14 A That means the cysts that contained viscid</p> <p>15 yellow pus that he mentions in his previous sentence.</p> <p>16 Q "Some shot-like comedones had appeared only</p> <p>17 the shoulders, mid portion of the back and chest with an</p> <p>18 occasional large cyst." Does that fairly well speak for</p> <p>19 itself, Doctor?</p> <p>20 A I think so.</p> <p>21 Q "A particular peppering of the skin with</p> <p>22 tenacious carbon-colored comedones was apparent around the</p> <p>23 umbilicus and lower portion of the abdomen." Is that</p> <p>24 descriptive in and by itself?</p> <p>25 A I think so.</p> |

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| <p style="text-align: right;">Page 33</p> <p>1 Q "The scrotum and penis were involved in a<br/>2 similar process; the former being given more to the<br/>3 formation of cysts." We've discussed that?<br/>4 A Yes.<br/>5 Q "The outer surfaces of the forearms and<br/>6 interior thigh showed similar but fewer comedones." Can<br/>7 you show to the jury what is meant when they state the<br/>8 outer surfaces of the forearms? Is that this part here?<br/>9 A That's outer, this is inner.<br/>10 Q So it would be this part of the forearm which<br/>11 had comedones, correct?<br/>12 A Yes, sir. Fewer they said.<br/>13 Q Yes. And then it says, "The anterior thighs<br/>14 likewise showed fewer comedones," and anterior would be<br/>15 the front portion of the thigh?<br/>16 A That's correct.<br/>17 Q Have you seen that condition in other cases<br/>18 of chloracne where it's on the outer forearm and the<br/>19 anterior thigh?<br/>20 A Yes. But not limited to those areas, yes,<br/>21 sir.<br/>22 Q In addition to other places?<br/>23 A Other places?<br/>24 A Yes, sir.<br/>25 Q Other places. Says, "The whole eruption was</p>                                                                                                                                                                                                            | <p style="text-align: right;">Page 35</p> <p>1 outside of the skin.<br/>2 Q But nothing specific? I mean, it's not -- he<br/>3 wasn't referred to a specialist in neurology by Dr. Jones.<br/>4 A No, but he had no symptoms or findings<br/>5 that -- after all Dr. Jones is a physician, he would know<br/>6 if a man had neurological symptoms or neurological<br/>7 findings.<br/>8 Q Well, couldn't lassitude be a neurological<br/>9 symptom?<br/>10 A No, sir, lassitude, a neurological -- it's<br/>11 hard to say whether a symptom is neurological or<br/>12 psychological.<br/>13 Q Could it be a neurological symptom?<br/>14 A I don't think so. I wouldn't include it as a<br/>15 neurological symptom.<br/>16 Q Can a person experiences lassitude as a<br/>17 result of medications?<br/>18 A Oh, certainly.<br/>19 Q And how is that brought about?<br/>20 A You have medicines that are depressants.<br/>21 You're using the term neurological and I'm using the term<br/>22 psychological.<br/>23 Q Well, if it's a depressant and it affects the<br/>24 brain?<br/>25 A Yes, sir. That's correct.</p>                                                |
| <p style="text-align: right;">Page 34</p> <p>1 acneform but differed from acne particularly in the lack<br/>2 of a seborrheic appearance of the skin and in the<br/>3 peculiarly deep black of the comedones as well as a<br/>4 general peppered distribution in areas not usually<br/>5 involved with acne vulgaris?" Can you explain that to the<br/>6 jury?<br/>7 A Well, acne vulgaris means common acne,<br/>8 teenage acne which goes up to at adult life. Seborrhea is<br/>9 flaking of the skin, redness of the scalp and flaking of<br/>10 the skin also that accompanies teenage acne. The deep<br/>11 blackheads seen in chloracne are not usually present in<br/>12 acne vulgaris, that's what he says.<br/>13 Q All right, sir. Then he goes on to describe<br/>14 treatment and he goes on to describe microscopic<br/>15 examination on page 1025?<br/>16 A Yeah. Well, he also, to end up, be complete,<br/>17 he also ends up saying a general physical examination<br/>18 revealed nothing of importance.<br/>19 Q All right, sir.<br/>20 A And the treatment, yes, sir.<br/>21 Q And on the general examination which revealed<br/>22 nothing of importance, what do you understand to be a<br/>23 general physical examination?<br/>24 A Examination of the heart, lungs, blood<br/>25 pressure, abdomen, neurological system; the whole business</p> | <p style="text-align: right;">Page 36</p> <p>1 Q And that can result in lassitude?<br/>2 A Yes, sir.<br/>3 Q Page 1025, treatment, they gave this man<br/>4 radiation, correct?<br/>5 A Yes, sir.<br/>6 Q Then microscopic examination. Dr. Kelly,<br/>7 have you ever done microscopic examination of skin samples<br/>8 of individuals in whom you suspected chloracne?<br/>9 A No, sir, I have not.<br/>10 Q And they describe on page 1025, "Summary of<br/>11 the symptoms and treatment in sixteen cases of acneform<br/>12 eruption," and across the top it has case, and a number,<br/>13 age, race, type of skin, type of eruption. Is that time<br/>14 of exposure, I can't read it on mine?<br/>15 A Yes, time of exposure.<br/>16 Q Time of exposure, and special treatment and<br/>17 it goes through all sixteen cases?<br/>18 A Yes, sir.<br/>19 Q Do you know which after these individuals you<br/>20 consulted when you became medical director?<br/>21 A No, sir, they don't have the names down.<br/>22 Q But you did consult --<br/>23 A Some of them, yes.<br/>24 Q Some of them when you became medical director<br/>25 for Monsanto Company?</p> |

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| <p style="text-align: right;">Page 37</p> <p>1 A Yes, sir.</p> <p>2 Q Did you make any inquiry into the symptoms of</p> <p>3 lassitude, loss of libido, loss of appetite?</p> <p>4 A Not that I recall. I don't know if I did. I</p> <p>5 asked them how they were feeling. When they said they</p> <p>6 felt fine I figured they had no symptoms.</p> <p>7 Q Before you commenced your consultation with</p> <p>8 these individuals you had read this article?</p> <p>9 A Yes, sir.</p> <p>10 Q The microscopic examinations described in</p> <p>11 this article, is there anything you feel is indicative of</p> <p>12 chloracne as aerolites of microscopic examinations?</p> <p>13 A Are we talking about this article or any</p> <p>14 time?</p> <p>15 Q No. In general.</p> <p>16 A Yes. Some dermatologists and some</p> <p>17 pathologists believe that they could tell chloracne by</p> <p>18 microscopic examination.</p> <p>19 Q Who are some of those folks?</p> <p>20 A Suskind is one.</p> <p>21 Q Who else?</p> <p>22 A Gosh, I don't remember them offhand, but --</p> <p>23 Q Page 10twenty-six is what, is that a</p> <p>24 photograph of a microscopic examination?</p> <p>25 A A section of the skin from the chest showing</p>                                                                    | <p style="text-align: right;">Page 39</p> <p>1 c-o-l-l-o-r-a.</p> <p>2 Q And it makes reference in that same sentence</p> <p>3 at the end to scarring, "Leaving in their wake much</p> <p>4 scarring." Is that something that has been reported in</p> <p>5 chloracne, scarring?</p> <p>6 A Well, it's been reported in chloracne, it's</p> <p>7 been reported in teenage acne, it's been reported in adult</p> <p>8 acne. Wherever you incise a cyst that has pus in it, you</p> <p>9 get a scar from the incision and the healing.</p> <p>10 Q Next couple of pages describe the process of</p> <p>11 manufacture, is that a fair statement, Doctor?</p> <p>12 A Yes, sir.</p> <p>13 Q Break time.</p> <p>14 (Whereupon, a short break was taken.)</p> <p>15 Q Dr. Kelly, we're ready to resume here. This</p> <p>16 morning we have discussed Exhibit K-2, which I believe you</p> <p>17 have in front of you?</p> <p>18 A Yes, I do.</p> <p>19 Q And for the record that document is titled,</p> <p>20 An Acneform Dermatargosis -- Can you pronounce that for</p> <p>21 me?</p> <p>22 A No. That's a -- I think you're doing as well</p> <p>23 as anybody. That's an obsolete term.</p> <p>24 Q Authored by Jack W. Jones, M.D. and Herbert</p> <p>25 S. Alden, M.D., Atlanta, Georgia. Do you know if you in</p>                                        |
| <p style="text-align: right;">Page 38</p> <p>1 the formation of the acneform eruption, eruption meaning a</p> <p>2 condition or rash, acneform being acne.</p> <p>3 Q Is that a situation where they actually took</p> <p>4 a photograph of the microscopic --</p> <p>5 A Yes, sir.</p> <p>6 Q Picture?</p> <p>7 A They took one out of the skin and sliced it</p> <p>8 and put it on slide and put a microscope on it and put a</p> <p>9 camera on top of the microscope.</p> <p>10 Q Page 1027, "Twenty-three of twenty-four men</p> <p>11 reported acneform eruption on the face and body." It says</p> <p>12 of the twenty-three, sixteen were examined. What does</p> <p>13 this mean, Doctor, just above the photograph, "In many</p> <p>14 patients numerous small sebaceous abscesses developed</p> <p>15 particularly around the -- I read that as c-o-l-l-o-r-a,</p> <p>16 is that correct?</p> <p>17 A Collar, collar, they just spelled it wrong.</p> <p>18 I think it's the collar line. That would be what I would</p> <p>19 think.</p> <p>20 Q That would be just above the collar around</p> <p>21 your neck?</p> <p>22 A Yes.</p> <p>23 Q But that c-o-l-l-o-r-a is just a misspelling?</p> <p>24 A I don't know. I don't know what else it</p> <p>25 could be. I have never heard of a work like</p> | <p style="text-align: right;">Page 40</p> <p>1 fact interviewed the individual whose case was reported on</p> <p>2 page 1024?</p> <p>3 A No, sir, I do not.</p> <p>4 Q Just to be clear for the record and I think</p> <p>5 this has been asked and answered, but just to be totally</p> <p>6 clear, when you interviewed the workers who had been</p> <p>7 exposed to these chemicals in 1935 or 1936?</p> <p>8 A Wait, I did not -- which of the dates, '35 or</p> <p>9 '36.</p> <p>10 Q When you interviewed them?</p> <p>11 A No, I didn't interview them in '35, I wasn't</p> <p>12 with Monsanto in '35. I didn't interview them in 1936, it</p> <p>13 was '37 or '38.</p> <p>14 Q Thank you. When you interviewed them, you</p> <p>15 did not ask any of them if they had experienced tiredness</p> <p>16 when they were exposed to the chemicals?</p> <p>17 A To the best of my knowledge, I did not. I</p> <p>18 asked them if they had lost any work, how they were</p> <p>19 feeling and the response was favorable. They said, "I</p> <p>20 feel fine."</p> <p>21 Q And just to be clear on the record, you did</p> <p>22 not ask any of them if they had experienced a loss of</p> <p>23 appetite when they developed the chloracne?</p> <p>24 A You mean I did not ask them in 1937 whether</p> <p>25 they had lost their appetite in 1935?</p> |

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| <p style="text-align: right;">Page 41</p> <p>1 Q No. When they had the chloracne.</p> <p>2 A Well, that's when they had the chloracne, in</p> <p>3 '35.</p> <p>4 Q I thought it was earlier.</p> <p>5 A Well, it was very -- Well, whenever they had</p> <p>6 the chloracne, no, I did not.</p> <p>7 Q And again to be clear for the record you did</p> <p>8 not ask any of the individuals whom you interviewed if</p> <p>9 they had experienced a loss of libido when they suffered</p> <p>10 the chloracne?</p> <p>11 A I did not in 1937 or '37 or whenever. I</p> <p>12 discussed their case with the workers that has chloracne</p> <p>13 and when they were working for the Swann company I did not</p> <p>14 ask in 1937 or '38 if they had loss of libido. No, I did</p> <p>15 not.</p> <p>16 Q And again, to be clear for the record, when</p> <p>17 you interviewed the workers you had read this article?</p> <p>18 A That's correct.</p> <p>19 Q You had also I believe talked to Dr. Alden or</p> <p>20 Jones?</p> <p>21 A I believe I had. I'm not sure I did.</p> <p>22 Q Before you interviewed the workers?</p> <p>23 A At some -- Yes. I'm not sure that I did. I</p> <p>24 mean, I'm not certain of that. That is fifty-five years</p> <p>25 ago.</p> | <p style="text-align: right;">Page 43</p> <p>1 in the color of Aroclors?</p> <p>2 A Well, I don't have any specific knowledge,</p> <p>3 but it may exist. I don't know.</p> <p>4 Q What would that indicate to you if there was</p> <p>5 a variation in colors?</p> <p>6 A I am not a manufacturing chemist. I cannot</p> <p>7 comment on that.</p> <p>8 Q On page 1030 at the bottom of the paragraph</p> <p>9 beginning, "In the beginning," it states -- and I'll read</p> <p>10 the sentence, "In the beginning an attempt at prevention</p> <p>11 of the condition was made by being especially careful that</p> <p>12 all men engaged in the manufacture of chlorinated diphenyl</p> <p>13 should have a thorough bath after working hours and that</p> <p>14 they should wear freshly laundered clothing before</p> <p>15 starting work." Would you consider a deviation from that</p> <p>16 practice as an unsafe practice?</p> <p>17 A No. It all depends on what the working</p> <p>18 conditions were. In other words, if this referred to the</p> <p>19 early days of manufacturing chlorinated biphenyl at</p> <p>20 Anniston, that's one thing. If it referred to after we</p> <p>21 had -- after the modernization of the plant and the</p> <p>22 improvement in the housekeeping and the improvement in</p> <p>23 ventilation they may not have had to do this.</p> <p>24 Q If a worker came up to you and he said, "Dr.</p> <p>25 Kelly, when should I have a thorough bath after working</p> |
| <p style="text-align: right;">Page 42</p> <p>1 Q Did you generate written materials as a</p> <p>2 result of your interview of those workers?</p> <p>3 A No, I did not, no. I think you're stating</p> <p>4 this interview, I saw these workers while they were</p> <p>5 working and I asked them if they had been -- some of the</p> <p>6 ones that had been seeing Dr. Jones and during the course</p> <p>7 while they were work, I talked to them about their present</p> <p>8 medical condition.</p> <p>9 Q Could we --</p> <p>10 A It was not a formal interview.</p> <p>11 Q Excuse me. Could we call that medical</p> <p>12 examination?</p> <p>13 A No. We could not.</p> <p>14 Q Did you interview them in an office type</p> <p>15 setting?</p> <p>16 A No, I saw them at their workplace.</p> <p>17 Q Doctor, can differences in the color of PCB's</p> <p>18 indicate impurities?</p> <p>19 A Yes.</p> <p>20 Q Did Monsanto publish documents which</p> <p>21 described variations in the color of certain Aroclors in</p> <p>22 the manufacturing process?</p> <p>23 A I don't know whether they did or not.</p> <p>24 Q As of this date you have no knowledge of</p> <p>25 documents published by Monsanto which describe variations</p>                     | <p style="text-align: right;">Page 44</p> <p>1 hours and wear freshly laundered clothing?" What would</p> <p>2 you tell him?</p> <p>3 A About what? He just walks in and asks</p> <p>4 anything?</p> <p>5 Q Yes. If he says, "Dr. Kelly, when should I</p> <p>6 have a thorough bath after working hours, and have freshly</p> <p>7 laundered clothing?" What would you tell him?</p> <p>8 MR. CARNEY: Are you talking about what</p> <p>9 period of time, what plant? Just generally a worker? Is</p> <p>10 he a PCB worker; is he in the Anniston plant?</p> <p>11 MR. McCREA: Let's say in 1958.</p> <p>12 Q (By Mr. McCrea) In 1958 if a worker called</p> <p>13 you from the Bloomington, Westinghouse plant and asked</p> <p>14 under what conditions he should have a thorough bath after</p> <p>15 working hours and have freshly laundered clothing, what</p> <p>16 would you tell him?</p> <p>17 MR. CARNEY: I'm going to object because I</p> <p>18 think the doctor doesn't have knowledge of the Bloomington</p> <p>19 plant.</p> <p>20 A I would tell him, "I don't know exactly how</p> <p>21 you're exposed. I don't know how much contact you've had</p> <p>22 with material. That is something for you to ask your</p> <p>23 supervisor, don't ask me." I don't know what his</p> <p>24 exposure -- I don't know what else he was exposed when</p> <p>25 they were outside of PCB's.</p>                                                                                                     |

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| <p style="text-align: right;">Page 45</p> <p>1 Q (By Mr. McCrea) If the worker asked you what<br/> 2 exposure would require a thorough bath after working hours<br/> 3 and wearing freshly laundered clothing, how would you<br/> 4 describe that exposure that would necessitate those<br/> 5 precautions?<br/> 6 A I would say if you have your -- In the first<br/> 7 place, I don't know if I would be in a position to comment<br/> 8 on this man's work over there. I would have to take that<br/> 9 into advisement -- under advisement. But as a general<br/> 10 recommendation I would say that if your clothes is --<br/> 11 clothes are soiled, soaked with the material you should<br/> 12 not wear those. You should talk a bath or a shower<br/> 13 immediately, or during your -- Shortly after such exposure<br/> 14 occurred.<br/> 15 Q And would you consider the failure to have a<br/> 16 thorough bath after working hours and wear freshly<br/> 17 laundered clothing under those circumstances an unsafe<br/> 18 practice?<br/> 19 MR. CARNEY: Well, I'm going to object to the<br/> 20 question. I think it leaves too many facts out. I don't<br/> 21 know what you're talking about again, what other chemicals<br/> 22 the person might be exposed to, what the extent of the<br/> 23 exposure -- There are too many factors there that you<br/> 24 haven't hypothesized. What time period, what plant, and<br/> 25 Dr. Kelly -- if you're referring to Bloomington again, he</p> | <p style="text-align: right;">Page 47</p> <p>1 (Reporter read back from the record as directed:<br/> 2 Q "Would you consider soaked and<br/> 3 saturated clothing on one day with no thorough bath and no<br/> 4 freshly laundered clothing as an unsafe working<br/> 5 condition?"<br/> 6 A I would consider if the person wore a<br/> 7 clothing that was saturated with PCB's and wore it for a<br/> 8 working day, that should in the be allowed.<br/> 9 Q (By Mr. McCrea) And would that be unsafe?<br/> 10 A That again depends. I don't know if that has<br/> 11 occurred. It's not been reported as causing any problems.<br/> 12 So I can't answer whether it's unsafe.<br/> 13 Q The next sentence states that, "These workers<br/> 14 were also instructed to apply night and morning veterinary<br/> 15 white lotion to the affected parts." Do you know what the<br/> 16 purpose of that was?<br/> 17 A I haven't the slightest idea.<br/> 18 Q Doctor, do you know any of the gentlemen<br/> 19 whose names are referenced in the abstracts of discussion<br/> 20 which begins at page 1033, Dr. Oliver S. Ormsby, Chicago?<br/> 21 A I do not know him.<br/> 22 Q Do you know Dr. Marion E. Sulzberger?<br/> 23 A I know him by reputation. He was a very<br/> 24 prominent dermatologist.<br/> 25 Q Dr. H.G. Irvine?</p> |
| <p style="text-align: right;">Page 46</p> <p>1 has indicated he's never seen that plant.<br/> 2 A It would have to be an assumption. I could<br/> 3 answer that as far as the Monsanto plant is concerned.<br/> 4 Q (By Mr. McCrea) What would your answer be as<br/> 5 far as Monsanto's plant is concerned?<br/> 6 A I would say that if you're exposed to PCB's<br/> 7 and your clothing is saturated with it at various areas<br/> 8 you should take a bath and change your clothing.<br/> 9 Q And would you also consider that an unsafe<br/> 10 working condition?<br/> 11 A Well, it depends how long it was repeated,<br/> 12 how often it was repeated. I don't know. I mean, you are<br/> 13 asking for an assumption that I'm not in a position to<br/> 14 give. I just don't have all the facts on it.<br/> 15 Q Weren't you asked to give expert testimony as<br/> 16 well as factual testimony as to the fact that if there<br/> 17 were safe working conditions there would be no risk from<br/> 18 PCB's?<br/> 19 A That's correct.<br/> 20 Q Would you consider soaked and saturated<br/> 21 clothing on one day with no thorough bath and no freshly<br/> 22 laundered clothing as an unsafe working condition?<br/> 23 A Are you saying then --<br/> 24 MR. CARNEY: Read that question back. I'm<br/> 25 not sure I --</p>                                                                                                                                                                | <p style="text-align: right;">Page 48</p> <p>1 A No, I do not know him. Know of him either.<br/> 2 Q Dr. Kelly, who is Herbert Blumenthal?<br/> 3 A Herbert Blumenthal is a Ph.D. who is United<br/> 4 States -- who's with the United States Public Health<br/> 5 Service -- I mean, the United States Department of<br/> 6 Agriculture.<br/> 7 Q Did you recall correspondence with Dr.<br/> 8 Blumenthal regarding PCB's?<br/> 9 A I know I've had correspondence with him. If<br/> 10 you show me it will refresh my memory.<br/> 11 Q All right, sir.<br/> 12 MR. McCREA: Could the court reporter mark<br/> 13 this as our next exhibit?<br/> 14 (Whereupon, Plaintiff's Deposition Exhibit No. 3<br/> 15 was marked for identification.)<br/> 16 Q (By Mr. McCrea) Dr. Kelly, can you identify<br/> 17 what is marked Plaintiff's Exhibit No. 3?<br/> 18 A Yes, sir.<br/> 19 Q What is that?<br/> 20 A This is a letter from me to Dr. Blumenthal.<br/> 21 Q Sir, if I could look over your shoulder, I<br/> 22 just have one copy of this. Did you authorize the<br/> 23 exhibit?<br/> 24 A Yes, I dictated it.<br/> 25 Q In the first sentence you state, "I thought</p>                                                                                                                                                        |

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| <p style="text-align: right;">Page 49</p> <p>1 you would be interested in knowing Monsanto is committed<br/> 2 to a program will allow the future use of our Aroclors<br/> 3 only in those applications where escape to the environment<br/> 4 can be prevented." First of all, for the jury are<br/> 5 Aroclors synonymous with PCB's?<br/> 6 A Some Aroclors are PCB's, some Aroclors are<br/> 7 not PCB's. There could be chlorinated terphenyls.<br/> 8 Q Could we substitute the word PCB's for<br/> 9 Aroclors and not change the impact of that first sentence?<br/> 10 A Yes.<br/> 11 Q When did Monsanto commit itself to a program<br/> 12 to prevent escape of PCB's on the environment?<br/> 13 A I can't answer that. I don't know the dates.<br/> 14 Q Will you describe that program for the jury<br/> 15 that existed on the date of April 8, 1970 as you described<br/> 16 to the U.S. Food and Drug Administration?<br/> 17 A Well, we -- first of all I said we committed<br/> 18 to the program, I don't know when we implemented the<br/> 19 program. But the program was to stop selling the material<br/> 20 for open uses. Open uses meaning plasticizers, paints,<br/> 21 lubricants and carbonless carbon paper. I don't know when<br/> 22 it was implemented but we were committed to do that. It<br/> 23 takes a little while to get the bureaucratic machinery<br/> 24 going.<br/> 25 Q The bureaucratic machinery at Monsanto?</p> | <p style="text-align: right;">Page 51</p> <p>1 escape of PCB's into the environment?<br/> 2 A I don't know when it was found that it was<br/> 3 getting into the food chain. I don't know the exact time<br/> 4 of that.<br/> 5 Q In what way would PCB's entering the food<br/> 6 chain be a risk to individuals?<br/> 7 A There might have been no risk at all. It<br/> 8 wasn't supposed to be in the food so we didn't want it<br/> 9 there.<br/> 10 Q Did you have any scientific information that<br/> 11 would suggest it was a risk?<br/> 12 A No, sir.<br/> 13 Q In 1970?<br/> 14 A No, sir.<br/> 15 Q Had you read about Yusho?<br/> 16 A Yes, sir. I believe I had at that -- I'm not<br/> 17 sure about the dates. I thought I was referring to the<br/> 18 United States food chain. There really wasn't in the food<br/> 19 chain, it was right in the food in Yusho.<br/> 20 Q And if it's in the food chain it's also in<br/> 21 the food, is it not?<br/> 22 A Well eventually, yes; but I think there's a<br/> 23 little difference between a compound getting into the<br/> 24 environment and going up the food chain and getting a<br/> 25 compound that -- pouring the material on your rice</p>                                                                                                                                                                                   |
| <p style="text-align: right;">Page 50</p> <p>1 A And it's customers, yes. You have to give<br/> 2 them a little time before you stop pulling the rug out<br/> 3 from under them, their raw materials.<br/> 4 Q Why did you implement that program at<br/> 5 Monsanto?<br/> 6 A Well, I didn't. The company implemented it.<br/> 7 Q Why did Monsanto implement that program?<br/> 8 A Because the material was getting into the<br/> 9 environment and it was contaminating the environment and<br/> 10 it was staying there and we did not want to add any<br/> 11 contaminant to the environment that could help -- that<br/> 12 would not be biodegradable.<br/> 13 Q In what way did the contamination of the<br/> 14 environment place the environment at risk as of April 8,<br/> 15 1970 as you understood it?<br/> 16 A It was hurting the reproduction of birds.<br/> 17 Q Did you consider that a fact that was<br/> 18 established in science?<br/> 19 MR. CARNEY: At what point?<br/> 20 MR. McCREA: On the date of April 8th, 1970?<br/> 21 A I'm not sure about the dates, but I felt<br/> 22 quite sure of it.<br/> 23 Q (By Mr. McCREA) Were there other<br/> 24 implications other than the reproduction of birds that<br/> 25 encouraged Monsanto to introduce this program to prevent</p>                                                                                                                                                     | <p style="text-align: right;">Page 52</p> <p>1 pancakes.<br/> 2 Q In April 8, 1970 did you consider the<br/> 3 presence of PCB's in the food chain as a serious problem?<br/> 4 A Well, serious problem from the point of<br/> 5 adulteration. I didn't consider it a serious problem from<br/> 6 the health aspects.<br/> 7 Q Do you consider it a serious problem today?<br/> 8 A No, sir.<br/> 9 Q If I called you up and asked you if you<br/> 10 consider PCB contamination of food a serious problem, your<br/> 11 answer today would be no?<br/> 12 A No, I didn't say that. I mean, it depends<br/> 13 how you contaminate it. If you were pouring PCB into a<br/> 14 batter for cake mix or something like that, that's<br/> 15 contamination, but if you mean by that the presence of<br/> 16 PCB's in the marketplace basket, it is not a problem.<br/> 17 Where it is actually ingested accidentally as it was in<br/> 18 Yusho and Yucheng, yes, that was a problem; but in the<br/> 19 United States it is not a problem.<br/> 20 Q If I called you up and asked you about the<br/> 21 environmental risks of owning a PCB transformer in a<br/> 22 substation next to a farmer's pasture, what explanation<br/> 23 would you give me as to the environmental risks and risks<br/> 24 of PCB's in the human food chain from the ownership of<br/> 25 that transformer in a substation?</p> |

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| <p style="text-align: right;">Page 53</p> <p>1 MR. CARNEY: Let me object to the question.<br/> 2 I don't understand the question. I think it's vague. Are<br/> 3 you talking about farm -- a transformer in the middle of a<br/> 4 farm crop? I don't understand what you're asking.<br/> 5 A I mean, if you want to describe -- Here we've<br/> 6 got this transformer on a pole in a farmer's field, right,<br/> 7 is that what you're talking about?<br/> 8 Q (By Mr. McCrea) Yes, sir.<br/> 9 A What's he got in that field?<br/> 10 Q He's got hay.<br/> 11 A I think the only risk he has if that<br/> 12 transformer leaks in the ground and there I think the<br/> 13 amount of material that would be there in relationship to<br/> 14 the amount of hay that a horse or a silage that a cow eats<br/> 15 would depend on how much, how big the transformer was, how<br/> 16 much got into the silage.<br/> 17 Q Could you explain those numbers to me if I<br/> 18 made inquiry of you?<br/> 19 A Well, if you tell me how big the transformer<br/> 20 is and how much PCB is in there and how much hay is going<br/> 21 to be contaminated I can explain it, but I can't make the<br/> 22 figures up myself for you.<br/> 23 Q If it contained two hundred gallons of PCB<br/> 24 oil and it was in a substation in the middle of a farmer's<br/> 25 field?</p> | <p style="text-align: right;">Page 55</p> <p>1 temperature of the fire.<br/> 2 A I mean --<br/> 3 MR. CARNEY: I think you're asking questions<br/> 4 difficult to answer without the facts.<br/> 5 Q (By Mr. McCrea) What would your advice be to<br/> 6 me if I asked you if it was safe to own that transformer<br/> 7 in that substation with two hundred gallons of PCB oil<br/> 8 surrounded by a field in which there was hay consumed by<br/> 9 cattle?<br/> 10 MR. CARNEY: And no leaking.<br/> 11 MR. McCREA: No leaking.<br/> 12 A I'd say it was safe.<br/> 13 Q (By Mr. McCrea) If I asked you the same<br/> 14 question today about a transformer in a building that had<br/> 15 no leaks, no malfunctions, contained two hundred gallons<br/> 16 of PCB oil; would there be any risk in your opinion to the<br/> 17 ownership of that transformer?<br/> 18 A Well, there's always a risk if it burned.<br/> 19 Q And what would that risk be?<br/> 20 A That the transformer would spill out the<br/> 21 fluids and that during the fire PCB's could be ignited,<br/> 22 they could be -- benzofurans could be formed in a<br/> 23 transformer, there's trichlorobenzene in there which could<br/> 24 form dioxins. They could be disseminated through the<br/> 25 building. Certainly there's that risk.</p>                                                                                                                                     |
| <p style="text-align: right;">Page 54</p> <p>1 A Wait. We're talking about transformer in a<br/> 2 pole the first time; now we're talking about dug down in<br/> 3 the bottom below a farmer's field?<br/> 4 Q No, in a substation.<br/> 5 A Substation in his field?<br/> 6 Q Right.<br/> 7 A And you've got two hundred gallons in this?<br/> 8 Q Right.<br/> 9 A It's a pretty big substation. And it leaked?<br/> 10 Q No, it didn't leak.<br/> 11 A No.<br/> 12 Q It was just sitting there perking along?<br/> 13 A Well, it was no problem. As long as it was<br/> 14 contained there was no problem.<br/> 15 Q Would there be any risk to me as owner of<br/> 16 that transformer in that as I described to you, a<br/> 17 transformer in a substation with two hundred gallons of<br/> 18 PCB oil surrounded by a pasture of hay used to feed<br/> 19 cattle?<br/> 20 A Well, the only risk would be if it leaks.<br/> 21 Q Would that be a risk?<br/> 22 A Yes, if you spill two hundred gallons out of<br/> 23 it into his field, yes.<br/> 24 Q What if it burned?<br/> 25 MR. CARNEY: Can you give us some idea of the</p>                                                                                                                                                                                                                                    | <p style="text-align: right;">Page 56</p> <p>1 Q And how would you explain the health<br/> 2 consequences of that particular fire and spread of furans<br/> 3 throughout able?<br/> 4 MR. CARNEY: Let me -- I don't know what you<br/> 5 mean by health consequences as opposed to having a<br/> 6 flammable transformer without the PCB oils, are you trying<br/> 7 to evaluate the relative risk of a PCB transformer versus<br/> 8 a non-PCB transformer.<br/> 9 MR. McCREA: No. I'm just asking him to<br/> 10 explain the health consequence to the people in the<br/> 11 building if the furans were contaminated.<br/> 12 A Well, I think in the first place once a fire<br/> 13 starts in the building everybody gets out. So it depends<br/> 14 how fast you get out whether there's any risk or not. If<br/> 15 you aren't burned up, if you get out in time that you<br/> 16 aren't suffering from the consequences of the risk, you<br/> 17 won't have any risk, you will get out.<br/> 18 Q (By Mr. McCrea) What if you don't? What if<br/> 19 you're in there for twenty-four hours and you are exposed<br/> 20 to the furans permeating the building?<br/> 21 A How much exposure you've got to tell me.<br/> 22 Q Well, I'm asking you for your evaluation.<br/> 23 I'm making an inquiry of you and I want you to explain it<br/> 24 to me with just the facts that have been given to me?<br/> 25 A Well, you haven't given me any facts.</p> |

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| <p style="text-align: right;">Page 57</p> <p>1 MR. CARNEY: Well, I'll object. You are</p> <p>2 saying somebody is in a building burning for twenty-four</p> <p>3 hours?</p> <p>4 MR. McCREA: No, I'm asking, Tom, I'm asking</p> <p>5 him, Dr. Kelly, if I owned a transformer in a building</p> <p>6 that contained PCB oil what are the risks of owning that</p> <p>7 transformer in that situation?</p> <p>8 MR. CARNEY: That wasn't the question you</p> <p>9 asked.</p> <p>10 MR. McCREA: Well, let's make that the</p> <p>11 question.</p> <p>12 A Is that the question?</p> <p>13 Q (By Mr. McCrea) Yes.</p> <p>14 A Well, the risks are that if there's a fire</p> <p>15 and the contents of that transformer, which are</p> <p>16 trichlorobenzene and trichlor -- chlorinated biphenyl, two</p> <p>17 different compounds are ignited and the fire is hot enough</p> <p>18 to reach certain temperature levels and not go to a level</p> <p>19 of which the material is completely disintegrated then</p> <p>20 there is a risk of these contaminants, these added</p> <p>21 compounds being formed. The amount of risk depends upon</p> <p>22 the exposure a person has, and I can't say how much</p> <p>23 exposure a person is going to have in that building.</p> <p>24 Q If I asked you if I should continue to own</p> <p>25 that transformer knowing the risks that you know, what is</p>                                                                          | <p style="text-align: right;">Page 59</p> <p>1 the products of the fire, of combustion, from being</p> <p>2 disseminated through the building, which would minimize</p> <p>3 the risk very markedly. So it would be my opinion you</p> <p>4 have to weigh all these factors.</p> <p>5 Q Weighing all the factors, if I asked you, Dr.</p> <p>6 Kelly, what's the end line, should I replace it with a</p> <p>7 transformer with more risk of fire or should I keep the</p> <p>8 PCB transformer with its risk, what's the bottom line?</p> <p>9 A I would say it varies with the conditions but</p> <p>10 I would believe that the PCB transformer is less risk than</p> <p>11 the one with an oil containing transformer.</p> <p>12 Q Dr. Kelly, the next sentence on Plaintiff's</p> <p>13 Exhibit No. 3 which is the second paragraph, states,</p> <p>14 "Secondly --" and excuse me if I can look over your</p> <p>15 shoulder, "We have essentially a crash program underway to</p> <p>16 find non-persistent, non-chlorinated substitute products."</p> <p>17 Who initiated the crash program at Monsanto?</p> <p>18 A I think it was the division that manufactured</p> <p>19 the PCB's, the division meaning the research, the sales,</p> <p>20 the marketing and the manufacturing group of the organic</p> <p>21 division, which was one of the four manufacturing</p> <p>22 divisions in the company.</p> <p>23 Q And who were the individuals who initiated</p> <p>24 that crash program that you have described in your letter</p> <p>25 to the U.S. Food and Drug Administration?</p> |
| <p style="text-align: right;">Page 58</p> <p>1 your answer?</p> <p>2 A I think I would have to equate that with what</p> <p>3 I would do -- of what substitute I had. Do I run the risk</p> <p>4 of a fire that would be enormously more extensive with an</p> <p>5 oil filled transformer, or do I run the possible risk of</p> <p>6 adverse consequences from the PCB fire? I don't know.</p> <p>7 Q So if I called you and asked you if I should</p> <p>8 continue the ownership of that transformer your answer</p> <p>9 would be you don't know?</p> <p>10 A No. I don't think I said that, you are</p> <p>11 talking to me at --</p> <p>12 Q Well, your answer --</p> <p>13 A Well, I would say if I -- I would say I would</p> <p>14 not -- I would weigh both factors and I would -- and</p> <p>15 depending on whether or not the individual thought that</p> <p>16 there was a more serious problem relating to a use of a</p> <p>17 flammable material in the transformer or a PCB containing</p> <p>18 fluid, if he thought there was more likelihood of a danger</p> <p>19 from the oil I would say keep on using it. Now speaking</p> <p>20 as of today you're talking about?</p> <p>21 Q Right, 1990?</p> <p>22 A Well, speaking as of 1990 I would say then</p> <p>23 you should be in a position to insure that if that</p> <p>24 eventuality occurs in which a PCB transformer burns there</p> <p>25 should be methods to keep the material from the soot and</p> | <p style="text-align: right;">Page 60</p> <p>1 A I think Minkler was one, who was I believe of</p> <p>2 the head of it at that time. I don't know. I don't</p> <p>3 remember the other names at present, but Howard Minkler</p> <p>4 was to my impression, the best of my recollection the</p> <p>5 vice-president in charge of that particular division in</p> <p>6 April of 1970.</p> <p>7 Q Where was the research being done for the</p> <p>8 crash program?</p> <p>9 A At St. Louis. Maybe it was done at Dayton</p> <p>10 also.</p> <p>11 Q Did Monsanto develop a non-persistent,</p> <p>12 non-chlorinated substitute product?</p> <p>13 A I don't know if they did subsequent to my</p> <p>14 departure. I don't know if we had developed one or not.</p> <p>15 Q What were the non-persistent, non-chlorinated</p> <p>16 substitute products that were the subject of the crash</p> <p>17 program in April, 1970.</p> <p>18 A I haven't the slightest idea. There were</p> <p>19 phthalates, there were silicones, there were a whole</p> <p>20 battery of them. I don't know what they -- and they might</p> <p>21 have looked at a hundred different potential products.</p> <p>22 Q When was that crash program started?</p> <p>23 A As I said I don't know it was implemented. I</p> <p>24 know that they were committed in April of 1970. I don't</p> <p>25 know when the research program started.</p>                                                                                                                                                                              |

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| <p style="text-align: right;">Page 61</p> <p>1 Q Did you inform Westinghouse that you had<br/> 2 initiated a crash program to find non-persistent,<br/> 3 non-chlorinated substitute products as you informed the<br/> 4 U.S. Food and Drug Administration?<br/> 5 A You mean me personally?<br/> 6 Q Yes, sir.<br/> 7 A No. I think that's commercial matters that<br/> 8 the marketing group or technical service people would have<br/> 9 done, not me.<br/> 10 Q Do you know if Monsanto Company gave the same<br/> 11 information to Westinghouse that they are giving to the<br/> 12 U.S. Food and Drug Administration that describes a crash<br/> 13 program for non-persistent, non-chlorinated substitute<br/> 14 products?<br/> 15 A No, I don't know.<br/> 16 Q Why did you tell the U.S. Food and Drug<br/> 17 Administration that you were initiating a crash program,<br/> 18 what's the relevance of that to them?<br/> 19 A Well, I don't know what the relevance is, but<br/> 20 I thought Herb and I were good friends and I thought I<br/> 21 would let him know how we were coming along. He was<br/> 22 interested in the same things we were interested in, in<br/> 23 keeping it out of the food, and if -- I was telling him<br/> 24 that not only were we going to cut down the uses where it<br/> 25 could escape into the environment but we're doing our best</p> | <p style="text-align: right;">Page 63</p> <p>1 wrote this letter?<br/> 2 A Did I research what information? Whether the<br/> 3 customers were using some of our product or somebody<br/> 4 else's product.<br/> 5 Q The names of the two large users and the type<br/> 6 of products they were switching to?<br/> 7 A Well, I'm sure I had known that two companies<br/> 8 were using other products instead of PCB's, but when you<br/> 9 say research it, I don't know what you mean by that. I<br/> 10 knew enough to write them a letter and say two of these<br/> 11 people, two large producers were getting out PCB's.<br/> 12 Q Have you ever been asked about this letter in<br/> 13 any other depositions that you've given for Monsanto?<br/> 14 A I don't recall.<br/> 15 Q Next sentence, "Obviously, Herb, you can<br/> 16 recognize the competitive aspect of developing and phasing<br/> 17 into sales such time of substitutes, so at present we are<br/> 18 not making any widespread announcement." Would you<br/> 19 explain why you are telling the U.S. Food and Drug<br/> 20 Administration that information?<br/> 21 A I don't know what my mindset was at that<br/> 22 time, but I think it speaks for itself. We are trying to<br/> 23 get out of the PCB's, and we haven't reached a point where<br/> 24 we said we are going to get out of it because we don't<br/> 25 know when a substitute will be available.</p>                                                                     |
| <p style="text-align: right;">Page 62</p> <p>1 to try to eliminate PCB's all together in those uses, in<br/> 2 all uses.<br/> 3 Q The next sentence states, "Already we have<br/> 4 two large users switching to substitutes of this type."<br/> 5 Period. Who were these two large users?<br/> 6 A I don't know, but I do not believe they're in<br/> 7 the electrical field. They may very well have been in the<br/> 8 plasticizer field. I would imagine they were the<br/> 9 plasticizers.<br/> 10 Q And today as you sit here you do not recall<br/> 11 who the two large users were?<br/> 12 A No, I do not. I do not even know what field<br/> 13 they were in.<br/> 14 Q Did you on the day you wrote the letter?<br/> 15 A I'm sure I did.<br/> 16 Q And you say switching to substitutes of this<br/> 17 type," what substitutes are you referring to in your<br/> 18 letter to the U.S. Food and Drug Administration?<br/> 19 A If I'm -- They were I'm going to say<br/> 20 non-persistent, non-chlorinated substitute products. I<br/> 21 don't know which ones they were. They were very probably<br/> 22 of the phthalate group, p-h-t-h-a-l-a-t-e.<br/> 23 Q Were they manufactured by Monsanto?<br/> 24 A I don't know.<br/> 25 Q Did you research the information before you</p>                                                                                           | <p style="text-align: right;">Page 64</p> <p>1 Q Well, aren't you saying that we don't want<br/> 2 everybody to know we're getting out of the PCB business<br/> 3 because if we did they would capture the market on<br/> 4 substitute fluids, so we're going to keep that information<br/> 5 ourselves, develop our own substitute fluids and retain<br/> 6 the market, is that what that says?<br/> 7 A Of course not. Keep it ourselves? I'm<br/> 8 writing to the government and I'm keeping it to myself?<br/> 9 Q Well, I don't know about that, but it says we<br/> 10 are not making any widespread announcements?<br/> 11 A That's right; but after all there were two<br/> 12 large users that were switching. I don't know if they<br/> 13 switched to substitutes of ours or substitutes of somebody<br/> 14 else, but they knew we were doing our best to get people<br/> 15 out. We had already told customers that we are cutting<br/> 16 down the use of the material in not allowing for<br/> 17 applications where it could get out. So I don't see<br/> 18 anything wrong with what I told Herb.<br/> 19 Q It says, "You can recognize the competitive<br/> 20 aspects of developing and phasing into sales such type of<br/> 21 substitutes so at present we are not making any widespread<br/> 22 announcement," isn't that so you can retain the sales<br/> 23 market?<br/> 24 A No, it really isn't, because we're not the<br/> 25 only people manufacturing these fluids. We're not even</p> |

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| <p style="text-align: right;">Page 65</p> <p>1 talking -- you know, I'm not saying, I don't know who<br/>2 these -- what fields these other users were in.<br/>3 Q Dr. Kelly, isn't it a fact that you were the<br/>4 only company in the United States making PCBs?<br/>5 A That's true.<br/>6 Q And you knew that if PCB's are eliminated<br/>7 substitute fluids will be used?<br/>8 A If they work, yes.<br/>9 Q And you wanted the market on the substitute<br/>10 fluids?<br/>11 A No, that is not correct. Of course we were<br/>12 in the business, we wanted to have as good a chance as<br/>13 anybody, if they liked our fluid, fine. But nobody had a<br/>14 fluid at that particular time that could use to -- that<br/>15 could do all the things that's PCB's could do.<br/>16 Plasticizers are -- fifty different plasticizers could be<br/>17 used.<br/>18 Q That's -- Go ahead.<br/>19 A I don't know what else you want me to say?<br/>20 Ask me a question.<br/>21 Q Why didn't you make a widespread announcement<br/>22 that you had this crash program and you were making<br/>23 substitute?<br/>24 A That's a marketing decision and I didn't have<br/>25 nothing to do with it.</p> | <p style="text-align: right;">Page 67</p> <p>1 Q But you've testified to it a number of times,<br/>2 Dr. Kelly?<br/>3 A Well, certainly I have, but I mean, I don't<br/>4 know if I've seen the entire program. I've seen parts of<br/>5 it.<br/>6 Q The last sentence states, "On the other hand,<br/>7 if the publicity gets as red hot as it did in the case of<br/>8 DDT we may be forced to make such an announcement at any<br/>9 time." What do you mean by that statement?<br/>10 A Well, I think some decisions are made on<br/>11 scientific bases, some are made on commercial bases, some<br/>12 are made on emotional bases and some are made on political<br/>13 bases. In the case of DDT, here was a wonderful product<br/>14 that wiped out probably a hundred million malaria deaths<br/>15 that was banned because of emotional and political<br/>16 reasons.<br/>17 So that's what I mean, they had some very red hot<br/>18 publicity. Now if such an emotional and political<br/>19 situation occurred we would be forced to make such an<br/>20 announcement. By such an announcement I guess I refer to<br/>21 we're getting out of all the sales and we're doing our<br/>22 best to make a product that doesn't have these things in<br/>23 it.<br/>24 Q Did you ever make such an announcement to the<br/>25 public?</p>                                                                                              |
| <p style="text-align: right;">Page 66</p> <p>1 Q Well, can you explain it? You wrote the<br/>2 letter?<br/>3 A I can't explain it. I just said we're not<br/>4 making any widespread announcements.<br/>5 Q You don't know why?<br/>6 A I do not know the marketing responsibilities<br/>7 of a supplier to his customer. I don't know what the<br/>8 marketing people had in mind; whether or not they could<br/>9 say to a customer, we're getting out right now. I don't<br/>10 know what the Monsanto reasons were. I'm afraid you'll<br/>11 have to ask someone else.<br/>12 Q You didn't tell Westinghouse about this<br/>13 information?<br/>14 MR. CARNEY: Well, objection. I don't think<br/>15 that was his testimony.<br/>16 A I said before, I said I would not be the<br/>17 person to talk to a customer. It would be the marketing<br/>18 people, the development people.<br/>19 Q (By Mr. McCrea) Have you seen documents at<br/>20 Monsanto which described the crash program?<br/>21 A In its entirety?<br/>22 Q Right.<br/>23 A I may have.<br/>24 Q You don't recall that?<br/>25 A No. After twenty years I don't think I do.</p>                                                        | <p style="text-align: right;">Page 68</p> <p>1 A We certainly made announcements we were<br/>2 getting out of the material. I don't know if we made any<br/>3 announcements that we were working on substitute<br/>4 materials, that's a sales and marketing situation. I<br/>5 don't know whether they did or not.<br/>6 Q As you sit here today based on your years<br/>7 with Monsanto and all of your testimony you don't know if<br/>8 this announcement to which you have referred and which you<br/>9 describe in your Plaintiff's Exhibit No. 3 was ever made?<br/>10 MR. CARNEY: Well, which announcement are you<br/>11 talking about? I think there's several things.<br/>12 MR. McCREA: It says, "We may be forced to<br/>13 make such an announcement at any time."<br/>14 A I find it a little hard to say what<br/>15 announcements I'm talking about, but certainly I know we<br/>16 made two very definite announcements. One, we're getting<br/>17 out of all the open uses of PCB's. No. 2, we're getting<br/>18 out all uses of PCB's and discontinuing use and -- the<br/>19 manufacture and sale of it. We made these two<br/>20 announcements. Whether or not we made the announcements<br/>21 we've got a substitute for this or if we ever had a<br/>22 substitute of what percentage of the market we ever had, I<br/>23 don't know.<br/>24 Q (By Mr. McCrea) Did DDT cause adverse<br/>25 environmental effects?</p> |

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| <p style="text-align: right;">Page 69</p> <p>1 A Yes. It caused thinning of birdshell eggs.</p> <p>2 Q Anything else?</p> <p>3 A No. Not that I can recall.</p> <p>4 Q Dr. Kelly, isn't it a fact that at the time</p> <p>5 of this letter Monsanto was using PCB's in pesticides to</p> <p>6 extend the kill life?</p> <p>7 A No, it was not. That was a recommendation</p> <p>8 made by the Department of Agriculture, as extender in</p> <p>9 pesticides. To the best of my knowledge I have seen the</p> <p>10 Department of Agriculture recommendation but it certainly</p> <p>11 was an extremely small portion of the PCB business and I</p> <p>12 doubt very much -- there may be an isolated Monsanto</p> <p>13 statement about its use, but I don't recall seeing it in</p> <p>14 technical bulletins.</p> <p>15 Q Dr. Kelly, you don't recall any publications</p> <p>16 of Monsanto in which they stated that PCB's extend the</p> <p>17 kill life of pesticides by up to ten years?</p> <p>18 A I may have seen them referring to Department</p> <p>19 of Agriculture work, they may have quoted Department of</p> <p>20 Agriculture findings.</p> <p>21 Q Did Monsanto have any customers to which it</p> <p>22 sold PCB's to use as an extender in pesticides to --</p> <p>23 A I don't know if it did or not.</p> <p>24 Q Monsanto had a wood treatment operation,</p> <p>25 correct?</p> | <p style="text-align: right;">Page 71</p> <p>1 let me look at it and it may refresh my memory I may know</p> <p>2 something about it. I don't recall at the present time.</p> <p>3 It was certainly not a very prominent feature of PCB's,</p> <p>4 let me tell you.</p> <p>5 Q But it could be?</p> <p>6 A Possibly, if they experimented with it. I</p> <p>7 don't know if they ever marketed for it. I don't recall</p> <p>8 it.</p> <p>9 Q Are you familiar with any test grounds at</p> <p>10 Florida State University in which PCB's were used as a</p> <p>11 termiticide in wood by Monsanto?</p> <p>12 A I have heard something about that. They did</p> <p>13 have experimental -- they did some experiment on -- I</p> <p>14 don't know, soaking PCB's or soaking posts in PCB's and</p> <p>15 putting it in the ground and I think they used it after</p> <p>16 the question of nonbiodegradability came in, they checked</p> <p>17 it to see -- they checked those areas, but I don't recall</p> <p>18 of ever having any sales effort or marketing effort</p> <p>19 devoted to the use of PCB's as a wood treating chemical.</p> <p>20 Q Do you recall the years in which Monsanto was</p> <p>21 experimenting with PCB's by soaking wood posts in the</p> <p>22 chemical?</p> <p>23 A No, and I'm not even sure if they just soaked</p> <p>24 the wood. I don't know how they did it. I just heard</p> <p>25 that sometime after I left the company. I don't know when</p> |
| <p style="text-align: right;">Page 70</p> <p>1 A Yes, it did.</p> <p>2 Q And you manufactured pentachlorophenol?</p> <p>3 A Yes, we did.</p> <p>4 Q And did you manufacture other wood</p> <p>5 preservatives?</p> <p>6 A Sodium pentachlorophenolate, which was a sodium</p> <p>7 salt of pentachlorophenol.</p> <p>8 Q Did you use PCB's as a termiticide?</p> <p>9 A Not that I ever heard of.</p> <p>10 Q As you sit here today you have no knowledge</p> <p>11 of Monsanto experimenting with PCB's as a termiticide for</p> <p>12 a wood protection?</p> <p>13 A That's a little different than what you said.</p> <p>14 You said did they ever use it as a -- I understand by</p> <p>15 using it did they offer for sale as a termiticide. I do</p> <p>16 not know whether or not they ever experimented with it or</p> <p>17 not. I don't know. I have seen no articles on it.</p> <p>18 Q Do you know Robert Arceneaux?</p> <p>19 A I recognize the name. I cannot tag him with</p> <p>20 any position or anything in the company.</p> <p>21 Q If he has described experiments by Monsanto</p> <p>22 in using PCB's to kill termites as a wood preservative,</p> <p>23 that information is new to you?</p> <p>24 A It all depends. I would think so, but if you</p> <p>25 will give me what information he is supposed to have said,</p>                                                         | <p style="text-align: right;">Page 72</p> <p>1 I heard it.</p> <p>2 Q Monsanto sold its wood preserving business to</p> <p>3 Koppers, correct?</p> <p>4 A I don't know to whom they sold, they disposed</p> <p>5 of it. They hadn't sold it by the time I left, but I</p> <p>6 don't believe they are in the wood treating business</p> <p>7 anymore.</p> <p>8 Q With respect to Plaintiff's Exhibit 3, which</p> <p>9 is your letter to Herb Blumenthal, dated April 8, 1970,</p> <p>10 did you receive inquiries from him before you wrote this</p> <p>11 letter?</p> <p>12 A I don't think so, and if I did I would have</p> <p>13 very probably said, "In reference to your letter and so</p> <p>14 and so, here is the information."</p> <p>15 Q Did you authorize this letter or did you sign</p> <p>16 it or did you do both?</p> <p>17 A I did both. That's my secretary's initials.</p> <p>18 Q But the information contained in the letter</p> <p>19 was your information, not information supplied to you. In</p> <p>20 other words, you knew and understood what was being</p> <p>21 stated?</p> <p>22 A Well, I got it from somebody.</p> <p>23 MR. CARNEY: I'm going to object.</p> <p>24 Q (By Mr. McCrea) Somebody didn't come in to</p> <p>25 you with a letter and say, "Dr. Kelly, could you sign this</p>                                                                                                                                                            |

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| <p style="text-align: right;">Page 73</p> <p>1 and send it to Herb Blumenthal?"</p> <p>2 A They certainly did not.</p> <p>3 Q Dr. Kelly, you retired from Monsanto Company</p> <p>4 in 1974, is that correct?</p> <p>5 A That's correct.</p> <p>6 Q When you retired did you own stock in</p> <p>7 Monsanto Company?</p> <p>8 A Yes, I did.</p> <p>9 Q Do you own stock in Monsanto Company today?</p> <p>10 A Yes, sir.</p> <p>11 Q Now I -- Do you know the value of that stock?</p> <p>12 A I haven't looked lately. It's been going</p> <p>13 down.</p> <p>14 Q Do you know the approximate value of all of</p> <p>15 your stock ownership in Monsanto Company?</p> <p>16 A 90,000, something like that.</p> <p>17 Q And do any other family members have stock</p> <p>18 ownership in Monsanto?</p> <p>19 A Small amounts.</p> <p>20 Q Do you know what --</p> <p>21 A Ten thou --</p> <p>22 Q Excuse me. Do you know what that would</p> <p>23 total?</p> <p>24 A Ten thousand dollars.</p> <p>25 Q Do you have what generally could be referred</p>                                                                                                                                                               | <p style="text-align: right;">Page 75</p> <p>1 monitoring program of Westinghouse for its workers --</p> <p>2 A No, sir.</p> <p>3 Q -- exposed to PCB's?</p> <p>4 A No, sir.</p> <p>5 Q Do you know if Westinghouse had a medical</p> <p>6 monitoring program for its workers exposed to PCB's?</p> <p>7 A No, sir, I do not.</p> <p>8 Q Did you ever establish a written protocol for</p> <p>9 medical monitoring of workers exposed to PCB's?</p> <p>10 A No, sir.</p> <p>11 Q Were you ever asked to describe a medical</p> <p>12 monitoring program for workers exposed to PCB's by any</p> <p>13 individual from Westinghouse Electric Corporation?</p> <p>14 A No, sir. You must remember that Westinghouse</p> <p>15 Electric was a very sophisticated medical organization.</p> <p>16 It antedated mine, was bigger than the Monsanto and they</p> <p>17 knew all about PCB's. They knew how the workers were</p> <p>18 exposed, which I didn't.</p> <p>19 MR. McCREA: Going to ask that that answer</p> <p>20 be stricken and that Doctor, could you -- Could the court</p> <p>21 reporter reread the question and could you answer the</p> <p>22 question?</p> <p>23 THE WITNESS: I thought I did.</p> <p>24 MR. CARNEY: Well, I'm going to object to the</p> <p>25 motion to strike, because I think the doctor did answer</p> |
| <p style="text-align: right;">Page 74</p> <p>1 to as stock options at this time, can you increase your</p> <p>2 stock ownership?</p> <p>3 A Only by going out in the open market and</p> <p>4 buying it. I have no stock options.</p> <p>5 Q Did you know any of the individuals at the</p> <p>6 Bloomington Westinghouse plant from 1957 which I will</p> <p>7 represent to you is the day I understand it opened until</p> <p>8 today?</p> <p>9 A No, sir.</p> <p>10 Q Did you know any of the --</p> <p>11 MR. CARNEY: Would you read that last</p> <p>12 question back? I just didn't hear it. I didn't hear the</p> <p>13 dates.</p> <p>14 MR. McCREA: 1957 to today.</p> <p>15 MR. CARNEY: Okay. You don't need to read</p> <p>16 it.</p> <p>17 Q (By Mr. McCrea) Did you know any of the</p> <p>18 individuals at the Muncie, Indiana transformer plant from</p> <p>19 the date it opened in the fifties to this date?</p> <p>20 A No, sir.</p> <p>21 Q Did you know any of the individuals at the</p> <p>22 Westinghouse transformer repair facility in Cincinnati,</p> <p>23 Ohio at any point in time up to and including today?</p> <p>24 A No, sir.</p> <p>25 Q Can you describe to the jury the medical</p> | <p style="text-align: right;">Page 76</p> <p>1 the question. You just didn't like the answer.</p> <p>2 MR. McCREA: Didn't say I didn't like the</p> <p>3 answer. I want the answer.</p> <p>4 Could the court reporter please reread the</p> <p>5 question?</p> <p>6 (Reporter read back from the record as directed:</p> <p>7 Q "Were you ever asked to describe a</p> <p>8 medical monitoring program for workers exposed to PCB's by</p> <p>9 any individual from Westinghouse Electric Corporation?")</p> <p>10 MR. CARNEY: Why don't you read the answer?</p> <p>11 (Reporter read back from the record as directed:</p> <p>12 A "No, sir. You must remember that</p> <p>13 Westinghouse Electric has a very sophisticated medical</p> <p>14 organization. At any date --")</p> <p>15 THE WITNESS: Antedated, a-n-t-e-d-a-t-e-d.</p> <p>16 ("-- antedated ours, was bigger than Monsanto</p> <p>17 and they knew all about PCB's. They knew how the workers</p> <p>18 were exposed, which I didn't.")</p> <p>19 Q (By Mr. McCrea) Who told you about the</p> <p>20 manner in which the workers were exposed to PCB's at</p> <p>21 Westinghouse?</p> <p>22 A Nobody. I said I didn't know how they were</p> <p>23 exposed.</p> <p>24 Q You said you knew how the workers were</p> <p>25 exposed?</p>                                   |

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| <p style="text-align: right;">Page 77</p> <p>1 A I said I didn't know. They knew, yes. They</p> <p>2 were manufacturing it, they were using it.</p> <p>3 Q Okay. What is the source of your information</p> <p>4 there?</p> <p>5 A I guess it's common sense. If you have a</p> <p>6 company that is using a material and it's in their plant</p> <p>7 they know how they are using it, they know how their</p> <p>8 workers are exposed.</p> <p>9 Q How were your workers exposed?</p> <p>10 A They were exposed during the filling, during</p> <p>11 leaks in pumps, they were exposed during changes in pumps,</p> <p>12 they were exposed during flushing out of lines.</p> <p>13 Q Were you exposed by fires?</p> <p>14 A No, sir. We didn't have any fires.</p> <p>15 Q Were there any other ways in which your</p> <p>16 workers were exposed?</p> <p>17 A Well, they may have been exposed by cleaning</p> <p>18 parts of the equipment.</p> <p>19 Q And that's common sense?</p> <p>20 A Beg your pardon?</p> <p>21 Q That's common sense?</p> <p>22 MR. CARNEY: Well, I don't know what you mean</p> <p>23 by common sense. You're --</p> <p>24 Q (By Mr. McCrea) Well, strike it. Were there</p> <p>25 any other ways that your workers were exposed?</p>                                                                      | <p style="text-align: right;">Page 79</p> <p>1 Q Right. Amend, change?</p> <p>2 A Well, not change, well, I'll amplify one.</p> <p>3 Q All right, sir?</p> <p>4 A At the close of one deposition you asked me</p> <p>5 did you put on the label, on PCB's, that it could kill</p> <p>6 you, and I said no. I'd like to amplify that by saying;</p> <p>7 We manufacture aspirin; aspirin if you take too much of it</p> <p>8 will kill you, we don't put that on the label. People</p> <p>9 manufacture iron pills; if you take enough iron pills that</p> <p>10 will kill you. There are probably four hundred thousand</p> <p>11 industrial chemicals that will kill people if you take too</p> <p>12 many. None of those are put on the label.</p> <p>13 Q Any other answers that you would like to</p> <p>14 amend or modify; amplify in any way?</p> <p>15 A No; but I presumably will see the deposition</p> <p>16 to correct it for errors.</p> <p>17 Q Absolutely correct. Dr. Kelly, have you</p> <p>18 reviewed any depositions of any of the plaintiffs in this</p> <p>19 case?</p> <p>20 A No, sir.</p> <p>21 Q Did you consult with Monsanto Company or the</p> <p>22 attorneys regarding questions to be addressed by Monsanto</p> <p>23 to the plaintiffs in this case? Did you help them prepare</p> <p>24 questions?</p> <p>25 A No, sir. There may have been</p>                               |
| <p style="text-align: right;">Page 78</p> <p>1 A I can't think of any.</p> <p>2 Q Were there vapors?</p> <p>3 A Well, yes. I said during filling, material</p> <p>4 came out hot.</p> <p>5 MR. McCREA: Break.</p> <p>6 (Whereupon, a short break was taken.)</p> <p>7 Q (By Mr. McCrea) Dr. Kelly, we're back on the</p> <p>8 record. Dr. Kelly, during the time that we had the</p> <p>9 continuance of the deposition were there any materials</p> <p>10 that you reviewed or any answers which you gave that you</p> <p>11 would like to bring to your attention?</p> <p>12 MR. CARNEY: Read that question back --</p> <p>13 MR. McCREA: It's a compound question, let</p> <p>14 me break it down.</p> <p>15 Q (By Mr. McCrea) Dr. Kelly, we had two days</p> <p>16 of depositions a week ago or so, following the continuance</p> <p>17 of the deposition during that interim time, were there any</p> <p>18 materials that you reviewed as those materials relate to</p> <p>19 answers you gave which you would like to bring to our</p> <p>20 attention and if so what are those materials?</p> <p>21 A No, sir.</p> <p>22 Q And the same question for any answers, were</p> <p>23 there any answers which you gave which upon thinking about</p> <p>24 them you would like to amplify them in any way?</p> <p>25 A To amplify?</p> | <p style="text-align: right;">Page 80</p> <p>1 interrogatories, but I don't even know if I did that.</p> <p>2 Q I appreciate that, and I think you answered</p> <p>3 it. You didn't sit down with them and say, "Why don't you</p> <p>4 ask this set of questions?" This might be helpful to our</p> <p>5 case."</p> <p>6 A No, sir.</p> <p>7 MR. McCREA: Could the court reporter mark</p> <p>8 this as Plaintiff's Exhibit 4, I believe?</p> <p>9 (Whereupon, Plaintiff's Deposition Exhibit No. 4</p> <p>10 was marked for identification.)</p> <p>11 Q Dr. Kelly, during the depositions of the</p> <p>12 plaintiffs in this case, the attorneys for Monsanto asked</p> <p>13 certain questions regarding health problems or health</p> <p>14 symptoms; now I will represent to you that I abstracted</p> <p>15 those depositions and took a list of perhaps eighty-five</p> <p>16 percent of the questions which Monsanto asked to the</p> <p>17 plaintiffs.</p> <p>18 I have listed those symptoms on a document and I</p> <p>19 would like to now hand your attorney that document so that</p> <p>20 he may receive it and then I would like to hand it to you</p> <p>21 and then I'll address a question to the document and we</p> <p>22 can go from there?</p> <p>23 A Yes.</p> <p>24 MR. CARNEY: Let me just object for the</p> <p>25 record that Exhibit -- Plaintiff's Exhibit 4 is I believe,</p> |

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| <p style="text-align: right;">Page 81</p> <p>1 six pages long and I'm not going to take the time -- I<br/> 2 don't think you're proposing that I do to check make sure<br/> 3 the statements that you made about the document -- I'm not<br/> 4 saying they are inaccurate, I just don't know about<br/> 5 checking them.</p> <p>6 MR. McCREA: I'm not stating that they are<br/> 7 totally accurate, all right. I'm not stating that each<br/> 8 and every health symptom and/or problem on that list is a<br/> 9 verbatim abstract from the depositions. But what I will<br/> 10 tell you is it's a good faith effort to duplicate all of<br/> 11 the questions which you asked nearly all of our plaintiffs<br/> 12 in some forty some depositions, and by you I mean<br/> 13 Monsanto, and I also will represent to you that it<br/> 14 includes perhaps eighty-five percent of the questions,<br/> 15 there are maybe fifteen percent that are not incorporated<br/> 16 on this document.</p> <p>17 MR. CARNEY: Okay, just for the record, I<br/> 18 think most of these problems that are listed in Exhibit 4<br/> 19 and again I'm not going to take the time to look at them,<br/> 20 but I would say probably most of them are complaints that<br/> 21 various of the plaintiffs have made either in their<br/> 22 answers to interrogatories, in their petition in this<br/> 23 lawsuit, possibly complaints they made to treating doctors<br/> 24 or complaints they have made in their depositions. So I<br/> 25 don't know that this is a list that has any meaning other</p> | <p style="text-align: right;">Page 83</p> <p>1 and they are multiple questions, or multiple choice<br/> 2 questions.</p> <p>3 I'm going to object to that being done at this<br/> 4 deposition. I don't think that there is any basis for<br/> 5 that kind of a questionnaire being done or taking up the<br/> 6 time of the jury or the -- and the time of everybody here<br/> 7 while the doctor would have to answer that. It could take<br/> 8 a significant amount of time. If -- so I would object to<br/> 9 this as a format and I would object to the question<br/> 10 because I think the question's compound and vague and<br/> 11 ambiguous.</p> <p>12 Q (By Mr. McCrea) Dr. Kelly?<br/> 13 A Can I answer it?<br/> 14 Q Just a second. It's important for me that<br/> 15 you understand the document in question. I did this to<br/> 16 save time and if you would like to go off the record and<br/> 17 check those off, that's fine with me. You don't have to<br/> 18 sit here on the record and do it. But rather than ask<br/> 19 each one and then have it typed out in a deposition, I<br/> 20 thought this would save time.</p> <p>21 So with that -- with your attorney's objection, and<br/> 22 the question posed to you I'll ask you the courtesy, would<br/> 23 you prefer to go off the record and respond to these<br/> 24 various symptoms or would you prefer to stay on the record<br/> 25 and do it?</p>                                                                        |
| <p style="text-align: right;">Page 82</p> <p>1 than than forty or fifty people, some have made these<br/> 2 various complaints.</p> <p>3 Q (By Mr. McCrea) All right, sir. Dr. Kelly,<br/> 4 I hand you what the court reporter has marked as<br/> 5 Plaintiff's Exhibit 4 and on the top of it states,<br/> 6 "Deposition of R. Emmet Kelly, M.D.," June 12th 1990.<br/> 7 The question which I would like to address to this<br/> 8 document is incorporated at the top of the page.</p> <p>9 The question states: "In your opinion, based on<br/> 10 medical probability is there no causal relationship,<br/> 11 comma, a possible causal relationship, comma, a probable<br/> 12 causal relationship or a proven causal relationship<br/> 13 between exposure to Yusho PCB oil which was contaminated<br/> 14 with furans and other chemicals and each of the<br/> 15 following --" and what I would like for you to do is to<br/> 16 simply go through that list and check the appropriate<br/> 17 response. If you're unable to provide an opinion I think<br/> 18 we should also have that category and you can simply X out<br/> 19 the symptom, if you have no opinion.</p> <p>20 MR. CARNEY: Let me object to the form of the<br/> 21 question and I'm going to object to the format. You know,<br/> 22 you're giving the witness a questionnaire to answer in a<br/> 23 deposition, we've got six pages listing probably<br/> 24 twenty-five health problems or symptoms on each page, so<br/> 25 you're talking about maybe a hundred and fifty questions</p>                 | <p style="text-align: right;">Page 84</p> <p>1 MR. CARNEY: Why don't we go off the record?<br/> 2 MR. McCREA: All right, agreed.<br/> 3 (Whereupon, a discussion was held off the record.)<br/> 4 Q (By Mr. McCrea) Dr. Kelly, we're back on the<br/> 5 record --</p> <p>6 MR. CARNEY: Let me make a statement first.<br/> 7 I objected before and I want to reiterate my objection to<br/> 8 this way of proceeding. I object to having this witness<br/> 9 fill out a -- answer a hundred and fifty questions in this<br/> 10 kind of a format. Number one, if I could -- Let me see<br/> 11 the document. Dr. Kelly, if you -- We're talking about<br/> 12 Exhibit 4. I want to further object in addition to the<br/> 13 objections I made before to the form of the question.</p> <p>14 I believe the standard used in Missouri is not<br/> 15 based on medical probability. This is a compound<br/> 16 question. It relates to PCB exposure in Yusho, the<br/> 17 Japanese PCB oil which was contaminated with furans and<br/> 18 which the experts have indicated that it was the furans,<br/> 19 the heavy concentration of furans in the PCB oil in Yusho<br/> 20 that caused the problems in Yusho and also the victims in<br/> 21 Yusho ate the PCB's, used it in cooking. So I'm going to<br/> 22 object to this format and instruct the witness not to<br/> 23 participate in filling out this questionnaire, in this<br/> 24 form anyway.</p> <p>25 MR. McCREA: Well, I can ask them one at a</p> |

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| <p style="text-align: right;">Page 85</p> <p>1 time and that would take probably six times as long as it<br/> 2 would to fill out the form and I think that we certainly<br/> 3 are entitled to Dr. Kelly's opinion for discovery purposes<br/> 4 in this case for the reason that there was heating of<br/> 5 PCB's in the Bloomington, Westinghouse plant, there were<br/> 6 explosions on a daily and weekly basis of capacitors in<br/> 7 the Bloomington, Westinghouse plant, there were fires in<br/> 8 the Muncie plant in which the Muncie Fire Department was<br/> 9 called to extinguish the fires and there was heating and<br/> 10 there was also incidents of fire in Cincinnati; all of<br/> 11 which are calculated according to Dr. Kelly's testimony to<br/> 12 produce furans at a window of six hundred to nine hundred<br/> 13 degrees Fahrenheit.</p> <p>14 I don't think there's been any evidence that<br/> 15 absorption into the body by ingestion produce a more toxic<br/> 16 or less toxic systemic reaction than absorption by route<br/> 17 of entry through the skin or breathing. Therefore<br/> 18 Counsel's suggestion that ingestion or as he states eating<br/> 19 of PCB's somehow distinguishes the factual situation in<br/> 20 Yusho in 1968, and Taiwan in 1979, I don't think is<br/> 21 meaningful.</p> <p>22 The idea of the form, Tom, is to save time. We sat<br/> 23 through forty some depositions in which you and your<br/> 24 associates addressed all of these questions one at a time<br/> 25 to each and every one of our plaintiffs and we never</p> | <p style="text-align: right;">Page 87</p> <p>1 difference between eating them and having your skin come<br/> 2 in contact with them. We can debate that; but I don't<br/> 3 know that our opinions matter really, it's going to be the<br/> 4 experts in the case.</p> <p>5 Further, Dr. Kelly has not examined any of these<br/> 6 plaintiffs and does not intend to examine the plaintiffs<br/> 7 to determine what problems they had and whether they're<br/> 8 related to PCB's. We had a panel of doctors in various<br/> 9 specialties who have done that and I assume you're going<br/> 10 to take their depositions and ask those specific<br/> 11 questions.</p> <p>12 So I don't know that this is the right witness to<br/> 13 cover the health problems that the plaintiffs have. Dr.<br/> 14 Kelly has never met any of the plaintiffs and we don't<br/> 15 intend to have him examine any of the plaintiffs. With<br/> 16 regard to your comments about the explosions daily in<br/> 17 Bloomington, et cetera, I'm not going to debate what that<br/> 18 is, except that I don't think you've accurately<br/> 19 characterized the conditions in the three plants.</p> <p>20 At any rate, my instruction to Dr. Kelly is not to<br/> 21 respond to the questions in this format as you -- in terms<br/> 22 of filling out a questionnaire with these problems that I<br/> 23 have outlined in the questionnaire that you've given to<br/> 24 him.</p> <p>25 Q (By Mr. McCrea) Dr. Kelly, in your opinion,</p>                                                |
| <p style="text-align: right;">Page 86</p> <p>1 objected. Now it's our turn to determine the medical<br/> 2 significance of these questions from Dr. Kelly, and I can<br/> 3 ask them one at a time and you can object and thus<br/> 4 eliminate the fact that it is a compound question or we<br/> 5 can save time or have Dr. Kelly answer this form.</p> <p>6 I think the question is fair, I think that medical<br/> 7 probability is in fact the standard, it's the standard in<br/> 8 Missouri, it is more likely than not in his opinion is it<br/> 9 more likely than not, and I think that the question's<br/> 10 fair.</p> <p>11 MR. CARNEY: Well, again, I don't think there<br/> 12 will be any saving of time. I think it will save time to<br/> 13 proceed without going through this elaborate questionnaire<br/> 14 which will not -- I think is objectionable, so will not<br/> 15 move this case along at all or the testimony. I mean, you<br/> 16 have the option of asking questions and I just -- I have<br/> 17 the option of objecting where I think they're improper.</p> <p>18 I would point out that again you're talking<br/> 19 about -- you're trying to relate again the symptoms or the<br/> 20 problems of the plaintiffs in this case with -- and none<br/> 21 of these plaintiffs as I understand it were exposed to<br/> 22 Japanese PCB's with the heavy furans that caused the<br/> 23 problems in Japan and Taiwan.</p> <p>24 None of these plaintiffs as I understand it ate the<br/> 25 PCB's like they did in Japan and I believe there is a</p>                   | <p style="text-align: right;">Page 88</p> <p>1 based on medical probability, is there no causal<br/> 2 relationship between exposure to the Yusho PCB oil which<br/> 3 was contaminated with furans and other chemicals and<br/> 4 asthma?</p> <p>5 MR. CARNEY: Let me object and we'll have the<br/> 6 question read back. Let me object to the form of that<br/> 7 question again for the same grounds I outlined before, and<br/> 8 in addition what you're asking the doctor to do in this<br/> 9 question and in Exhibit 4 is to try to recollect what was<br/> 10 in the literature, the Japanese literature about what<br/> 11 symptoms and problems the Yusho victims who had the<br/> 12 heavily furan contaminated PCB's and they ate them and to<br/> 13 try to recollect what was in there.</p> <p>14 I don't think there's any evidence that Dr. Kelly<br/> 15 has independent knowledge as to what these Japanese<br/> 16 victims' problems were other than through the literature.<br/> 17 We have the literature, that would be the best evidence of<br/> 18 what's contained in there and Dr. Kelly can give you his<br/> 19 recollection but I don't know that that helps any.</p> <p>20 He probably if you get into the detail particularly<br/> 21 that you have in Exhibit 4 would have to look at the<br/> 22 literature to determine whether asthma or something else<br/> 23 was a symptom of the Japanese Yusho victims who ate PCB<br/> 24 oils with heavy contaminants of the furans.</p> <p>25 Q (By Mr. McCrea) Dr. Kelly, you may answer.</p> |

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| <p style="text-align: right;">Page 89</p> <p>1 A Well, first of all you have to tell me what<br/> 2 you mean by medical probability; one out of a million, one<br/> 3 out of fifty, one out of two.<br/> 4 Q More likely than not.<br/> 5 A Fifty-one percent?<br/> 6 Q Let me explain this. That's a good question.<br/> 7 I'm asking you if in your opinion based on medical<br/> 8 probability is there no causal relationship between<br/> 9 exposure to the Yusho PCB oil which was contaminated with<br/> 10 furans and other chemicals and asthma. In other words,<br/> 11 can you tell us based upon your opinion on a more likely<br/> 12 than not basis if there was no causal relationship?<br/> 13 A Based on --<br/> 14 MR. CARNEY: Same objection.<br/> 15 A Based on my knowledge of the Yusho<br/> 16 literature, is that correct?<br/> 17 Q (By Mr. McCrea) Your knowledge of the Yusho<br/> 18 literature, your attendance at seminars, your information<br/> 19 from medical personnel throughout the world, any available<br/> 20 source to you.<br/> 21 A Well, all right. We start then. Asthma, I<br/> 22 would have to know, A, the person's smoking habits. I<br/> 23 would have to know whether they had asthma previously,<br/> 24 whether the asthma was exaggerated before I could answer<br/> 25 any of those questions.</p>                                                                                                                                              | <p style="text-align: right;">Page 91</p> <p>1 question and all of those other reasons stated in your<br/> 2 objection.<br/> 3 Q (By Mr. McCrea) Dr. Kelly, then, skin<br/> 4 irritation and again with the understanding that we are<br/> 5 answering the question at the top of the page and if you<br/> 6 don't understand that please address any lack of<br/> 7 understanding?<br/> 8 A On all these we are talking about the Yusho<br/> 9 PCB oil, which is a Japanese Kanechlor, which is<br/> 10 contaminated with the chlorinated dibenzofurans and<br/> 11 contaminated with chlorinated quaterphenyls, that's what<br/> 12 we're talking about?<br/> 13 Q That's right.<br/> 14 A In an undetermined amount, various amounts in<br/> 15 the rice oil which they put in the stuff they cooked?<br/> 16 Q Exactly correct.<br/> 17 A Okay. Skin irritation, I don't know what<br/> 18 they are talking about. Skin irritation, what's the<br/> 19 irritation? Redness? What was it? I don't know. How<br/> 20 long did it last? It may be -- I will also have to say I<br/> 21 would probably have to go over the six articles that were<br/> 22 summarized by Selikoff in his journal on the Yusho<br/> 23 incident before I could be sure about all these things.<br/> 24 Put down a don't know on skin irritation.<br/> 25 Q All right, sir. Skin rashes?</p> |
| <p style="text-align: right;">Page 90</p> <p>1 Q What do you mean exaggerated?<br/> 2 A Well, was it hastened by -- Did they get,<br/> 3 have asthma before and after they ate the PC -- Yusho PCB<br/> 4 oil with the furans in, or did they get more asthma. I'd<br/> 5 have to go back to the literature and look.<br/> 6 Q All right. Skin irritation?<br/> 7 MR. CARNEY: Could I -- because I assume<br/> 8 you're going to go down this list.<br/> 9 MR. McCREA: Yes.<br/> 10 MR. CARNEY: Could I have a standing<br/> 11 objection to this line of questioning, to the question in<br/> 12 terms of the use of the world medical probability and the<br/> 13 question being compound and to the question being based on<br/> 14 the medical literature or the literature -- the Yusho or<br/> 15 Japanese literature, which I think is a matter of record<br/> 16 and would be the best evidence of what the problems were<br/> 17 associated with that, and the fact that Dr. Kelly does not<br/> 18 have firsthand knowledge of this; so that we're not adding<br/> 19 anything other than Dr. Kelly's recollection of the<br/> 20 literature, and I think the question's vague and ambiguous<br/> 21 as well. If I can have a standing objection, then I'll<br/> 22 try and unless I hear another objection not to continue my<br/> 23 objections and we can move faster.<br/> 24 MR. McCREA: I agree that you may have a<br/> 25 standing objection as to the fact that it is a compound</p> | <p style="text-align: right;">Page 92</p> <p>1 A Yes, that's proven; if by skin rashes you<br/> 2 mean chloracne and pigmentation.<br/> 3 Q Hearing problems?<br/> 4 A There again, I don't know if they had<br/> 5 infected chloracne inside their ear canals, I don't know<br/> 6 that. I would say none on that, none to not proven --<br/> 7 none to I don't know; because I don't know the basis for<br/> 8 the hearing problem. I don't know what hearing problem it<br/> 9 is. I would suggest we also have a column, not enough<br/> 10 information.<br/> 11 Q Okay. Let's add that.<br/> 12 A Huh?<br/> 13 Q All right, we'll add that.<br/> 14 A Okay.<br/> 15 Q And do you want to add not enough information<br/> 16 to the hearing problem?<br/> 17 A Hearing problems, correct.<br/> 18 Q Headaches?<br/> 19 A Again, how often? One headache, one four<br/> 20 times a day, one lasting for weeks? Not enough<br/> 21 information.<br/> 22 Q Kidney problems?<br/> 23 A Again, what kind of problems? Getting up at<br/> 24 night, passing blood, kidney stones? Not enough<br/> 25 information.</p>                                                                                                                                                                                                                                                       |

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| <p style="text-align: right;">Page 93</p> <p>1 Q Swelling?</p> <p>2 A Where? If it's in the gums some of the</p> <p>3 children had swelling of their gums; but I don't know</p> <p>4 anyplace else.</p> <p>5 Q Would you say proven as to children with</p> <p>6 swelling in their gums?</p> <p>7 A Yes.</p> <p>8 Q Hypertension?</p> <p>9 A Well, I think hypertension and high blood</p> <p>10 pressure are the same.</p> <p>11 Q All right. Can we treat them as one?</p> <p>12 A Yes. It was alleged but further work showed</p> <p>13 that there wasn't any connection; so not proven.</p> <p>14 Q Stomach problems?</p> <p>15 A There again, I don't know. That runs all the</p> <p>16 way from indigestion to stomach cancer. So I don't know</p> <p>17 really how I could answer a question like that.</p> <p>18 Q Not enough information?</p> <p>19 A Not enough information.</p> <p>20 Q Sinus problems?</p> <p>21 A Not enough information. I don't know what</p> <p>22 kind of problems they had.</p> <p>23 Q So would that be don't know and not enough</p> <p>24 information?</p> <p>25 A That's correct, not enough information.</p>     | <p style="text-align: right;">Page 95</p> <p>1 A Same.</p> <p>2 Q Acne?</p> <p>3 A Proven.</p> <p>4 Q Skin cancer?</p> <p>5 A Not prove, none.</p> <p>6 Q Boils?</p> <p>7 A If by that you mean an infected cyst, proven,</p> <p>8 but a boil, again as I said a boil is around a hair</p> <p>9 follicle, but -- so technically if it's a -- by that you</p> <p>10 mean an infected cyst, yes.</p> <p>11 Q Okay. I'm going to put infected cyst.</p> <p>12 A Right.</p> <p>13 Q And that's proven?</p> <p>14 A Yes.</p> <p>15 Q Flushing of skin?</p> <p>16 A Not enough information.</p> <p>17 Q Skin discoloration?</p> <p>18 A Yes.</p> <p>19 Q Unusual growth or loss of hair? Now, I think</p> <p>20 we should break that down into two categories, first,</p> <p>21 unusual growth of hair?</p> <p>22 A Possible.</p> <p>23 Q And second, unusual loss of hair?</p> <p>24 A Not enough information.</p> <p>25 Q Allergies?</p>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p style="text-align: right;">Page 94</p> <p>1 Q Ulcerated esophagus?</p> <p>2 A I recall that there was one instance of</p> <p>3 ulcerated esophagus, but it certainly without seeing the</p> <p>4 report again and something if anybody else, if any other</p> <p>5 cases had it outside of the one I'd have to say not</p> <p>6 proven.</p> <p>7 Q Prostate problems?</p> <p>8 A Not enough information.</p> <p>9 Q Cysts?</p> <p>10 A Yes, proven.</p> <p>11 Q Pneumonia?</p> <p>12 A Not proven.</p> <p>13 Q So that would be -- It is your opinion that</p> <p>14 there was none?</p> <p>15 A That's right, not proven.</p> <p>16 Q Not proven. Peeling of feet?</p> <p>17 A Well, let's put feet and hands together. I</p> <p>18 mean, I don't know what they mean by peeling of that.</p> <p>19 Q Let's add to that peeling of skin on the</p> <p>20 bottom of feet?</p> <p>21 A Not enough information. I don't know if they</p> <p>22 were checked for fungi or not, if they had athlete's foot.</p> <p>23 Q So that would be not enough information?</p> <p>24 A That's correct.</p> <p>25 Q Peeling of hands, peeling of skin on hands?</p> | <p style="text-align: right;">Page 96</p> <p>1 A I don't know what you mean by that. Does</p> <p>2 that mean they are allergic to PCB's, allergic to milk,</p> <p>3 allergic to rice? Not enough information.</p> <p>4 Q Let's interpret that as being after the</p> <p>5 exposure they became allergic to various things, not</p> <p>6 PCB's. In other words, they became more of an</p> <p>7 allergic-type person.</p> <p>8 MR. CARNEY: Are you saying that's what the</p> <p>9 articles in Yusho say?</p> <p>10 MR. McCREA: No, I'm just asking him.</p> <p>11 MR. CARNEY: Do the articles in Yusho say</p> <p>12 that?</p> <p>13 MR. McCREA: I'm asking him for his opinion</p> <p>14 of the symptoms in Yusho, based on articles, based on</p> <p>15 seminars, based on communications with personnel within</p> <p>16 Monsanto.</p> <p>17 MR. CARNEY: Well, I don't know that Dr.</p> <p>18 Kelly has indicated he has any information about Yusho</p> <p>19 other than what's contained in the literature. So I don't</p> <p>20 know how you could be asking him and he I think he has</p> <p>21 indicated he wasn't there and didn't examine them</p> <p>22 personally.</p> <p>23 So again I don't -- I think this is a waste of time</p> <p>24 to have Dr. Kelly try to recollect what's in the</p> <p>25 literature and whether it's in there in a sufficient</p> |

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| <p style="text-align: right;">Page 97</p> <p>1 amount to -- or clear enough with control groups, et<br/> 2 cetera, to make any kind of a determination as to<br/> 3 whether -- what the probability is.<br/> 4 MR. McCREA: I agree that all those<br/> 5 variables exist, but I'm asking him his opinion based on<br/> 6 medical probability if there is no causal relationship, a<br/> 7 possible causal relationship, a probable causal<br/> 8 relationship, or a proven causal relationship between<br/> 9 exposure to the Yusho PCB oil which was contaminated with<br/> 10 furans and other chemicals and allergies.<br/> 11 Q (By Mr. McCrea) And the way I'd like to<br/> 12 phrase that is more prone to allergies after the exposure.<br/> 13 A I'd have to review the literature.<br/> 14 Q Do you understand the question; more prone to<br/> 15 allergies?<br/> 16 A Yes.<br/> 17 Q Thank you. So we'd say that's not enough<br/> 18 information?<br/> 19 A That's correct.<br/> 20 Q Hives?<br/> 21 A Same answer, hives are an allergic reaction.<br/> 22 Q Profuse sweating?<br/> 23 A Here again I don't know if you -- again, I<br/> 24 need more information. If you get a bunch of infected<br/> 25 cysts, you've got a fever, you've get sweating. So more</p> | <p style="text-align: right;">Page 99</p> <p>1 A I'd have to review that. Not enough<br/> 2 information.<br/> 3 Q Emphysema?<br/> 4 A Same answer.<br/> 5 Q Sores that won't easily heal?<br/> 6 A I don't know what they mean by that, whether<br/> 7 they mean the sores from the infected chloracne or sores<br/> 8 they might have got scraping their knees on bamboo? I<br/> 9 don't know.<br/> 10 Q Let's make that unrelated to chloracne.<br/> 11 Let's make that sores that are unrelated to chloracne.<br/> 12 A Not proven.<br/> 13 Q So that would be none?<br/> 14 A That's correct.<br/> 15 Q Bronchitis?<br/> 16 A More information needed.<br/> 17 Q Not enough information, correct?<br/> 18 A That's right.<br/> 19 Q Breathing problems?<br/> 20 MR. CARNEY: Objection to what is meant by<br/> 21 breathing problems; and again asking this witness to try<br/> 22 to recollect everything in the literature that he read<br/> 23 about the Japanese victims where they ate PCB's laced with<br/> 24 heavy amounts of furans that caused the problem.<br/> 25 A Not enough information on what the symptoms</p> |
| <p style="text-align: right;">Page 98</p> <p>1 information.<br/> 2 Q Not enough information on that?<br/> 3 A That's correct.<br/> 4 Q Problems with toenails?<br/> 5 A Possible.<br/> 6 MR. CARNEY: Let me object to that on the<br/> 7 problem with toenails. I don't know, are you talking<br/> 8 about ingrown toenails, are you talking about thick<br/> 9 toenails, are you talking about what -- It seemed to me<br/> 10 there are several types of problems with toenails, so<br/> 11 that's a vague question.<br/> 12 Q (By Mr. McCrea) Let's break that down.<br/> 13 First, thickened toenails?<br/> 14 A There were some changes in the toenails. I<br/> 15 don't know if they were problems for the people or not;<br/> 16 but there were some changes in the toenails.<br/> 17 Q Okay. Let's make that changes in toenails<br/> 18 rather than problems with toenails?<br/> 19 A Yes.<br/> 20 Q And that would be possible?<br/> 21 A Yes.<br/> 22 Q And the next one, let's make that changes in<br/> 23 fingernails?<br/> 24 A Possible also.<br/> 25 Q Shortness of breath?</p>                                                                                                                                                                                   | <p style="text-align: right;">Page 100</p> <p>1 are.<br/> 2 Q (By Mr. McCrea) In other words, that<br/> 3 question is -- You don't know what is meant by the word<br/> 4 problems?<br/> 5 A Yes.<br/> 6 Q The same for the next one?<br/> 7 A Throat, right.<br/> 8 Q That's it's not understood what is meant by<br/> 9 problems?<br/> 10 A Correct.<br/> 11 Q So that would be need more information as to<br/> 12 the symptoms?<br/> 13 A Yes.<br/> 14 Q Increase or decrease in sensitivity to<br/> 15 certain kinds of smells?<br/> 16 A I just have no comment to make on that at<br/> 17 all.<br/> 18 Q So your answer would be no comment?<br/> 19 A No comment.<br/> 20 Q Altered sense of taste?<br/> 21 A The same answer to that one.<br/> 22 Q And that would be no comment?<br/> 23 A That's correct.<br/> 24 Q Epilepsy?<br/> 25 A Not proven.</p>                                                                                                                                                                                                                                                                   |

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| <p style="text-align: right;">Page 101</p> <p>1 Q Shaking or tremors in hands -- Excuse me,<br/> 2 shaking or tremors of hands?<br/> 3 A I need more information.<br/> 4 MR. CARNEY: Let me object. As we're going<br/> 5 through these questions are you implying when you get an<br/> 6 answer not proven that it means it's possible or probable<br/> 7 or --<br/> 8 MR. McCREA: No. When it says it's not<br/> 9 proven it means it can happen.<br/> 10 MR. CARNEY: Well, again --<br/> 11 MR. McCREA: When he says none, when he says<br/> 12 it's not proven that means it's his opinion that it didn't<br/> 13 happen.<br/> 14 MR. CARNEY: It didn't happen in the<br/> 15 literature in Japan?<br/> 16 MR. McCREA: No, Tom, it didn't happen in<br/> 17 Yusho. He's not restricted to the --<br/> 18 MR. CARNEY: Well, why don't you ask him if<br/> 19 he has any firsthand knowledge outside of the literature<br/> 20 that's involved. It seems to me you're -- you know, now I<br/> 21 object to all these questions on the further ground that I<br/> 22 think your understanding of the answers and my<br/> 23 understanding certainly are different as to what's meant<br/> 24 by none, as to what's meant by proven.<br/> 25 MR. McCREA: None means that he's stating</p>                                                                                                                                                                                                              | <p style="text-align: right;">Page 103</p> <p>1 A Yes; but I also though can also state that<br/> 2 somebody in that Yusho experience may have had epilepsy.<br/> 3 Q Right, and I understand that; but you're<br/> 4 stating it was not caused by the oil?<br/> 5 A That's correct. I don't believe epilepsy was<br/> 6 caused by the Japanese PCB oil with --<br/> 7 Q And you're stating it wasn't possible that it<br/> 8 was caused by the Yusho oil?<br/> 9 MR. CARNEY: Well --<br/> 10 MR. McCREA: Just a second please.<br/> 11 Q (By Mr. McCrea) Because we've get a category<br/> 12 for possibility.<br/> 13 MR. CARNEY: Well, that's the problem.<br/> 14 You're assuming by his answering one question in your<br/> 15 multiple choice group an answer on other questions which<br/> 16 you're not asking, number one. Number two, when you say<br/> 17 none, I don't know whether you're asking him was there any<br/> 18 epilepsy shown by any of the people who ate contaminated<br/> 19 Japanese PCB's laced with furans, with heavier<br/> 20 concentrations of furans than in the U.S. PCB's, again.<br/> 21 So I haven't still understood what you mean by none.<br/> 22 MR. McCREA: Didn't happen.<br/> 23 MR. CARNEY: That no one in those articles --<br/> 24 MR. McCREA: Established that symptom as<br/> 25 being in anyway related to the exposure to PCB's?</p> |
| <p style="text-align: right;">Page 102</p> <p>1 based on his opinion, he's stating in his opinion based on<br/> 2 medical probability that that symptom was not caused by<br/> 3 the exposure to the Yusho PCB oil. That's what that<br/> 4 means, it was not caused.<br/> 5 MR. CARNEY: Well, that wasn't my<br/> 6 understanding of what was meant by none. Maybe you need<br/> 7 to -- the problem with your questions, Mr. McCrea, when<br/> 8 you're assuming definitions and terms without defining<br/> 9 those terms in the question we have then the potential of<br/> 10 a communication gap between a term that's undefined that<br/> 11 may mean a different thing to a witness than it does to<br/> 12 you, Mr. McCrea.<br/> 13 So I think if you're not going to define your terms<br/> 14 in the question I think you have another flaw here that --<br/> 15 and the flaw is that you have got questions with undefined<br/> 16 terms.<br/> 17 MR. McCREA: I think that's a valid<br/> 18 objection. In other words, I wouldn't want to finish this<br/> 19 deposition and come back and face the reality that we<br/> 20 weren't talking about the same thing.<br/> 21 Q (By Mr. McCrea) Let's go to where we are,<br/> 22 epilepsy, all right. I have indicated on my sheet that<br/> 23 you're stating as a matter -- that you in your opinion are<br/> 24 stating as a matter of medical probability that that<br/> 25 symptom was not caused by the exposure on the Yusho oil?</p> | <p style="text-align: right;">Page 104</p> <p>1 THE WITNESS: Well, that isn't what you were<br/> 2 saying.<br/> 3 MR. CARNEY: Yeah, now you've changed the<br/> 4 question.<br/> 5 THE WITNESS: Well, you've changed the legal<br/> 6 parameter.<br/> 7 MR. McCREA: Well, let's read the question<br/> 8 again.<br/> 9 THE WITNESS: Yes, but not what you just --<br/> 10 MR. McCREA: It was my error.<br/> 11 THE WITNESS: Just so we know the ground<br/> 12 rules of each one.<br/> 13 MR. McCREA: Believe me, when I get back to<br/> 14 Indiana I'd like to think that we understand the ground<br/> 15 rules; and it's important for me, it's important for you,<br/> 16 it's important for your attorney.<br/> 17 Q (By Mr. McCrea) Go back to Page 1, the<br/> 18 question at the top, please.<br/> 19 A Okay.<br/> 20 Q Let's look at that again, Dr. Kelly. It says<br/> 21 in your opinion, based on medical probability is there no<br/> 22 causal relationship? That could mean none, in my<br/> 23 thinking. A possible causal relationship? That would<br/> 24 mean possible. A probable causal relationship? That<br/> 25 would mean probable; or a proven causal relationship, that</p>                                                                                                                                                                                   |

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| <p style="text-align: right;">Page 105</p> <p>1 would mean proven. In other words, we have four<br/> 2 categories, it didn't happen, there is no indication --<br/> 3 A No. That isn't the category, it didn't<br/> 4 happen.<br/> 5 Q As a result of PCB ingestion?<br/> 6 A All right, fine, but you've got to say -- it<br/> 7 happened, it happened there.<br/> 8 Q As a result -- Read the question. Between<br/> 9 exposure to Yusho PCB oil. All right? I'm not saying<br/> 10 that they couldn't have interviewed a person who had<br/> 11 epilepsy and they would report this person has epilepsy;<br/> 12 but this person had epilepsy before the exposure;<br/> 13 therefore it is concluded that there is no causal<br/> 14 relationship.<br/> 15 Now, if they interviewed the person and they said<br/> 16 this person had epilepsy, the individual is thirty-four<br/> 17 years old, the individual never had epilepsy up until that<br/> 18 date, there was nothing to explain the epilepsy based upon<br/> 19 other potential causes, that's to me what we're talking<br/> 20 about.<br/> 21 MR. CARNEY: Let me just make the objection<br/> 22 that just because one person out of all of the people that<br/> 23 were -- they ate the Japanese contaminated PCB's with<br/> 24 furans happened to get epilepsy doesn't mean that there's<br/> 25 any proof that PCB's of the Japanese variety that have the</p> | <p style="text-align: right;">Page 107</p> <p>1 between PCB's and held effects, are you?<br/> 2 MR. CARNEY: No. What I am saying is with<br/> 3 regard to the Japanese PCB's that the Japanese cooked with<br/> 4 and ate and those particular furans when you had much<br/> 5 more -- those PCB's had a much higher concentration of<br/> 6 furans. It's something entirely different than the PCB's<br/> 7 in the United States with a much lower furans and so I<br/> 8 think there's a difference and I'm not sure that Dr. Kelly<br/> 9 has any more knowledge other than the literature about the<br/> 10 Japanese situation.<br/> 11 MR. McCREA: Are you stating that Dr. Kelly<br/> 12 is not qualified as a medical practitioner to offer his<br/> 13 opinion on the cause and effect relationship between the<br/> 14 exposure to Yusho PCB oil and health problems? Are you<br/> 15 stating he's not qualified to give that?<br/> 16 MR. CARNEY: No. Dr. Kelly can speak for<br/> 17 himself as to what he feels he can offer his opinions on.<br/> 18 All I'm doing is making a comment that there's a<br/> 19 difference, number one, and I don't think he has indicated<br/> 20 that he has knowledge outside of the literature with<br/> 21 regard to the Japanese.<br/> 22 MR. McCREA: He started off with skin<br/> 23 irritation, don't know, hearing problems, don't know. He<br/> 24 also has given the answer not enough information on<br/> 25 several occasions, totally legitimate answers.</p> |
| <p style="text-align: right;">Page 106</p> <p>1 furans causes epilepsy.<br/> 2 MR. McCREA: Well, the doctor can answer it<br/> 3 that way.<br/> 4 MR. CARNEY: Well, but that's not the -- the<br/> 5 problem is your question's confusing as to when you say<br/> 6 none. Do you mean none of the victims had epilepsy, when<br/> 7 they got epilepsy, whether the writers concluded one way<br/> 8 or the other that the epilepsy had anything to do with the<br/> 9 Japanese people eating these PCB's with the furans? I<br/> 10 don't know what you mean when you say none. I'm<br/> 11 ambiguous -- I think it's ambiguous as to what you mean.<br/> 12 MR. McCREA: What I mean is, I'm asking the<br/> 13 doctor for his opinion, all right; do you understand that<br/> 14 correct, Tom?<br/> 15 MR. CARNEY: Well, and again --<br/> 16 MR. McCREA: Just a second. I'm asking him<br/> 17 for his opinion; is there any problem with that?<br/> 18 MR. CARNEY: I do have a problem with that,<br/> 19 because the doctor has indicated that his knowledge is<br/> 20 based on some literature. Now there are articles that<br/> 21 cover this and I don't know that he has any opinions<br/> 22 outside of that literature with regard to the Japanese<br/> 23 people ingesting PCB's with furans.<br/> 24 MR. McCREA: You're not stating that he's<br/> 25 not qualified to discuss the cause and effect relationship</p> | <p style="text-align: right;">Page 108</p> <p>1 MR. CARNEY: I'm not disputing that all. But<br/> 2 I am disputing that your questions are vague and I<br/> 3 certainly had a different understanding as to what you<br/> 4 meant by none. Now Dr. Kelly may. I don't know that you<br/> 5 defined the terms.<br/> 6 MR. McCREA: None means he has stated based<br/> 7 on as a medical doctor, based on information he has read<br/> 8 and based on the information that has come to his<br/> 9 attention that that problem was not caused by the<br/> 10 ingestion of the PCB Yusho oil, period.<br/> 11 MR. CARNEY: Well, you're not even saying<br/> 12 whether there was any indication that there was any<br/> 13 epilepsy.<br/> 14 MR. McCREA: Well, I'm asking him the<br/> 15 question and if there's been no indication --<br/> 16 MR. CARNEY: Well, go ahead and ask your<br/> 17 questions. I think so far they have been very vague and I<br/> 18 think there's been an -- at least in terms of what I<br/> 19 understood your questions to be I have not understood the<br/> 20 definitions that you just recently defined your questions<br/> 21 to be.<br/> 22 MR. McCREA: None means none, possible means<br/> 23 possible.<br/> 24 MR. CARNEY: None what? None what?<br/> 25 MR. McCREA: No connection. No connection</p>                                                                                                                                                                               |

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| <p style="text-align: right;">Page 109</p> <p>1 whatsoever.</p> <p>2 MR. CARNEY: Do the articles say there is no</p> <p>3 connection?</p> <p>4 MR. McCREA: No, that it's his</p> <p>5 interpretation of the articles, it's his interpretation of</p> <p>6 the data, it's his opinion as medical doctor that there is</p> <p>7 no causal relation.</p> <p>8 MR. CARNEY: Well, that's not the questions</p> <p>9 that I understood that you're asking.</p> <p>10 THE WITNESS: Well I'd like to have a couple</p> <p>11 more definitions clarified.</p> <p>12 MR. McCREA: Yes, sir.</p> <p>13 THE WITNESS: When I say don't know, I mean</p> <p>14 by that I don't -- have not checked the literature</p> <p>15 recently to find out whether this -- whether I can make</p> <p>16 an -- give an opinion on it.</p> <p>17 MR. McCREA: That's exactly the way I</p> <p>18 understand your answers.</p> <p>19 THE WITNESS: All right, and when I say not</p> <p>20 enough information that means as we were talking about</p> <p>21 kidney problems, what kind of kidney problems were you</p> <p>22 talking about?</p> <p>23 MR. McCREA: That's exactly the way I</p> <p>24 understood your answer, Dr. Kelly. That's exactly right.</p> <p>25 In other words, there isn't -- That's exactly the way I</p>                                                                                                                         | <p style="text-align: right;">Page 111</p> <p>1 MR. CARNEY: Objection. Well, I'm objecting</p> <p>2 to the form of the question, it's compound, as well as the</p> <p>3 other objections.</p> <p>4 A I would say I would have to examine the Yusho</p> <p>5 literature before answering that question.</p> <p>6 Q (By Mr. McCrea) Change in speech pattern?</p> <p>7 MR. CARNEY: I'm going to object. I don't</p> <p>8 know what you mean by change in speech pattern.</p> <p>9 MR. McCREA: It means a speech pattern which</p> <p>10 has somehow been altered or change. I don't know that</p> <p>11 that's --</p> <p>12 MR. CARNEY: That doesn't help cure my</p> <p>13 objection.</p> <p>14 A Well, I'll give a double-barreled answer to</p> <p>15 that.</p> <p>16 Q (By Mr. McCrea) All right, sir.</p> <p>17 A I don't -- I need more information as to what</p> <p>18 the change in speech pattern is. Is he talking about</p> <p>19 stuttering, is he talking about repeating words? And I'll</p> <p>20 have to say I'll have to examine the literature, the Yusho</p> <p>21 literature to see whether there's any possible or probable</p> <p>22 connection. You're asking me really to give an</p> <p>23 epidemiological answer to any of these questions.</p> <p>24 Q Just asking for your opinion.</p> <p>25 A Well, yes; but as I say I'll have to</p> |
| <p style="text-align: right;">Page 110</p> <p>1 understood it.</p> <p>2 MR. CARNEY: Well, what is your --</p> <p>3 MR. McCREA: Ask him. Ask him. You said</p> <p>4 what is your --</p> <p>5 MR. CARNEY: Well, what I'd like you to do is</p> <p>6 just have you ask questions that are not so vague and</p> <p>7 ambiguous that it leaves listeners confused as to what</p> <p>8 you're asking. That's what I'd like; if you could do that</p> <p>9 I'd appreciate it.</p> <p>10 MR. McCREA: I'd like to satisfy your</p> <p>11 questions for clarity.</p> <p>12 MR. CARNEY: And up to date on this whole</p> <p>13 series of questions on Exhibit 4 I think this whole series</p> <p>14 of questions is riddled with ambiguity to the point where</p> <p>15 it's unintelligible to me what you're asking.</p> <p>16 Q (By Mr. McCrea) It's not easy, is it,</p> <p>17 Doctor? Dr. Kelly, we're down to shaking or tremors of</p> <p>18 hands, the question posed to you by this document is in</p> <p>19 your opinion based on medical probability is there no</p> <p>20 causal relationship, a possible causal relationship, a</p> <p>21 probable causal relationship or a proven causal</p> <p>22 relationship between exposure to Yusho PCB oil, which was</p> <p>23 contaminated with furans and other chemicals and shaking</p> <p>24 or tremors of hands? Your answer is there's not enough</p> <p>25 information?</p> | <p style="text-align: right;">Page 112</p> <p>1 double-check it to see if there's one person there with a</p> <p>2 speech pattern or fifty, with a changed speech pattern.</p> <p>3 Q I understand.</p> <p>4 A Numbness in hands. Let's first separate this</p> <p>5 out, numbness in hands. The same situation; I'll have to</p> <p>6 have more information as to how, when the numbness came</p> <p>7 on, how long it lasted and in what percentage of the</p> <p>8 people it was reported.</p> <p>9 Q So that would be not enough information?</p> <p>10 MR. CARNEY: Well, again, you know, you're</p> <p>11 trying to put him into a --</p> <p>12 MR. McCREA: No.</p> <p>13 MR. CARNEY: You made four categories, he's</p> <p>14 given you an answer.</p> <p>15 MR. McCREA: Okay.</p> <p>16 MR. CARNEY: And somehow you're trying to put</p> <p>17 him into a category of yours and I think that's improper.</p> <p>18 THE WITNESS: Well, my category is I need</p> <p>19 more information on it, and two, I would have to review</p> <p>20 the Yusho literature to come out with an opinion.</p> <p>21 Q (By Mr. McCrea) Okay, sir. Numbness in</p> <p>22 feet?</p> <p>23 A Same answer.</p> <p>24 Q Coordination problems?</p> <p>25 A Same answer.</p>                                                                                                       |

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| <p style="text-align: right;">Page 113</p> <p>1 Q Unusual gait or walking characteristics?</p> <p>2 A Same answer.</p> <p>3 Q Next page, stumbling?</p> <p>4 A The next two are really the same answer to</p> <p>5 that, stumbling or problems with balance.</p> <p>6 Q Yes, sir.</p> <p>7 A Same answer.</p> <p>8 Q And that answer is need more information?</p> <p>9 You would have to read the literature?</p> <p>10 MR. CARNEY: I'm not sure that is --</p> <p>11 Q (By Mr. McCrea) What is the answer?</p> <p>12 A Well, the answer is I would have to know more</p> <p>13 about the stumbling, whether it was once or whether it was</p> <p>14 all the time, and I would have to read the literature to</p> <p>15 see -- the Yusho literature to see what the significance</p> <p>16 of the individual case reports might have been.</p> <p>17 Q All right, sir, and that's true for stumbling</p> <p>18 and problems with balance, is that correct?</p> <p>19 A That's correct.</p> <p>20 Q Arthritis?</p> <p>21 A Not proven.</p> <p>22 Q Joint pain?</p> <p>23 A I'd have to have more information and check</p> <p>24 the occurrence in the literature, of the Yusho literature.</p> <p>25 MR. CARNEY: I just want to object to that</p>                                                                                                                                                                   | <p style="text-align: right;">Page 115</p> <p>1 A You mean they can't move their arms and legs?</p> <p>2 Q Right.</p> <p>3 A I don't believe there's any causal</p> <p>4 relationship.</p> <p>5 Q Problems with bones?</p> <p>6 MR. CARNEY: I'm going to object. Problems</p> <p>7 with bones is very broad.</p> <p>8 Q (By Mr. McCrea) How about changes in bone</p> <p>9 structure? Let's change that to change in bone</p> <p>10 structure?</p> <p>11 MR. CARNEY: I don't know what you mean by</p> <p>12 changes in bone structure. The question's vague as well</p> <p>13 as all of the other objections I have in my standing</p> <p>14 objection.</p> <p>15 Q (By Mr. McCrea) Okay, changes in bone</p> <p>16 structure.</p> <p>17 A I'd have to see more information on that.</p> <p>18 Q That's the break time. Thank you, Doctor.</p> <p>19 (Whereupon, a lunch break was taken.)</p> <p>20 Q Dr. Kelly, we're back on the record. Again</p> <p>21 referring to Plaintiff's Exhibit 4, is that the number,</p> <p>22 sir, on the document?</p> <p>23 A Yes, sir.</p> <p>24 Q The next symptom listed as I recall when we</p> <p>25 took our break is swelling of joints. Do you have an</p>                              |
| <p style="text-align: right;">Page 114</p> <p>1 one as well as a couple of the others. I don't know what</p> <p>2 you mean by joint pain.</p> <p>3 MR. McCREA: Stiffness or soreness of</p> <p>4 muscles.</p> <p>5 MR. CARNEY: Again, I would object on the</p> <p>6 ground that I don't know what you mean by that.</p> <p>7 A Again, I need more information on how stiff</p> <p>8 they were, how long they were -- how sore they were, and</p> <p>9 I'd have to see the incidents in these people, by</p> <p>10 reviewing the Yusho literature following the ingestion of</p> <p>11 this Japanese PCB material.</p> <p>12 Q (By Mr. McCrea) All right, sir. Paralysis?</p> <p>13 A I don't think it's been proven, no.</p> <p>14 Q And that would be again for clarity of the</p> <p>15 record you are stating in your opinion based on medical</p> <p>16 probability there is no causal relationship?</p> <p>17 A What kind of paralysis? What are we talking</p> <p>18 about? Paralysis of the little finger or a stroke or one</p> <p>19 whole extremity? I don't know what you mean. Dropped</p> <p>20 eyelid? I mean, there are all sorts of paralysis, so I</p> <p>21 say, I don't know. I could change my answer to I'd like</p> <p>22 to -- I need more information but I don't think there is</p> <p>23 any causal relationship.</p> <p>24 Q Let's say paralysis of the limbs, hands,</p> <p>25 legs?</p> | <p style="text-align: right;">Page 116</p> <p>1 opinion based on a medical probability if there is no</p> <p>2 causal relationship, a possible causal relationship, a</p> <p>3 probable causal relationship or a proven causal</p> <p>4 relationship between exposure to the Yusho PCB oil which</p> <p>5 was contaminated with furans and other chemicals and that</p> <p>6 particular symptom?</p> <p>7 A I would have to have more information about</p> <p>8 the symptoms, when the swelling came on, how long it</p> <p>9 lasted and I would also have to review the -- re-review</p> <p>10 the Yusho literature to see what the incidence of this</p> <p>11 particular symptom was.</p> <p>12 MR. CARNEY: Do I still have my standing</p> <p>13 objection?</p> <p>14 MR. McCREA: Yes.</p> <p>15 Q (By Mr. McCrea) The next symptom,</p> <p>16 rheumatism?</p> <p>17 A Same answer.</p> <p>18 Q Muscle spasms?</p> <p>19 A Same answer.</p> <p>20 Q Muscle weakness?</p> <p>21 A Same answer.</p> <p>22 MR. CARNEY: I'm going to object on the</p> <p>23 ground that I don't know what is meant; what type of</p> <p>24 muscle weakness we're talking about and where?</p> <p>25 MR. McCREA: Again you understand that we</p> |

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| <p style="text-align: right;">Page 117</p> <p>1 took this from questions which you addressed to your<br/>2 clients.<br/>3 MR. CARNEY: Well, as I recall at least in<br/>4 looking at some of those depositions that the questions<br/>5 would be asked in a general way, "Have you had muscle<br/>6 weakness?" And if they indicated they did then we asked<br/>7 where and when and what type and got details. So what I<br/>8 am saying is when you just ask these general questions<br/>9 without any definition to it I think it is overbroad.<br/>10 Q (By Mr. McCrea) Muscle twitching?<br/>11 A I'll have to give the same answer that I<br/>12 would have to know more about what is meant by that<br/>13 particular symptom and then re-review the literature to<br/>14 see if that was a prominent symptom in the Yusho cases.<br/>15 Q Swelling of hands?<br/>16 A Same answer.<br/>17 Q Multiple sclerosis?<br/>18 A None.<br/>19 Q Parkinson's disease?<br/>20 A None.<br/>21 Q Back problems?<br/>22 A Again, I would have to ask what back problems<br/>23 are we talking about, and I would have to review the<br/>24 literature, the Yusho literature to see if they had any<br/>25 particular become problems and how often it occurred. But</p> | <p style="text-align: right;">Page 119</p> <p>1 can answer the same thing for the next two, and I would<br/>2 have to re-review the literature of Yusho to find out if<br/>3 the Japanese PCB had caused that at Yusho.<br/>4 Q Problems with eyes?<br/>5 A Yes, there were problems with eyes, if by<br/>6 that you mean the eyelids, that was proven.<br/>7 Q Problems with vision?<br/>8 A Again, there I would have to know what the<br/>9 problems with and I think we can include blurred vision<br/>10 under that for the sake of hurrying this along. I'd have<br/>11 to know more about what problems we're talking about and<br/>12 whether or not -- I'd have to re-review the literature<br/>13 with Yusho with the Japanese PCB.<br/>14 Q Glaucoma?<br/>15 A None.<br/>16 Q Loss of eyesight?<br/>17 A None.<br/>18 Q Seeing spots?<br/>19 A I mean by loss of eyesight, you mean complete<br/>20 blindness? Is that what you mean by complete loss, it's<br/>21 gone?<br/>22 Q I don't know.<br/>23 A Gee, it's hard for me to answer then.<br/>24 Q I would assume it means not blindness, or it<br/>25 would state blindness?</p>                                                                                                                                                                                           |
| <p style="text-align: right;">Page 118</p> <p>1 my opinion would be it would be very improbable.<br/>2 Q Disk problems?<br/>3 A PCB exposure has not been causally related to<br/>4 any disk problems. I presume, the vertebral disks.<br/>5 MR. CARNEY: Again, Doctor, we're talking<br/>6 about the Japanese situation --<br/>7 THE WITNESS: The Japanese --<br/>8 MR. CARNEY: Not the American.<br/>9 THE WITNESS: The Japanese Yusho PCB with<br/>10 chlorinated benzofurans and chlorinated terphenyls.<br/>11 Q (By Mr. McCrea) The answer to that would be<br/>12 none?<br/>13 A That's correct.<br/>14 Q Back pain?<br/>15 MR. CARNEY: Objection to what you mean by<br/>16 back pain.<br/>17 A I would have to know more about the symptom<br/>18 and re-review the literature to see whether that was a<br/>19 prominent factor.<br/>20 Q (By Mr. McCrea) Let's make that pain in the<br/>21 spine, in the back?<br/>22 A Same answer to that.<br/>23 Q Ringing in ears?<br/>24 A Again I'd have to know when that occurred,<br/>25 how often it occurred, how long it occurred and I think I</p>                                                                                                                                                        | <p style="text-align: right;">Page 120</p> <p>1 A Five percent loss?<br/>2 Q Yes.<br/>3 A Hundred percent loss?<br/>4 Q Yes. Diminished.<br/>5 A Well, I'd have to agree with you, I don't<br/>6 know what it means.<br/>7 Q We just took these from their depositions.<br/>8 MR. CARNEY: I'm going to object to that<br/>9 characterization and I will say if in fact you did and I'm<br/>10 not saying you did or didn't; I'm not -- you haven't shown<br/>11 me the depositions, but I will say this: That if that<br/>12 question was asked, it was undoubtedly asked because one<br/>13 or more of the plaintiffs indicated that they had a<br/>14 problem, that problem associated with PCB's. One of the<br/>15 problems with your clients, Mr. McCrea, is they're<br/>16 claiming that every problem they've had from ingrown<br/>17 toenails to headaches and everything in between was caused<br/>18 by PCB's.<br/>19 So since that's the position that you have taken we<br/>20 have had to go into all of these problems. If you could<br/>21 be a little more specific in your complaint as to what you<br/>22 think is caused by PCB's we could narrow the focus, which<br/>23 I would welcome. If we could limit it to chloracne we'd<br/>24 have a much simpler time and we wouldn't have to take all<br/>25 this time.</p> |

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| <p style="text-align: right;">Page 121</p> <p>1 Q (By Mr. McCrea) Seeing spots?</p> <p>2 A Again, I am unable to evaluate that symptom</p> <p>3 and I would have to re-review the Yusho literature to see</p> <p>4 if their eating their PCB's caused spots in front of their</p> <p>5 eyes.</p> <p>6 Q Doctor, it is your opinion that PCB's</p> <p>7 ingested into the body as opposed to PCB's which have a</p> <p>8 route of entry through the skin, if the amount is the</p> <p>9 same, once into the body --</p> <p>10 MR. CARNEY: Let me -- Are you finished?</p> <p>11 MR. McCREA: No.</p> <p>12 MR. CARNEY: I want to object as soon as</p> <p>13 you're finished.</p> <p>14 MR. McCREA: Okay.</p> <p>15 Q (By Mr. McCrea) Is it your opinion that</p> <p>16 there's a difference of the toxicity between PCB's which</p> <p>17 are ingested into the body and PCB's which are absorbed</p> <p>18 through the skin?</p> <p>19 MR. CARNEY: Let me object because I think</p> <p>20 the question is vague and ambiguous. You haven't</p> <p>21 mentioned the amount.</p> <p>22 MR. McCREA: Same amount.</p> <p>23 MR. CARNEY: You haven't mentioned whether</p> <p>24 you're talking about the Yusho Japanese PCB's that had the</p> <p>25 heavy amount of furans that caused problems in Japan that</p>                                                                                                | <p style="text-align: right;">Page 123</p> <p>1 MR. McCREA: No.</p> <p>2 MR. CARNEY: So again I don't know what you</p> <p>3 mean by amount and again I don't know what you mean by</p> <p>4 saying compounds. Are we talking about the Japanese PCB's</p> <p>5 with the heavy amount of furans in them?</p> <p>6 MR. McCREA: We can talk about anything you</p> <p>7 want to talk about. We can talk about PCB's with furans,</p> <p>8 with quaterphenyls, with biphenylenes, with dioxin. We</p> <p>9 can talk about the Yusho PCB's with the furans and the</p> <p>10 quaterphenyls. We can talk about you PCB's that you</p> <p>11 manufacture with furans in it, as tested by Monsanto.</p> <p>12 It doesn't matter. What I'm stating is this: If</p> <p>13 you ingest as opposed to having a route of entry through</p> <p>14 the skin and the same amount ends up absorbed into your</p> <p>15 body, are those compounds more toxic, according to Dr.</p> <p>16 Kelly, if they're ingested?</p> <p>17 MR. CARNEY: Let me object, because number</p> <p>18 one, you said it doesn't matter whether it's the Japanese</p> <p>19 PCB's with the heavy amount of furans or the American</p> <p>20 PCB's, and I beg to differ with you. I think there's a</p> <p>21 significant difference between the two, the American PCB's</p> <p>22 I think the record is clear on -- at least from Dr.</p> <p>23 Kelley's testimony, has a very infinitesimal amount of</p> <p>24 furans compared to the Japanese and the furans are what</p> <p>25 caused the problems in Japan.</p> |
| <p style="text-align: right;">Page 122</p> <p>1 we haven't seen in the PCB's in America, and so I think</p> <p>2 the question's vague.</p> <p>3 Q (By Mr. McCrea) Doctor, if the -- Are you</p> <p>4 stating that if the same identical compound of PCB's is</p> <p>5 ingested that it would be more toxic than that same --</p> <p>6 MR. CARNEY: I just wanted to make sure I had</p> <p>7 time to object. Sometimes the doctor is quicker than I am</p> <p>8 with his answer, and so as soon as you're finished let me</p> <p>9 know and I'll object.</p> <p>10 THE WITNESS: I will wait for you, but just</p> <p>11 keep reminding me, that's a problem of mine I answer a</p> <p>12 little too fast.</p> <p>13 Q (By Mr. McCrea) Doctor, are you stating that</p> <p>14 if the same compound of PCB's is ingested as opposed to</p> <p>15 entering the body through the skin that there's a</p> <p>16 difference in toxicity in ingested PCB's as opposed to</p> <p>17 PCB's absorbed through the skin?</p> <p>18 A This is --</p> <p>19 MR. CARNEY: Object, let me object. When you</p> <p>20 say you are saying the same; I don't know what you're</p> <p>21 talking about in terms of amount.</p> <p>22 MR. McCREA: Same amount.</p> <p>23 MR. CARNEY: Same objection. What, if you</p> <p>24 drink PCB oil versus sticking your hand in the same PCB</p> <p>25 oil, would that be the same amount.</p> | <p style="text-align: right;">Page 124</p> <p>1 So I think it's a problem when you're trying to</p> <p>2 equate and say the same thing. I think the record is</p> <p>3 clear that it isn't. They are not the same; and you're</p> <p>4 mixing again apples and oranges when you're talking about</p> <p>5 the same amount of PCB's in the body.</p> <p>6 I'll agree with you if you have the same amount of</p> <p>7 PCB's in the body you have the same amount of PCB's, but</p> <p>8 the question is how much PCB's does it take to have your</p> <p>9 hand in it or to be exposed through skin contact versus</p> <p>10 drinking and getting the PCB's in your body that way.</p> <p>11 It's a totally different situation and you're trying to</p> <p>12 say it's the same, so I think your question is vague and</p> <p>13 ambiguous.</p> <p>14 MR. McCREA: Thank you for the agreement.</p> <p>15 Q (By Mr. McCrea) Doctor, have you performed</p> <p>16 any studies as to what the rate of skin absorption is of</p> <p>17 PCB's on the skin?</p> <p>18 A You mean the rate?</p> <p>19 Q Right.</p> <p>20 A How much goes in in one minute, half hour,</p> <p>21 two hours, twenty-four hours.</p> <p>22 Q Exactly.</p> <p>23 A No, I have not.</p> <p>24 Q Do you know of any study in which that has</p> <p>25 been done?</p>                                                                                                                                                                                                                                        |

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| <p style="text-align: right;">Page 125</p> <p>1 A There may have. There are minimum lethal<br/> 2 doses by skin absorption, there are minimum lethal doses<br/> 3 by oral intake. But to answer your question there may<br/> 4 have been those studies. I don't know. I don't recall.<br/> 5 Q But if the PCB's enter the body they don't<br/> 6 have less toxicity if they are ingested as opposed to<br/> 7 going through the skin? I mean, there's nothing about the<br/> 8 skin absorption that makes them less toxic, or is there?<br/> 9 A There could be, because remember if you<br/> 10 swallow it, it's absorbed, it goes into the liver and also<br/> 11 if you swallow, when these people swallowed the Japanese<br/> 12 PCB if one of them had an ulcerated esophagus, which is<br/> 13 the gullet, which is the tube leading from the mouth on<br/> 14 the stomach, he had that.<br/> 15 Whether that was caused by swallowing that PCB or<br/> 16 not I don't know. But certainly it could not be caused by<br/> 17 absorption through the skin, you would not get a ulcerated<br/> 18 esophagus from the skin absorption. If it was absorbed<br/> 19 through the skin it goes to the lungs first rather than<br/> 20 the liver. Whether or not there's excretion from the<br/> 21 lungs or not is a question.<br/> 22 Q Which body organs produce enzymes?<br/> 23 A The liver.<br/> 24 Q Any others?<br/> 25 A I'm sure there are. As I said earlier I'm no</p> | <p style="text-align: right;">Page 127</p> <p>1 A Yes.<br/> 2 MR. McCREA: Correct.<br/> 3 Q (By Mr. McCrea) Or Taiwan, can we include<br/> 4 Taiwan in this?<br/> 5 MR. CARNEY: Well, I think your question up<br/> 6 to now has just been Yusho?<br/> 7 THE WITNESS: Yusho.<br/> 8 MR. McCREA: I agree.<br/> 9 A Let's stick to this. Why don't you come up<br/> 10 with another questionnaire on Taiwan?<br/> 11 Q (By Mr. McCrea) No, Doctor. Do you know of<br/> 12 any substantial differences between Yusho and Taiwan?<br/> 13 A There may be. I'll have to check.<br/> 14 Q Do you know of any?<br/> 15 MR. CARNEY: Let me object here. You're<br/> 16 asking the witness to speculate about what's in literally<br/> 17 hundreds of pages of writing in these two instances to<br/> 18 determine the differences.<br/> 19 MR. McCREA: The question did not ask Dr.<br/> 20 Kelly to speculate. The question is do you know of any<br/> 21 substantial differences between Yusho poisoning and<br/> 22 poisoning in Taiwan?<br/> 23 A Well, what do you mean by substantial.<br/> 24 Q (By Mr. McCrea) Something that you would<br/> 25 consider medically significant or scientifically</p>                                                                                                                                                |
| <p style="text-align: right;">Page 126</p> <p>1 enzymologist; but I'm sure there are other enzymes outside<br/> 2 of the liver.<br/> 3 Q Are PCB's an enzyme inducer?<br/> 4 A Yes.<br/> 5 Q And you can't tell us here today if there are<br/> 6 other organs which produce enzymes other than the liver?<br/> 7 A No, sir.<br/> 8 Q Problems with reading?<br/> 9 MR. CARNEY: Again, I have to know what you<br/> 10 mean by problems with reading. The question's vague.<br/> 11 Q (By Mr. McCrea) An inability to read and<br/> 12 retain the information. In other words, the inability to<br/> 13 look at a document, to read it and to retain the<br/> 14 information?<br/> 15 A And to remember it?<br/> 16 Q Yes, sir.<br/> 17 MR. CARNEY: Well, it's a compound question.<br/> 18 You're asking about inability to read and then inability<br/> 19 to retain what you have read, and so I object to the form.<br/> 20 Q (By Mr. McCrea) Inability to retain what<br/> 21 you've read.<br/> 22 A I would have to know more about the symptom<br/> 23 and re-review the literature.<br/> 24 MR. CARNEY: Again for the record, we're<br/> 25 talking about the Japanese Yusho literature?</p>                                                                                                                                                                                                                                                                             | <p style="text-align: right;">Page 128</p> <p>1 significant?<br/> 2 A I would have to re-review both articles to<br/> 3 answer that.<br/> 4 Q What I mean by medically significant are the<br/> 5 symptoms produced, scientifically significant are the dose<br/> 6 response, the amount ingested, make up of the chemical?<br/> 7 MR. CARNEY: I'm gong to object to the form<br/> 8 of the question. It's compound; you're asking at least<br/> 9 three or four different questions in that question. I<br/> 10 don't know which one you want him to answer.<br/> 11 Q (By Mr. McCrea) Let's break it down one at a<br/> 12 time. Do you know of any differences in the symptoms<br/> 13 between the Japanese symptoms and the Taiwanese victims?<br/> 14 A I would have to re-review the articles on<br/> 15 both.<br/> 16 Q Do you know of any significant differences<br/> 17 between the amount of PCB's with contaminants ingested in<br/> 18 Japan compared to Taiwan?<br/> 19 MR. CARNEY: Talking about the amounts?<br/> 20 MR. McCREA: Right.<br/> 21 A I cannot be certain. My impression is the<br/> 22 people in Yusho have had more. I'm not certain of that; I<br/> 23 would have to look again at the literature.<br/> 24 Q (By Mr. McCrea) Do you know of any<br/> 25 substantial differences in the chemicals in the PCB's in</p> |

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| <p style="text-align: right;">Page 129</p> <p>1 Japan as opposed to Taiwan?</p> <p>2 MR. CARNEY: Objection to the form. Contains</p> <p>3 an undefined term what you mean by substantial.</p> <p>4 A Again I would have to look at the amounts</p> <p>5 that were listed in both literatures to say whether or not</p> <p>6 there were substantial differences.</p> <p>7 Q (By Mr. McCrea) Dr. Kelly, the next one is</p> <p>8 problems with lights, and make that oncoming headlights at</p> <p>9 night when driving?</p> <p>10 MR. CARNEY: Well, I don't know what you mean</p> <p>11 by problems with oncoming lights. If you're in the path</p> <p>12 of the lights I think you'd have the problem with it but I</p> <p>13 don't know if that's what you mean.</p> <p>14 Q (By Mr. McCrea) Eye sensitivity with lights</p> <p>15 when driving at night?</p> <p>16 A I don't believe the people in Yusho were</p> <p>17 driving automobiles; so I don't recall that symptom ever</p> <p>18 coming up.</p> <p>19 Q It probably didn't. Cataracts?</p> <p>20 A No.</p> <p>21 MR. CARNEY: Let me, just for clarification,</p> <p>22 are we back to just Yusho again?</p> <p>23 MR. McCREA: Correct.</p> <p>24 Q (By Mr. McCrea) Cataracts?</p> <p>25 A No.</p> | <p style="text-align: right;">Page 131</p> <p>1 Q The eye itself, excluding the eyelid?</p> <p>2 A I do not know of any.</p> <p>3 Q Inflamed or puffy eyes?</p> <p>4 A Well, we skipped a few.</p> <p>5 Q We did?</p> <p>6 A Irritated eyes.</p> <p>7 Q I thought we went over that. You said that</p> <p>8 was proven?</p> <p>9 A Well, we can take it inflamed or puffy eyes,</p> <p>10 unusual redness of the eyes, plus a discharge in the eyes.</p> <p>11 Yes, those have been reported at Yusho.</p> <p>12 Q Heart problems?</p> <p>13 A Again, I would have to know what the meaning</p> <p>14 of that symptom is or that condition is and re-review the</p> <p>15 literature of the Japanese poisoning with Kanechlor, the</p> <p>16 Japanese PCB.</p> <p>17 Q Heart attack?</p> <p>18 A I certainly do not believe that has been</p> <p>19 proven.</p> <p>20 MR. CARNEY: Again we're talking about Japan,</p> <p>21 Yusho?</p> <p>22 A Yusho, Japan, Yusho.</p> <p>23 Q (By Mr. McCrea) Stroke?</p> <p>24 A I do not believe there has been a causal</p> <p>25 relationship between strokes and the ingestion of Japanese</p>             |
| <p style="text-align: right;">Page 130</p> <p>1 Q What are cataracts?</p> <p>2 A Opacity of the lens and of the eye.</p> <p>3 Q And what is the chemical composition?</p> <p>4 A Calcium, presumably, and some colloid</p> <p>5 formation.</p> <p>6 Q Seeing spots in sunlight?</p> <p>7 A Again, I would have to know more about the</p> <p>8 symptoms and re-review the literature on Yusho poisoning</p> <p>9 with the Japanese PCB's.</p> <p>10 Q Irritated eyes?</p> <p>11 A Yes.</p> <p>12 Q Eye disease?</p> <p>13 A Here again, you mean by an eye disease,</p> <p>14 eyelid disease or eye disease? I don't know what you mean</p> <p>15 by that sentence. I mean, if I say yes, cataracts is an</p> <p>16 eye disease, but I don't believe cataracts --</p> <p>17 Q Are there any particular diseases of the</p> <p>18 eye --</p> <p>19 A The eye itself? Not --</p> <p>20 Q -- that you feel are possibly, probably or</p> <p>21 proven to have resulted from the ingestion of the Yusho</p> <p>22 PCB oil?</p> <p>23 A If you mean the globe of the eye itself or do</p> <p>24 you mean the eyelids? Do you include that in your</p> <p>25 blanket --</p>                                                                                          | <p style="text-align: right;">Page 132</p> <p>1 PCB oil with the furan contaminations.</p> <p>2 Q Was your answer I do not believe there has</p> <p>3 been a definite causal relationship between stroke and the</p> <p>4 injection of Yusho oil?</p> <p>5 A That's correct.</p> <p>6 Q Is it your opinion that there is no</p> <p>7 relationship?</p> <p>8 A I would have to re-review the literature to</p> <p>9 find out.</p> <p>10 Q Tightness in chest?</p> <p>11 A Again, I'd have to know more about the</p> <p>12 symptom.</p> <p>13 Q Peripheral neuropathy as it effects the</p> <p>14 nerves crossing the chest?</p> <p>15 A Well, that's not tightness of the chest.</p> <p>16 That's pain along the ribs.</p> <p>17 Q All right. My question is peripheral</p> <p>18 neuropathy?</p> <p>19 A We're forgetting about tightness of the chest</p> <p>20 now, are we?</p> <p>21 Q Yes, sir; and now as a subcategory,</p> <p>22 peripheral neuropathy as it effects the nerve endings in</p> <p>23 the chest area?</p> <p>24 MR. CARNEY: I'm going to object to the</p> <p>25 definition of what peripheral neuropathy is. At least I</p> |

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| <p style="text-align: right;">Page 133</p> <p>1 think you've mischaracterized it and it's my understanding<br/> 2 that it's in the ends of the nerves on the limbs, but<br/> 3 maybe I'm wrong, I'm not a --<br/> 4 THE WITNESS: I wouldn't hear what you said.<br/> 5 MR. CARNEY: The ends of the nerves at the<br/> 6 ends of the extremities; but I may be wrong and I'm not a<br/> 7 doctor, so I'll -- but I think you mischaracterized what a<br/> 8 peripheral neuropathy is.<br/> 9 MR. McCREA: I'm not a doctor, I could very<br/> 10 well have.<br/> 11 Q (By Mr. McCrea) But Doctor, could you have<br/> 12 peripheral neuropathy in the nerve endings in the chest<br/> 13 muscles?<br/> 14 A Yes.<br/> 15 Q The question is now peripheral neuropathy, is<br/> 16 the nerve endings in the chest?<br/> 17 A I would have to review the article to find<br/> 18 out whether there was any relationship.<br/> 19 Q Tightness in heart area or pain?<br/> 20 MR. CARNEY: Objection to the form, as well<br/> 21 as I have my continuing standing objection, right Mr.<br/> 22 McCrea?<br/> 23 MR. McCREA: Yes, we stipulate.<br/> 24 A I would have to review the symptoms of what<br/> 25 they are talking about to get more information about the</p> | <p style="text-align: right;">Page 135</p> <p>1 Q I understand that.<br/> 2 A Well, I just want to let the jury know that<br/> 3 there's a big difference between benzene and chlorinated<br/> 4 biphenyl.<br/> 5 Q All right. Are there transformer fluids that<br/> 6 contain trichlorobenzene?<br/> 7 A Yes.<br/> 8 Q If a worker is exposed to a transformer which<br/> 9 contains trichlorobenzene and polychlorinated biphenyls,<br/> 10 putting aside Yusho, would leukemia be a possible<br/> 11 consequence of exposure?<br/> 12 MR. CARNEY: Objection, I don't think you've<br/> 13 given enough facts. The amount, the length of time, the<br/> 14 dose.<br/> 15 Q (By Mr. McCrea) Doctor, let me uncomplicate<br/> 16 the question, if I can. Is there a difference between<br/> 17 toxicity of trichlorobenzene and benzene?<br/> 18 A Oh, yes.<br/> 19 Q All right, sir. In your opinion is<br/> 20 trichlorobenzene associated with leukemia?<br/> 21 A No.<br/> 22 Q Anemia? Now we're back to Yusho.<br/> 23 A I do not know if anemia has been associated<br/> 24 with the Yusho occurrence. I could have to know more<br/> 25 about the type of anemia, the extent of the anemia, what</p> |
| <p style="text-align: right;">Page 134</p> <p>1 symptoms of what they mean by tightness in the heart area<br/> 2 or pain I presume where he has pain in the heart area.<br/> 3 Again I would need more information on that and I would<br/> 4 then have to re-review the literature on the Yusho<br/> 5 incident using the Japanese contaminated PCB's.<br/> 6 Q (By Mr. McCrea) Unusual rapid or irregular<br/> 7 heart beat?<br/> 8 MR. CARNEY: Objection to the form. It's<br/> 9 also vague; I don't know what you mean by unusual.<br/> 10 A Again, I would have to know what caused<br/> 11 irregular heart beat. I would have to know what caused<br/> 12 the rapidity of the heart. I'd have to know how long it<br/> 13 was. I'd have to know whether its was once in a while or<br/> 14 intermittent, so the answer is I do not have enough facts<br/> 15 to give an adequate opinion on that.<br/> 16 Q Diabetes?<br/> 17 A No.<br/> 18 Q High blood sugar?<br/> 19 A No.<br/> 20 Q Leukemia?<br/> 21 A No.<br/> 22 Q You acknowledge, Doctor, that benzene can<br/> 23 cause leukemia, correct?<br/> 24 A Oh, yes, certainly. We aren't talking about<br/> 25 benzene.</p>                                                                            | <p style="text-align: right;">Page 136</p> <p>1 happened to the blood counts and I would have to review<br/> 2 the literature to know if that was a significant finding.<br/> 3 Q Gout?<br/> 4 A No, never heard of gout being associated with<br/> 5 anybody's PCB much less Yusho's.<br/> 6 Q What causes gout?<br/> 7 A It's disturbance of the purine metabolism<br/> 8 which causes a precipitation of uric acid in the joint<br/> 9 cavities.<br/> 10 Q Liver problems?<br/> 11 MR. CARNEY: I'm gong to object to that as<br/> 12 being undefined, what you mean by liver problems.<br/> 13 MR. McCREA: Swelling of the liver.<br/> 14 MR. CARNEY: I'm not sure that these -- there<br/> 15 was any measuring of the liver. I don't know that people<br/> 16 know if their liver is swollen or not.<br/> 17 You can answer.<br/> 18 A It is possible.<br/> 19 MR. CARNEY: He's asking whether there's<br/> 20 anything in the literature in Yusho?<br/> 21 A I think there was to the best of my<br/> 22 recollection, but we have defined liver problems to the<br/> 23 swelling of the liver.<br/> 24 Q (By Mr. McCrea) Hepatitis?<br/> 25 A Yes. If the liver is swollen it could be due</p>         |

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| <p style="text-align: right;">Page 137</p> <p>1 to hepatitis.</p> <p>2 Q Porphyria cutanea tarda?</p> <p>3 A Do we get that one? I don't see it in here.</p> <p>4 Q As a liver problem?</p> <p>5 A What?</p> <p>6 Q As a liver problem?</p> <p>7 A I thought you were asking for that. I done</p> <p>8 know if that was reported in the Japanese Yusho incident</p> <p>9 are or not.</p> <p>10 Q Elevated porphyrins as part of liver</p> <p>11 problems?</p> <p>12 A If they had liver problems they may have had</p> <p>13 elevated porphyrins. I do not know if they were, at the</p> <p>14 present time, I do not recollect whether or not they</p> <p>15 tested for them or whether they were elevated to a</p> <p>16 statistical positivity.</p> <p>17 Q Primary liver tumor?</p> <p>18 A Is that also under problems?</p> <p>19 Q Yes, sir.</p> <p>20 A I don't recall if the Japanese PCB's with the</p> <p>21 chlorinated benzofurans, et cetera, caused primary liver</p> <p>22 tumors. I am of the opinion it did not.</p> <p>23 Q Fatty degeneration?</p> <p>24 A That's possible.</p> <p>25 Q Induction of enzymes?</p>                                                                                          | <p style="text-align: right;">Page 139</p> <p>1 A Any place?</p> <p>2 Q Yes, sir.</p> <p>3 MR. CARNEY: You're again talking about the</p> <p>4 Japanese ingestion of the Japanese PCB's with the furans?</p> <p>5 MR. McCREA: Correct.</p> <p>6 A I do not know if it has been statistically</p> <p>7 proven that cancer has resulted from the oral intake of</p> <p>8 the Japanese PCB's.</p> <p>9 Q (By Mr. McCrea) Food allergies?</p> <p>10 MR. CARNEY: Objection to the form, it's</p> <p>11 vague.</p> <p>12 A I don't know enough about the delineation of</p> <p>13 that symptom and I would have to re-review the literature</p> <p>14 to answer the question.</p> <p>15 Q Motion sickness?</p> <p>16 A Same answer.</p> <p>17 Q Stomach problems?</p> <p>18 MR. CARNEY: Objection to the form. It's</p> <p>19 vague.</p> <p>20 A I presume by this you mean anything from a</p> <p>21 person having to take the Japanese equivalent of Maalox to</p> <p>22 a cancer of the stomach?</p> <p>23 Q (By Mr. McCrea) Yes, sir.</p> <p>24 A Well, I would have to know more about the</p> <p>25 stomach problems and to re-review the literature.</p>                                                                                                                                                                                                                                           |
| <p style="text-align: right;">Page 138</p> <p>1 A That's possible. There's inductions of</p> <p>2 enzymes isn't all bad all the time.</p> <p>3 Q Cirrhosis, which is the next one on the</p> <p>4 chart?</p> <p>5 A I do not know whether or not cirrhosis has</p> <p>6 been reported in the Yusho literature.</p> <p>7 Q Hepatitis we have discussed. Tumors, and by</p> <p>8 this, doctor, non-cancerous tumors?</p> <p>9 A We mentioned that, too. You said hepatoma</p> <p>10 above. Didn't you mention hepatoma under liver problems?</p> <p>11 I thought that was one of your subsidiary questions.</p> <p>12 Q Primary liver tumor?</p> <p>13 A That's a hepatoma.</p> <p>14 Q You answered that?</p> <p>15 A And I said I did not know that that was</p> <p>16 reported.</p> <p>17 Q And now the question is, excuse me, is</p> <p>18 unrelated to the liver. This is to the body, tumors in</p> <p>19 the body, non-cancerous tumors?</p> <p>20 A I do not recall any such association in a</p> <p>21 causal manner.</p> <p>22 Q What about non-cancerous tumors of the liver?</p> <p>23 A Again, I do not know if any of them had</p> <p>24 occurred. I'd have to re-review the literature.</p> <p>25 Q Cancer?</p> | <p style="text-align: right;">Page 140</p> <p>1 Q Ulceration of the esophagus?</p> <p>2 A It's been stated that that occurred. At</p> <p>3 least one case there, in Yusho.</p> <p>4 Q I think that's a repeat of one on the first</p> <p>5 page. No -- well, yes, it is, and you've answered that.</p> <p>6 Can you tell us what you recall about that one case,</p> <p>7 Doctor?</p> <p>8 A Not except that someone had -- I'd have to</p> <p>9 re-review the literature, but one person had an ulcerated</p> <p>10 esophagus.</p> <p>11 Q Problems with intestines?</p> <p>12 A I'm going to give you the same answer on the</p> <p>13 next one, two, three, four, five, six, seven; it will save</p> <p>14 some time. The answer is --</p> <p>15 Q All right.</p> <p>16 A The answer is I would have to know more about</p> <p>17 the delineation of these symptoms, the time factor</p> <p>18 involved and I would have to know -- I'd have to re-review</p> <p>19 the literature to see if in fact these occurred.</p> <p>20 Q As a subcategory, Dr. Kelly, on problems with</p> <p>21 intestines, fatty tumors of the intestines?</p> <p>22 A I'd have to know more about where this fatty</p> <p>23 tumor was. I mean, the intestine is coated with fat.</p> <p>24 There are pieces of fat hanging down all along the</p> <p>25 intestines and I don't know if that's considered a fatty</p> |

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| <p style="text-align: right;">Page 141</p> <p>1 tumor or not, if it's a piece of fat. The omentum which</p> <p>2 hangs over almost the complete intestine is almost</p> <p>3 completely composed of fat, so --</p> <p>4 Q Doctor, I think these next two have been</p> <p>5 previously answered -- No, they haven't. Unusual weight</p> <p>6 gain?</p> <p>7 MR. CARNEY: I don't -- I guess I'll object.</p> <p>8 I don't know what you mean by unusual weight gain versus</p> <p>9 usual, usual. I don't know if there's a difference in</p> <p>10 your mind or not.</p> <p>11 A Well, Mr. McCrea, I'd have to find out what</p> <p>12 they mean by unusual weight gain and what they mean by</p> <p>13 unusual weight loss. I'd have to look up in these</p> <p>14 articles and see if some people gained weight and some</p> <p>15 people lost weight as a result of the exposure to the</p> <p>16 Japanese eating the Japanese PCB's. So I would have to</p> <p>17 see, there'd have to be a preponderance of one; I don't</p> <p>18 believe you'd have it both ways. Some people would gain</p> <p>19 weight and some people would lose weight as a result of</p> <p>20 PCB's, so I can't answer that.</p> <p>21 Q (By Mr. McCrea) Allergies to medications?</p> <p>22 MR. CARNEY: Objection. I don't know what</p> <p>23 you mean, what type of medications? Question's vague.</p> <p>24 A I don't think that was talked about in there.</p> <p>25 I would have to review the literature to give you an</p> | <p style="text-align: right;">Page 143</p> <p>1 by proven fact; has it been proved in a law -- proved up</p> <p>2 in a lawsuit. I don't know that this witness is an expert</p> <p>3 as to what's been proven in the courts of the United</p> <p>4 States or not.</p> <p>5 Q (By Mr. McCrea) Has it been proven in</p> <p>6 medical science that enzyme induction can enhance the</p> <p>7 effects of enzyme induction?</p> <p>8 MR. CARNEY: I'm going to object on the same</p> <p>9 grounds, the use of the word proven. I don't know what</p> <p>10 you mean by that, it's an undefined term.</p> <p>11 A If one takes antipyrine, which is a drug that</p> <p>12 has been used previously in the reduction of fever and you</p> <p>13 have enzyme induction you will speed up the elimination of</p> <p>14 that antipyrine from the body. Whether that's good or bad</p> <p>15 for the body I don't know, but it does effect that.</p> <p>16 Q (By Mr. McCrea) How long has that been</p> <p>17 known, Doctor?</p> <p>18 A Ten years, give or take a few years.</p> <p>19 Q Do you recall where that was reported?</p> <p>20 A Oh, it's reported often.</p> <p>21 Q Are there any other medications?</p> <p>22 A There may well be.</p> <p>23 Q Which can be likewise affected in addition to</p> <p>24 antipyrine?</p> <p>25 A Antipyrine?</p> |
| <p style="text-align: right;">Page 142</p> <p>1 answer to that.</p> <p>2 Q (By Mr. McCrea) Can enzyme induction alter</p> <p>3 the effectiveness of medications?</p> <p>4 A Well, sometimes it can enhance it. Sometimes</p> <p>5 it can all hurt.</p> <p>6 Q So it can both make it more effective and</p> <p>7 make it less effective?</p> <p>8 A It's a possibility.</p> <p>9 Q Do you know how enzymes do that?</p> <p>10 A No, I don't.</p> <p>11 Q Is that proven, that enzyme induction can</p> <p>12 enhance and decrease the effectiveness of medications?</p> <p>13 MR. CARNEY: I'm going to object to the word</p> <p>14 proven. That's an undefined term as to what you mean by</p> <p>15 proven. I assume you're talking about the literature</p> <p>16 here --</p> <p>17 MR. McCREA: No.</p> <p>18 MR. CARNEY: And I don't think the literature</p> <p>19 uses the word proven.</p> <p>20 MR. McCREA: No. I'm not talking about the</p> <p>21 Yusho literature. I'm asking Dr. Kelly if it's a proven</p> <p>22 fact that enzyme induction can both improve or lessen the</p> <p>23 effectiveness of medication?</p> <p>24 MR. CARNEY: Well, I'm going to object to the</p> <p>25 use of the word proven fact. I don't know what you mean</p>                                                                                                                                                                                                                                                      | <p style="text-align: right;">Page 144</p> <p>1 Q Yes, sir.</p> <p>2 MR. CARNEY: Objection to the form. It's</p> <p>3 vague.</p> <p>4 A There may have been. I mean, there may be.</p> <p>5 I just don't recall at the present time.</p> <p>6 Q (By Mr. McCrea) Now Doctor, loss of appetite</p> <p>7 and we're talking about you she PCB ingestion?</p> <p>8 A Well, I'll have to answer that the same way I</p> <p>9 answered unusual weight gain, unusual weight loss.</p> <p>10 There's loss of appetite and there's too much appetite. I</p> <p>11 would have to know more about the symptoms and I'd have to</p> <p>12 know more about -- I'd have to re-review the literature to</p> <p>13 answer that question.</p> <p>14 Q In 1933 the individual working for Swann</p> <p>15 Chemical complained of loss of appetite, is that not</p> <p>16 correct?</p> <p>17 A My I see Exhibit 1 again?</p> <p>18 Q Page 1024 under Report of Case, the first</p> <p>19 full paragraph, second to the last line?</p> <p>20 A Yes, he complained of loss of appetite, yes,</p> <p>21 sir.</p> <p>22 Q Uncontrolled urge to eat, Yusho ingestion?</p> <p>23 A I don't know. I'd have to re-review the</p> <p>24 literature on that.</p> <p>25 Q Colitis?</p>                                                                                             |

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| <p style="text-align: right;">Page 145</p> <p>1 A Again, that is a catch-all phrase for</p> <p>2 everything from amoebic colitis to ulcerative colitis to</p> <p>3 to spastic colitis to allergic colitis. I'd have to know</p> <p>4 more about the type of colitis. I'd have to review the</p> <p>5 literature to be able to tell it.</p> <p>6 Q Kidney pain?</p> <p>7 A Same answer to that, kidney pain could be</p> <p>8 kidney stone, could be pain in the region, could be pain</p> <p>9 on emptying the bladder.</p> <p>10 Q Bladder problems?</p> <p>11 A Again, I'd have to know more about what they</p> <p>12 are talking about. I think we could take all three of</p> <p>13 these, bladder problems, colon problems, spleen problems.</p> <p>14 I'd have to know what the problems with. I don't think</p> <p>15 the spleen has very many problems unless it gets too big;</p> <p>16 but I'd have to know more about that and re-review the</p> <p>17 literature on the Yusho incident using the Japanese PCB's.</p> <p>18 Q Rectal bleeding?</p> <p>19 A There again I'd have to know whether that's</p> <p>20 associated with constipation, hemorrhoids, whether they do</p> <p>21 a lot of stooping or lifting and I don't know without</p> <p>22 re-reviewing the literature whether that was prominent at</p> <p>23 Yusho.</p> <p>24 Q Painful urination?</p> <p>25 A I do not know whether that was a prominent</p> | <p style="text-align: right;">Page 147</p> <p>1 often they occurred, what their relationship was to the</p> <p>2 exposure, what was the extent of the exposure and then I'd</p> <p>3 have to re-review the literature to find out whether it</p> <p>4 was a prominent findings at Yusho.</p> <p>5 Q Amnesia?</p> <p>6 A That's pretty close to memory loss, I think I</p> <p>7 would include that under it.</p> <p>8 Q Were the -- Were the Yusho -- Strike the</p> <p>9 question. Disorientation?</p> <p>10 A That I'd have to have more information what</p> <p>11 were they disoriented around time, place, people or what.</p> <p>12 Q Speech disorder?</p> <p>13 A Didn't we have that before?</p> <p>14 Q Very similar; speech problems I think it was.</p> <p>15 A My answer would be the same for speech</p> <p>16 disorder as I was for speech problems.</p> <p>17 Q Okay. Lethargy?</p> <p>18 A I would have to know more about it and</p> <p>19 re-review the literature to see if it was prominent in the</p> <p>20 Yusho episode.</p> <p>21 Q Trouble sleeping?</p> <p>22 A I think we can combine that with insomnia.</p> <p>23 That's pretty close.</p> <p>24 Q All right, sir?</p> <p>25 A I would have to say I would have to know more</p>                      |
| <p style="text-align: right;">Page 146</p> <p>1 symptom or not.</p> <p>2 Q Unusual color in urine?</p> <p>3 A I haven't the slightest idea what color they</p> <p>4 are talking about. Purple, green, red? I don't know.</p> <p>5 Q Fair enough. Blood in urine?</p> <p>6 A I think that has not been proven at all in</p> <p>7 the Yusho people.</p> <p>8 Q Would your answer be none?</p> <p>9 A I know of none, yes.</p> <p>10 Q Frequent urination?</p> <p>11 A The same answer. I would have to say that I</p> <p>12 would have to know more about this, what other causes</p> <p>13 there may have been for the urination and I would have to</p> <p>14 re-review the literature to see if that was a prominent</p> <p>15 finding in the Yusho episode after the ingestion of</p> <p>16 Japanese PCB.</p> <p>17 Q Dizziness?</p> <p>18 A I think we can take the next four.</p> <p>19 Q All right, sir.</p> <p>20 A Because the answer is just going to be the</p> <p>21 same as I have just given you, periods of disorientation,</p> <p>22 blacking out, fainting and memory loss.</p> <p>23 Q All right, sir. What is your answer?</p> <p>24 A That I would have to know more about a</p> <p>25 description of these symptoms, when they occurred, how</p>                                                                                                                                                                    | <p style="text-align: right;">Page 148</p> <p>1 about it. I would have to know more about the symptoms</p> <p>2 and would have to re-review the literature to see if it</p> <p>3 was a positive finding.</p> <p>4 Q Trouble concentrating?</p> <p>5 A Same answer.</p> <p>6 Q Nervousness?</p> <p>7 A I'd have to know what they mean by</p> <p>8 nervousness. Does that mean a person is jittery, does</p> <p>9 that mean a person has tremors, does that mean a person is</p> <p>10 afraid to go out in the street, get hit by a ricksha.</p> <p>11 Q First jittery, under the category of</p> <p>12 nervousness, at Yusho.</p> <p>13 A Beg your pardon? I can't hear you.</p> <p>14 Q First, the subsymptom of jittery, under</p> <p>15 nervousness?</p> <p>16 A I do not know if that was a prominent symptom</p> <p>17 at Yusho, so I cannot answer.</p> <p>18 Q Tremors?</p> <p>19 MR. CARNEY: I think that's vague. What kind</p> <p>20 of tremors.</p> <p>21 A I think I answered that before someplace.</p> <p>22 No, maybe I didn't; but I would have to know more about</p> <p>23 when the tremors came on, how long they came on, what</p> <p>24 muscles were involved and I'd have to re-review the</p> <p>25 literature to see if it was a significant finding.</p> |

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| <p style="text-align: right;">Page 149</p> <p>1 MR. CARNEY: And I'll object on the ground</p> <p>2 that further you haven't indicated what type of tremor.</p> <p>3 Q (By Mr. McCrea) Tremors of the hand?</p> <p>4 MR. CARNEY: Well, I would object. There are</p> <p>5 various types of tremors of the hand and I'd have to know</p> <p>6 which ones you mean. Otherwise the question's overbroad</p> <p>7 and vague.</p> <p>8 Q (By Mr. McCrea) Tremors of the hand?</p> <p>9 MR. CARNEY: Talking about a postural tremor</p> <p>10 or --</p> <p>11 A My answer is the same, I'd have to know more</p> <p>12 about it. Is it a tremor when you reach for a glass of</p> <p>13 water. Is it shaking all the time like Parkinson's? I</p> <p>14 don't know, I'd have to know more about it.</p> <p>15 Q (By Mr. McCrea) Scared?</p> <p>16 MR. CARNEY: Objection.</p> <p>17 A Scared?</p> <p>18 Q (By Mr. McCrea) Yeah. You said scared,</p> <p>19 scared of being hit by a ricksha?</p> <p>20 A I do not believe that that was a prominent</p> <p>21 symptom that I can recall.</p> <p>22 Q Anxiety?</p> <p>23 A I do not believe that was prominent symptom</p> <p>24 in Yusho. I would have to re-review the literature to</p> <p>25 find out.</p> | <p style="text-align: right;">Page 151</p> <p>1 ingestion of the Japanese PCB's.</p> <p>2 Q Vertigo?</p> <p>3 A There again, people get very confused. Does</p> <p>4 vertigo mean you stand up and the room goes around, or do</p> <p>5 you get lightheaded. So there's got to be a very definite</p> <p>6 definition of what they mean by vertigo and what I mean by</p> <p>7 vertigo and what medical -- what is accepted as vertigo.</p> <p>8 But to answer your question I would have to know more</p> <p>9 about that symptom and I would have to re-review the</p> <p>10 literature.</p> <p>11 Q Dr. Kelly, Exhibit 4, we have gone over every</p> <p>12 symptom on that exhibit?</p> <p>13 A Yes, sir.</p> <p>14 Q As medical director of --</p> <p>15 A May I correct you a minute? Because I said</p> <p>16 yes and I want to correct that answer.</p> <p>17 Q Yes, sir.</p> <p>18 A You have gone over signs and symptoms. Skin</p> <p>19 cancer is not a symptom, it's a sign. It's not a symptom.</p> <p>20 A boil is not a symptom. High blood pressure is not a</p> <p>21 symptom.</p> <p>22 Q All right. We have gone over all of the</p> <p>23 signs, which is something you can see, and all of the</p> <p>24 symptoms, which is something that's reported?</p> <p>25 A That's correct.</p>                                                                                                                                                                                             |
| <p style="text-align: right;">Page 150</p> <p>1 Q Irritability?</p> <p>2 A Same answer.</p> <p>3 Q What is your answer on irritability, that you</p> <p>4 need more information?</p> <p>5 A I would need more information to know what</p> <p>6 they would be irritated about, how often it would be</p> <p>7 irritated, how long the periods of irritability would last</p> <p>8 and then I would have to review the Yusho literature to</p> <p>9 find out if the ingestion of the Japanese PCB caused</p> <p>10 people to be more irritable than they were previously.</p> <p>11 Q Injury to the immune system?</p> <p>12 A That's possible.</p> <p>13 Q Predisposed to cancer?</p> <p>14 A No, I do not believe so.</p> <p>15 Q Depression?</p> <p>16 A I would have to review the literature to find</p> <p>17 out if that was a prominent symptom at Yusho and I do not</p> <p>18 recall it being.</p> <p>19 Q Change in personality?</p> <p>20 A Same answer.</p> <p>21 Q Unexplained crying?</p> <p>22 A Same answer.</p> <p>23 Q Claustrophobia?</p> <p>24 A I never heard of that before. It may have</p> <p>25 been, but I never heard of it, at Yusho after the</p>                                                                        | <p style="text-align: right;">Page 152</p> <p>1 Q On Plaintiff's Exhibit 4?</p> <p>2 A Yes, sir.</p> <p>3 Q My question to you, as medical director of</p> <p>4 Monsanto Company did you ever ask a single worker if he</p> <p>5 had any of these specific problems? In other words, when</p> <p>6 you sat down and did your medical evaluation of the</p> <p>7 workers did you ask the worker a question such as: "Mr.</p> <p>8 Worker, I'm going to ask you a series of questions. Have</p> <p>9 you had any of the following: Asthma, skin irritation,</p> <p>10 skin rashes?" Did you ever go through a list of questions</p> <p>11 with the workers?</p> <p>12 MR. CARNEY: Let me object. I think you</p> <p>13 covered this in questions about what he did in his</p> <p>14 physical examinations at length last week when you were</p> <p>15 examining the witness, and I'm going to object to that. I</p> <p>16 think the question is vague and ambiguous. Are you asking</p> <p>17 did he ask specifically and each one of those or are you</p> <p>18 asking on one? I don't know what the question is, very</p> <p>19 vague.</p> <p>20 Q (By Mr. McCrea) And I appreciate the</p> <p>21 objection and it's important for us to understand this</p> <p>22 answer. I'm not talking about these symptoms, Dr. Kelly,</p> <p>23 what I am asking you is did you ever specifically ask a</p> <p>24 worker about specific signs or symptoms?</p> <p>25 A Yes. Not these, now, you're not talking</p> |

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| <p style="text-align: right;">Page 153</p> <p>1 about those you've said.</p> <p>2 Q No?</p> <p>3 A Yes, I asked them if they had gained weight.</p> <p>4 I asked them if they lost weight. I mean, when you take a</p> <p>5 physical examination you don't have a list to sit down and</p> <p>6 say okay, "Do you have asthma? "No" do you have skin</p> <p>7 irritation? "No." You go by symptoms. You start with</p> <p>8 the head, you ask them about whether they had headaches,</p> <p>9 you develop when they got the headaches, if they had</p> <p>10 headaches. If they had eye problems you ask them about</p> <p>11 that. You ask them when they have had their glasses</p> <p>12 checked. You ask them -- you cover all these specific</p> <p>13 things but not specifically each one.</p> <p>14 Q Did you ever have a list of questions like</p> <p>15 when you go in for a driver's license, you know how they</p> <p>16 sit there and they ask you if you had any of these. Did</p> <p>17 you ever have a list of questions in which you checked off</p> <p>18 the signs or symptoms on a written list?</p> <p>19 A We have had some -- We would have asked</p> <p>20 people about conditions that occurred infrequently in the</p> <p>21 industrial environments. We would ask people if they had</p> <p>22 back pain. We would ask people who were exposed --</p> <p>23 Q Now we're talking about PCB workers?</p> <p>24 A No. You didn't mention PCB. You said did I</p> <p>25 ever talk to any Monsanto workers.</p> | <p style="text-align: right;">Page 155</p> <p>1 A K what?</p> <p>2 Q K-87.</p> <p>3 A Eighty-six documents in there?</p> <p>4 Q Right. Your attorneys asked you about those</p> <p>5 documents.</p> <p>6 MR. CARNEY: Do you have a second set that</p> <p>7 you could give to Dr. Kelly?</p> <p>8 (Whereupon, a discussion was held off the record.)</p> <p>9 Q (By Mr. McCrea) Doctor, I'm going to ask you</p> <p>10 a few questions about certain documents in this stack and</p> <p>11 I will refer to them by the exhibit number in the lower</p> <p>12 right corner?</p> <p>13 A Yes, sir.</p> <p>14 Q The first one --</p> <p>15 MR. CARNEY: Why don't we just, so that we</p> <p>16 can have -- if you just mention the exhibit number I could</p> <p>17 have my associate hand the doctor that. That way he wont</p> <p>18 have to juggle. I think our -- just for the record our</p> <p>19 exhibits went from K-1 through K-108.</p> <p>20 MR. McCREA: K- 108, all right.</p> <p>21 Q (By Mr. McCrea) Dr. Kelly, can you review</p> <p>22 please Exhibit K-3?</p> <p>23 A Yes, sir, I have it.</p> <p>24 Q Would you turn to page 298?</p> <p>25 A Yes, sir.</p>                                                                                                                                                                                                                                                 |
| <p style="text-align: right;">Page 154</p> <p>1 Q Right. Let's restrict it to PCB workers.</p> <p>2 Did you ever have a specific list of signs and symptoms</p> <p>3 which you asked workers exposed to PCB's in Anniston or</p> <p>4 Sauget, Illinois?</p> <p>5 A Well, now remember, the people that I</p> <p>6 examined were the -- What was it, seventeen or</p> <p>7 twenty-seven people at East St. Louis. I did not examine</p> <p>8 the workers at Anniston, the PCB workers. I talked to the</p> <p>9 workers at Anniston, when I asked them how they were</p> <p>10 getting along, asked them if they had any problems, asked</p> <p>11 them when they went back to the doctor, asked them when</p> <p>12 they went to St. Louis. The people in St. Louis where I</p> <p>13 gave the thorough examination in that one group that were</p> <p>14 still working there, I covered these things under the</p> <p>15 systems.</p> <p>16 Q Did you specifically ask them about specific</p> <p>17 signs or symptoms on a written list?</p> <p>18 MR. CARNEY: I think we're out of time. So</p> <p>19 we don't cut off the answer, save it for the break.</p> <p>20 MR. McCREA: Break.</p> <p>21 (Whereupon, a short break was taken.)</p> <p>22 Q Dr. Kelly, your attorneys asked you about</p> <p>23 documents which were identified as K-1 through K- 87?</p> <p>24 A Me?</p> <p>25 Q K-87.</p>                                                                                                                                  | <p style="text-align: right;">Page 156</p> <p>1 Q First of all, the title of this document is</p> <p>2 what?</p> <p>3 A Symposium on Certain Chlorinated</p> <p>4 Hydrocarbons.</p> <p>5 Q Does that include PCB's?</p> <p>6 A It includes what he called PCB's. He did not</p> <p>7 test PCB's as he stated in his 1939 article, he tested</p> <p>8 P -- polychlorinated diphenyl benzene, which is not a PCB.</p> <p>9 But he referred to that particular compound as a PCB</p> <p>10 through all these articles in 1937.</p> <p>11 Q All right. On page 298 can you see in the</p> <p>12 second column the heading discussion?</p> <p>13 A Yes, sir.</p> <p>14 Q The first sentence under that heading states</p> <p>15 "These experiments leave no doubt as to the possibility of</p> <p>16 systemic effects from the chlorinated naphthalenes and</p> <p>17 chlorinated diphenyl." Is chlorinated diphenyl</p> <p>18 synonomous, the same as PCB?</p> <p>19 A Yes, it is. But remember now, he was not</p> <p>20 using chlorinated diphenyl. This is an error that he</p> <p>21 accepted and changed when he found out he was not testing</p> <p>22 chlorinated diphenyl so that whenever he refers to that in</p> <p>23 these 1937 articles when he refers to chlorinated</p> <p>24 diphenyl, he is in error, he is referring to chlorinated</p> <p>25 diphenyl benzene and for accuracy we will have to get his</p> |

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| <p style="text-align: right;">Page 157</p> <p>1 1939 article in which he reverses his nomenclature.</p> <p>2 Q Would you define systemic effects as written</p> <p>3 in this sentence?</p> <p>4 A Yes, affects the body as a whole.</p> <p>5 Q Would you turn to page 307?</p> <p>6 A Yes, sir.</p> <p>7 Q When did you determine the cause of the</p> <p>8 chloracne in the workers at Swann Chemical?</p> <p>9 A When I read the literature on it. When I</p> <p>10 read Jones' article.</p> <p>11 Q Would you read the paragraph in the left</p> <p>12 column? Dr. R. Emmet Kelly, is that you?</p> <p>13 A That is I. The name is spelled wrong but</p> <p>14 that is all right. One T in Emmet.</p> <p>15 Q And would you read those two paragraphs into</p> <p>16 the records?</p> <p>17 A "I can't contribute anything to the</p> <p>18 laboratory studies; but there has been quite a little</p> <p>19 human experimentation in the last several years,</p> <p>20 especially in our plant where we have been manufacturing</p> <p>21 this chlorinated diphenyl. It has been our observation</p> <p>22 that although on one occasion we did have a more or less</p> <p>23 extensive series of skin eruptions which we were never</p> <p>24 able to attribute as to the cause whether it was an</p> <p>25 impurity in the benzene we were using or the chlorinated</p>                                                                               | <p style="text-align: right;">Page 159</p> <p>1 it was Swann workers and they had it -- but I wasn't going</p> <p>2 to say when we bought a company that had it, I used the</p> <p>3 word we for simplicity.</p> <p>4 Q Was the statement accurate when you state,</p> <p>5 "We were never about to attribute as to cause whether it</p> <p>6 was impurity in the benzene we were using or to the</p> <p>7 chlorinated diphenyl." Was that statement accurate on</p> <p>8 that date?</p> <p>9 A I think so, yes.</p> <p>10 Q And chlorinated diphenyl is synonymous with</p> <p>11 PCB?</p> <p>12 A Yes.</p> <p>13 Q And when you said chlorinated diphenyl on</p> <p>14 this date that was one and the same as PCB?</p> <p>15 A Well, not exactly, you are oversimplifying</p> <p>16 it; because we didn't know -- at least I didn't know at</p> <p>17 that time whether the impurity in the benzene caused a</p> <p>18 chlorinated diphenyl, chlorinated styrene, chlorinated</p> <p>19 diphenyl benzene or God knows what. So I didn't know</p> <p>20 that -- so I believe this was an ad-lib statement I made</p> <p>21 there that probably in hindsight I might have been more</p> <p>22 precise.</p> <p>23 Q And that statement was made after you read</p> <p>24 the Jones and Alden article?</p> <p>25 A That's right, but after all Jones and Alden</p> |
| <p style="text-align: right;">Page 158</p> <p>1 diphenyl, we have never had any systemic reactions at all</p> <p>2 in our men."</p> <p>3 Q Let's stop right there. Did you make that</p> <p>4 statement on the date of June 30, 1970?</p> <p>5 A Yes, I did.</p> <p>6 Q And before June 30, 1970 had you read the</p> <p>7 article by Jones and Alden?</p> <p>8 A I very probably did.</p> <p>9 Q And on June 30, 1937 was that statement which</p> <p>10 you gave accurate in which you state: "It has been our</p> <p>11 observation that although on one occasion we did have a</p> <p>12 more or less extensive series of skin eruptions which we</p> <p>13 were never able to attribute as to cause, whether it was</p> <p>14 impurity in the benzene we were using or to the</p> <p>15 chlorinated diphenyl, we have never had any systemic</p> <p>16 reactions at all in our men." Was that statement accurate</p> <p>17 on that date?</p> <p>18 A Well, it depends what is meant by we, what I</p> <p>19 meant by we at that time. I don't believe that at that</p> <p>20 particular time in June the 30th, 1937 I was going to go</p> <p>21 into the structure, the subsidiary structures of Swann and</p> <p>22 when we bought Swann and I believe I used we in the</p> <p>23 all-inclusive sense meaning Monsanto and Swann.</p> <p>24 Q Was that statement accurate on that date?</p> <p>25 A With that provision it's accurate, yes. That</p> | <p style="text-align: right;">Page 160</p> <p>1 did not precisely know either. They said in our opinion</p> <p>2 this is probably -- in our opinion this is probably</p> <p>3 chlorinated styrene or something else.</p> <p>4 Q Was that statement made after you talked to</p> <p>5 the workers at the Anniston, Alabama plant?</p> <p>6 A I can't answer that.</p> <p>7 Q You go down in that paragraph at the end and</p> <p>8 you say also from chlorinated diphenyl alone there have</p> <p>9 been no cases of systemic poisoning reported?</p> <p>10 A That's correct.</p> <p>11 Q What do you consider a report of systemic</p> <p>12 poisoning?</p> <p>13 A A government report, a case report, a series</p> <p>14 of papers on -- a paper that, such as Jones and Alden had.</p> <p>15 Q Do you consider a worker's report of</p> <p>16 lassitude, loss of appetite and loss of libido a report?</p> <p>17 A To whom?</p> <p>18 Q To you?</p> <p>19 A Well, I never got those.</p> <p>20 Q To Jones. You consider that a report?</p> <p>21 MR. CARNEY: Well, I'm going to object to the</p> <p>22 form of the question. I don't know what you mean by</p> <p>23 report.</p> <p>24 MR. McCREA: I'm asking him.</p> <p>25 MR. CARNEY: Well, I done know what you mean</p>                                                                                 |

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| <p style="text-align: right;">Page 161</p> <p>1 in your question. The question is vague.</p> <p>2 Q (By Mr. McCrea) Dr. Kelly, you state here:</p> <p>3 "We have examined them very closely both from what</p> <p>4 laboratory tests we thought might help us and from the</p> <p>5 clinical viewpoint." When you say them, are you referring</p> <p>6 to the sixteen men who experienced chloracne?</p> <p>7 A That's correct.</p> <p>8 Q And did you inquire of those men as to their</p> <p>9 reports of lassitude, loss of appetite and loss of libido?</p> <p>10 A No, sir; but in this report I am talking</p> <p>11 about medical reports in the medical literature, not a</p> <p>12 report of an individual to a doctor, that is not what's</p> <p>13 usually considered to be a report.</p> <p>14 Q And when you say also from chlorinated</p> <p>15 diphenyl alone there have been no cases of systemic</p> <p>16 poisoning reported. Were there cases of systemic</p> <p>17 poisoning reported from chlorinated diphenyl and other</p> <p>18 chemicals?</p> <p>19 A They were reported, yes. They were reported</p> <p>20 by Drinker but then Drinker changed his mind. I mean, he</p> <p>21 not only changed his mind, he accepted the fact that he</p> <p>22 was in error. So I didn't know that at that time that he</p> <p>23 was going to then double-check the chlorinated diphenyl.</p> <p>24 He had reported it.</p> <p>25 He had said that these people had systemic effects</p> | <p style="text-align: right;">Page 163</p> <p>1 chlorinated diphenyl by itself or chlorinated diphenyl by</p> <p>2 itself by -- in conjunction with naphthalene reported as</p> <p>3 causing any systemic illness.</p> <p>4 Q Dr. Kelly, isn't it a fact that Dr. Jones and</p> <p>5 Dr. Alden received a report from a worker that he suffered</p> <p>6 lassitude, loss of appetite and loss of libido, isn't that</p> <p>7 that a fact?</p> <p>8 A Yes, but the fact -- that's one fact. The</p> <p>9 other fact is he didn't know what those people were</p> <p>10 exposed to. He said, "We've got an impurity in here, we</p> <p>11 don't know what it is. We think it may be chlorinated</p> <p>12 styrene."</p> <p>13 Q But in your paragraph above you state that</p> <p>14 you don't know if it was the impurity or the PCB?</p> <p>15 A Well, that's correct, I didn't know it then.</p> <p>16 But then I knew afterwards when we had forty years of</p> <p>17 experience just having chlorinated -- PCB's without</p> <p>18 impurities and no ill effect then I was certainly</p> <p>19 positive. I didn't know in 1937 but I certainly knew in</p> <p>20 1939 all the way up to 1974.</p> <p>21 Q Do you have any statistics available for your</p> <p>22 workers in PCB's to show the percentage of workers on an</p> <p>23 epidemiological basis who had lassitude, loss of appetite</p> <p>24 or loss of libido?</p> <p>25 A No, sir.</p> |
| <p style="text-align: right;">Page 162</p> <p>1 from certain chlorinated hydrocarbons and he called it</p> <p>2 chlorinated diphenyl when in truth it should have been</p> <p>3 chlorinated diphenyl benzene.</p> <p>4 So I went on his statement in 1937 and then when I</p> <p>5 found out that -- Well, there never were any cases where</p> <p>6 chlorinated diphenyl was used by itself that had systemic</p> <p>7 poisonings. Tremors were cases of chlorinated diphenyl</p> <p>8 benzene, which was included as ten percent and chlorinated</p> <p>9 naphthalene that caused systemic poisoning.</p> <p>10 Q What were the effects resulting from the</p> <p>11 systemic poisoning of that combination of chemicals and</p> <p>12 when were they reported?</p> <p>13 A Well, they were reported obviously sometime</p> <p>14 before 1937 but I don't know when.</p> <p>15 Q What were the effects of the systemic</p> <p>16 poisoning?</p> <p>17 A Both.</p> <p>18 Q Of those combinations of chemicals?</p> <p>19 A There were cases that had chlorinated</p> <p>20 naphthalene alone that developed jaundice and death and</p> <p>21 chloracne, not exactly in that order. There were cases of</p> <p>22 chlorinated naphthalene that had what was called ten</p> <p>23 percent chlorinated diphenyl in them which were also</p> <p>24 reported in the literature as causing chloracne, jaundice</p> <p>25 and death. But there were no cases reported that had</p>                         | <p style="text-align: right;">Page 164</p> <p>1 MR. CARNEY: I'm going to object to the</p> <p>2 question before the doctor answers and that's the question</p> <p>3 is vague and ambiguous. I don't know what you mean by</p> <p>4 several terms including the epidemiological basis. The</p> <p>5 question's compound. So I object to the form and I object</p> <p>6 on the grounds that it's vague and ambiguous.</p> <p>7 MR. McCREA: Could the reporter reread the</p> <p>8 question.</p> <p>9 (Reporter read back from the record as directed:</p> <p>10 "Q. Do you have any statistics available</p> <p>11 for your workers in PCB's to show the percentage of</p> <p>12 workers on an epidemiological basis who had lassitude,</p> <p>13 loss of appetite or lass of libido?")</p> <p>14 A That's the question?</p> <p>15 Q (By Mr. McCrea) Yes, sir.</p> <p>16 A No, I did not do any epidemiological studies</p> <p>17 as to the presence or absence of lethargy, loss of libido</p> <p>18 or loss of appetite.</p> <p>19 Q Do you have any numbers for those symptoms?</p> <p>20 MR. CARNEY: I'm going to object. I don't</p> <p>21 know what you mean by do you have any numbers.</p> <p>22 Q (By Mr. McCrea) The number of people who</p> <p>23 experienced those symptoms who worked in PCB's?</p> <p>24 A We have no record of any of them ever telling</p> <p>25 their examining physician that, so the number would be</p>              |

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| <p style="text-align: right;">Page 165</p> <p>1 zero.</p> <p>2 Q And no record of ever asking those questions?</p> <p>3 MR. CARNEY: Well, let me object to the --</p> <p>4 You mean a written record as opposed to a memory of</p> <p>5 asking? If we get hung up on this whether the doctor had</p> <p>6 a written checklist, was asking certain questions or</p> <p>7 whether he had people fill out a form.</p> <p>8 MR. McCREA: I think we established he had</p> <p>9 no written checklist. I think we have established that he</p> <p>10 did an examination, a standard examination, a standard</p> <p>11 physical examination, but there was no checklist.</p> <p>12 Q (By Mr. McCrea) My question is: Do you have</p> <p>13 any numbers in writing of workers who experienced those</p> <p>14 three symptoms, lassitude, loss of appetite, also of</p> <p>15 libido?</p> <p>16 A We have no numbers in writing of oral that</p> <p>17 these people did have these symptoms. If you ask that, we</p> <p>18 have no written record that these workers reported those</p> <p>19 three symptoms.</p> <p>20 Q I think we have been over that enough,</p> <p>21 Doctor.</p> <p>22 A Good.</p> <p>23 Q What information did you gain after June 30,</p> <p>24 1937 with respect to the chloracne of the sixteen</p> <p>25 individuals who worked for Swann?</p> | <p style="text-align: right;">Page 167</p> <p>1 Q And you didn't ask?</p> <p>2 A No, I didn't ask them.</p> <p>3 Q Doctor, I want to ask you about Renate</p> <p>4 Kimbrough. Would you turn to Exhibit K-7? Who is Renate</p> <p>5 Kimbrough?</p> <p>6 A Renate Kimbrough is a scientist who works for</p> <p>7 the United States government, she is probably the premier</p> <p>8 worker in PCB's. She's been a laboratory individual, she</p> <p>9 is a pathologist, she's a -- has done a great deal of work</p> <p>10 in epidemiology, and in 1987 she was for the Center of</p> <p>11 Environmental Health at the Centers for Disease Control of</p> <p>12 the Public Health Service.</p> <p>13 Q When she did her experiments on rats and</p> <p>14 determined that PCB's caused liver cancer --</p> <p>15 A A PCB, 1260.</p> <p>16 Q Did she get that from Monsanto?</p> <p>17 A Yes.</p> <p>18 Q What was the chemical again?</p> <p>19 A Aroclor 1260, which is a PCB chlorinated to</p> <p>20 sixty percent.</p> <p>21 Q When she did her studies on rats with the PCB</p> <p>22 obtained from Monsanto and determined that it caused</p> <p>23 cancer in the livers of the rats did you hold her in</p> <p>24 regard as the premier scientist?</p> <p>25 A Yes, I did.</p> |
| <p style="text-align: right;">Page 166</p> <p>1 A You mean from then on out?</p> <p>2 Q Right.</p> <p>3 A Fifteen, twenty years?</p> <p>4 Q Right.</p> <p>5 A Well, I obtained the information that the</p> <p>6 chloracne had receded markedly in the years that I went to</p> <p>7 Anniston before the war.</p> <p>8 Q Any other information which you obtained</p> <p>9 after June 30, 1937?</p> <p>10 MR. CARNEY: Other than what he's already</p> <p>11 testified to about saying that they felt fine? Do you</p> <p>12 want him to repeat what he already said?</p> <p>13 Q (By Mr. McCrea) I think that -- Was that</p> <p>14 before or after June 1937 when you interviewed the workers</p> <p>15 in the plants?</p> <p>16 MR. CARNEY: Again I want to object to you're</p> <p>17 characterizing as interviewing. I think he's already</p> <p>18 described what he did.</p> <p>19 A I saw them on almost yearly intervals.</p> <p>20 Q (By Mr. McCrea) Did you obtain any</p> <p>21 information after June 30th of '37?</p> <p>22 A No positive information that they had any</p> <p>23 complaints of libido, loss of appetite or loss of --</p> <p>24 Q They didn't come out and tell you that?</p> <p>25 A No. They said they felt fine.</p>                                                                                                           | <p style="text-align: right;">Page 168</p> <p>1 Q And did you --</p> <p>2 A May I explain?</p> <p>3 Q Certainly.</p> <p>4 A Yes, but there's often differences of opinion</p> <p>5 between scientists.</p> <p>6 Q Did you find any flaws with her work in which</p> <p>7 she took your PCB's from your factory and used them in an</p> <p>8 experiment and produced cancer in rats?</p> <p>9 A Yes. There were flaws because there's an</p> <p>10 interpretation by her pathologists. Her pathologists had</p> <p>11 a different viewpoint than the two independent</p> <p>12 pathologists we picked.</p> <p>13 Q Was she wrong?</p> <p>14 A In our opinion she was, in hers she wasn't.</p> <p>15 Q Did you tell her she was wrong?</p> <p>16 A No. We didn't have our scientists,</p> <p>17 independent pathologists look at her slides by the time,</p> <p>18 at that particular time.</p> <p>19 Q Was she untrustworthy?</p> <p>20 A No, she wasn't untrustworthy. What leads you</p> <p>21 to believe that?</p> <p>22 Q I just want to know your feelings.</p> <p>23 A My feeling is she's entirely trustworthy.</p> <p>24 She's an excellent scientist, but scientists have</p> <p>25 different opinions.</p>                                                                    |

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| <p style="text-align: right;">Page 169</p> <p>1 Q And was the protocol which she did using your<br/>2 PCB which produced cancer done in an appropriate protocol<br/>3 under excellent scientific standards?<br/>4 A I didn't investigate the protocol. I took<br/>5 her word for it, and I accepted the fact that she's a good<br/>6 scientist and what she did is good work. Now if her other<br/>7 pathologists came out with a point of view that was<br/>8 different for other pathologists, you've got to weigh both<br/>9 of them.<br/>10 Q Who were the pathologists who disagreed with<br/>11 her pathologic interpretation that there was cancer?<br/>12 A Dr. Parvis, P-a-r-v-i-s, P-o-u-r, of the<br/>13 Eppeley, E-p-p-e-l-e-y, Institute of Cancer of the<br/>14 University of Nebraska Medical School --<br/>15 Q Did he --<br/>16 A And wait, that's one and Dr. Gordon Richter,<br/>17 R-i-c-h-t-e-r. I think it's Gordon Richter, but it's<br/>18 Richter of the Department of Pathology of Northwestern<br/>19 University Medical School.<br/>20 Q Are you knowledgeable about the trip Dr.<br/>21 Gordon Richter took with the Monsanto personnel to<br/>22 Washington D.C. in which he reviewed the slides of the<br/>23 cancer in the rats and told your people that was cancer?<br/>24 A No, sir, I'm not. When was that?<br/>25 Q I'll be glad to furnish you a transcript of</p> | <p style="text-align: right;">Page 171</p> <p>1 Q What did they tell you?<br/>2 A They said Richter and Parvis Pour didn't find<br/>3 as many cancers as Dr. Kimbrough's pathologists.<br/>4 Q When did they tell you that?<br/>5 A Sometime after 1974, between 1974 and 1980.<br/>6 I don't know the first time I heard it.<br/>7 Q Did Dr. Parvis, is that his name?<br/>8 A That's right.<br/>9 Q Publish a study on his review of the cancer<br/>10 slides?<br/>11 A I don't know if he -- I have never seen it in<br/>12 a medical journal, whether he published the report and<br/>13 sent it to Dr. Kimbrough and sent it to Monsanto. I would<br/>14 imagine he did but I don't recall seeing it.<br/>15 Q Did anyone other than Dr. Parvis and Dr.<br/>16 Richter by your testimony disagree with the results of the<br/>17 Kimbrough studies using your PCB's?<br/>18 MR. CARNEY: Again you're talking about the<br/>19 rat studies?<br/>20 MR. McCREA: Correct.<br/>21 A I don't know. I mean, I don't know anyone<br/>22 else. I don't know; they may have, they may not. I don't<br/>23 know of any else. I know these two had different points<br/>24 of view than Dr. Kimbrough's pathologists.<br/>25 Q (By Mr. McCrea) But you've never seen</p> |
| <p style="text-align: right;">Page 170</p> <p>1 his testimony?<br/>2 A Fine. Would you give me the date?<br/>3 Q I certainly will.<br/>4 A Fine. But I'm not familiar with that, I<br/>5 don't recall it at present.<br/>6 Q Where is Dr. Richter now?<br/>7 A I don't know.<br/>8 Q But your testimony is that this individual<br/>9 looked at the slides and said there was no cancer?<br/>10 A No. He did not. He didn't say there was no<br/>11 cancer. He said there were many fewer than the 186 or<br/>12 something that Dr. Kimbrough's pathologist said.<br/>13 Q Were you employed at Monsanto when Monsanto<br/>14 flew him out there to look at the slides?<br/>15 A I don't know when they flew him out.<br/>16 Q Did you ever talk to Mr. Lavinskas about<br/>17 that?<br/>18 A No, I didn't.<br/>19 Q So you're not familiar, Dr. Kelly, with his<br/>20 review of those slides?<br/>21 A I don't recall I've seen his review, no.<br/>22 I've been told about his review.<br/>23 Q Where did -- Who told you about his review?<br/>24 A Somebody at Monsanto. I don't recall the<br/>25 name.</p>                                                                                                                                                                                                                                                                                        | <p style="text-align: right;">Page 172</p> <p>1 anything in writing from either one of them?<br/>2 A Well, I may very well have. I don't recall<br/>3 it.<br/>4 Q Was that significant finding by Dr. Kimbrough<br/>5 with regard to the manufacture and use of PCB's as far as<br/>6 Monsanto was concerned?<br/>7 MR. CARNEY: Objection to the form of the<br/>8 question. It contained undefined terms.<br/>9 A Would you repeat the question, please?<br/>10 MR. McCREA: Could you reread the question,<br/>11 please?<br/>12 (Reporter read back from the record as directed.)<br/>13 A Well, it certainly was a matter of concern.<br/>14 We had a two year study and that gave negative results and<br/>15 we had -- here was this other study that gave positive<br/>16 results. So it was a matter of concern, yes.<br/>17 Q (By Mr. McCrea) Your two year study was done<br/>18 by who?<br/>19 A By Dr. Calandra, I.B.T.<br/>20 Q Was he indicted for fraudulently preparing<br/>21 reports and giving them to the United States government?<br/>22 MR. CARNEY: With regard to the PCB study?<br/>23 MR. McCREA: No, with regard to the work he<br/>24 did at I.B.T.<br/>25 A I don't know if Dr. Calandra was indicted or</p>                           |

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| <p style="text-align: right;">Page 173</p> <p>1 not.</p> <p>2 Q (By Mr. McCrea) What does it mean to be</p> <p>3 indicted?</p> <p>4 MR. CARNEY: I'm going to object, this is not</p> <p>5 a lawyer talking but a doctor and you're asking him about</p> <p>6 a technical legal term. I don't know that he's claiming</p> <p>7 any expertise in the area of criminal law.</p> <p>8 Q (By Mr. McCrea) Was your toxicologist, Paul</p> <p>9 Wright, a participant in the I.B.T. studies, which is</p> <p>10 Industrial Bio-Test, Northbrook, Illinois?</p> <p>11 MR. CARNEY: I'm going to object to the form</p> <p>12 of the question, mischaracterizes the record.</p> <p>13 A He was not a Monsanto employee when he was</p> <p>14 working at I.B.T.</p> <p>15 Q (By Mr. McCrea) Did Monsanto pay his</p> <p>16 attorney's fees of about a million, \$400,000?</p> <p>17 A I don't know that of myself. That would be</p> <p>18 hearsay. I just don't know.</p> <p>19 Q Have you talked to Paul Wright about the work</p> <p>20 he did at Industrial Bio-Test and the laboratory studies</p> <p>21 which he carried out?</p> <p>22 MR. CARNEY: Are you talking about after he</p> <p>23 finished his work at I.B.T.?</p> <p>24 MR. McCREA: At any time.</p> <p>25 A Well, I'm sure I had, when he came back it's</p>                                                                                                                                                                                                         | <p style="text-align: right;">Page 175</p> <p>1 A I don't follow you all at all. What</p> <p>2 information did I want when I started the studies at</p> <p>3 I.B.T.? I wanted information on the toxicity of some</p> <p>4 products. I don't know which the products they were.</p> <p>5 They may have been plasticizers. I don't know which our</p> <p>6 first product was. We sent them products from the</p> <p>7 agriculture department. We sent them products from the</p> <p>8 organic division. We sent them products from the</p> <p>9 inorganic division. I don't know which the first ones we</p> <p>10 used.</p> <p>11 Q Who made the decision to do toxicological</p> <p>12 studies on PCB's at I.B.T. in 1970?</p> <p>13 A I did.</p> <p>14 Q What factors did you take into account in</p> <p>15 making that decision to do toxicological studies of PCB's</p> <p>16 at I.B.T. in 1970?</p> <p>17 A Several factors, one, the reputation of the</p> <p>18 laboratory, which was of the highest, it's list of</p> <p>19 customers, Dow, DuPont, U.S. Army, Food and Drug</p> <p>20 Department, many pharmaceutical companies. Two, our</p> <p>21 experience with the individuals and the laboratory on our</p> <p>22 own products that were done prior to using -- prior to</p> <p>23 I.B.T. using the PCB's.</p> <p>24 This was not the first one we had. We had -- I</p> <p>25 can't tell you when they started but we had at least five</p> |
| <p style="text-align: right;">Page 174</p> <p>1 natural to say, "Paul, what have you been doing up there,</p> <p>2 what have you been working on?" But I don't have the</p> <p>3 details of it. I never received in the slightest inkling</p> <p>4 that everything was not in accord with good scientific</p> <p>5 methods and principles.</p> <p>6 Q (By Mr. McCrea) Did you review the I.B.T.</p> <p>7 studies in coming to that conclusion?</p> <p>8 A Well, I read them. I had George Lavinskas</p> <p>9 who was our pathologist review them. We also had the Food</p> <p>10 and Drug people review them, we sent the results to the</p> <p>11 Food and Drug Administration, they reviewed them.</p> <p>12 Q And you determined that everything which was</p> <p>13 done at I.B.T. according to the information presented to</p> <p>14 you was done in a scientifically appropriate manner?</p> <p>15 MR. CARNEY: Well, I'm going to object. I</p> <p>16 think you're mischaracterizing by he determined. Are you</p> <p>17 saying did he make an independent investigation or did</p> <p>18 he -- I don't know what you mean by he determined.</p> <p>19 Q (By Mr. McCrea) Let's tell the jury a little</p> <p>20 bit about I.B.T. Why did Monsanto make the decision to do</p> <p>21 tests at I.B.T.?</p> <p>22 A Because we had used I.B.T. almost since they</p> <p>23 started the laboratory.</p> <p>24 Q What information did you not have that you</p> <p>25 wanted when you started these studies at I.B.T.?</p> | <p style="text-align: right;">Page 176</p> <p>1 to eight years of experience with them. Our results were</p> <p>2 excellent, our results were accepted as gospel by the</p> <p>3 government.</p> <p>4 Q Why did you feel it was necessary in 1970 for</p> <p>5 Monsanto to obtain this toxicological data from I.B.T. on</p> <p>6 PCB's?</p> <p>7 A Well, you mean from I.B.T. or from anybody?</p> <p>8 Q From I.B.T.?</p> <p>9 A Because I thought they were the best</p> <p>10 laboratory to do it.</p> <p>11 Q But why did you need to do the test?</p> <p>12 A Well, that was what I was asking, the reason</p> <p>13 for the tests or the reason we had done at I.B.T.</p> <p>14 Q I think you established the reason for using</p> <p>15 I.B.T., it was reputation, their experience and excellent</p> <p>16 results.</p> <p>17 A And also their list of satisfied customers.</p> <p>18 Q Why did you feel it was necessary to run</p> <p>19 these tests?</p> <p>20 A Because there was no long term studies on</p> <p>21 I.B.T. -- I mean, on PCB's that it was showing up in the</p> <p>22 environment. It was showing up in some of the fish, sport</p> <p>23 fish and I don't know when it started showing up in milk,</p> <p>24 but there was no long term studies on it so we wanted to</p> <p>25 find out what the long term effects were.</p>                                                                                                |

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| <p style="text-align: right;">Page 177</p> <p>1 Q And by long term effects, is that the same as</p> <p>2 chronic effects?</p> <p>3 A Yes.</p> <p>4 Q You as medical director at Monsanto Company</p> <p>5 made the decision to use I.B.T. because there were no long</p> <p>6 term or chronic studies showing the effects of PCB?</p> <p>7 A That's correct.</p> <p>8 Q Who made the decision to send Paul Wright</p> <p>9 from Monsanto to I.B.T.?</p> <p>10 A I don't think there ever was a decision made</p> <p>11 to send Paul Wright from Monsanto to I.B.T. I believe</p> <p>12 Paul Wright was either recruited by I.B.T. or applied</p> <p>13 himself. He was not sent by anybody as far as I know.</p> <p>14 Q Who made the decision to employ Paul Wright</p> <p>15 at Monsanto after he finished his work at I.B.T.?</p> <p>16 A That was a decision made by the medical</p> <p>17 department. I was the ultimate individual to say go or no</p> <p>18 go. It was on the recommendation of our people who knew</p> <p>19 Paul Wright from his days in the agricultural division. I</p> <p>20 didn't know him but other people did know him.</p> <p>21 I don't know if -- I think George Lavinskis was</p> <p>22 with us then, and certainly Elmer Wheeler knew him from</p> <p>23 going up to Calandra to I.B.T. during those two years Paul</p> <p>24 was up there.</p> <p>25 Q Was Paul write indicted for falsifying</p> | <p style="text-align: right;">Page 179</p> <p>1 Q (By Mr. McCrea) Do you understand that he</p> <p>2 takes the Fifth Amendment when asked about I.B.T., against</p> <p>3 self-incrimination?</p> <p>4 A I understand he has, yes.</p> <p>5 Q Can you explain to the jury the reasons he</p> <p>6 elected to depart from Monsanto and go to I.B.T.?</p> <p>7 MR. CARNEY: Well, I'm going to object</p> <p>8 because I think this would call for speculation. There's</p> <p>9 been no foundation that he even had much contact with Mr.</p> <p>10 Wright.</p> <p>11 Q (By Mr. McCrea) Did Paul Wright tell you why</p> <p>12 he wanted to leave Monsanto and go to I.B.T.?</p> <p>13 A Not that I can recollect.</p> <p>14 Q Did you discuss with him his departure from</p> <p>15 Monsanto and new job at I.B.T.?</p> <p>16 A I really don't know. I mean, he may have</p> <p>17 said what kind of an outfit is I.B.T., do you know Joe</p> <p>18 Calandra, or something like that; but remember he was not</p> <p>19 working for me. He was in an entirely different building.</p> <p>20 He was in a different division, he was in the agricultural</p> <p>21 division. He was in the research department over there.</p> <p>22 I doubt if I say Paul twice in my life before he went up</p> <p>23 to I.B.T.</p> <p>24 Q Did anyone explain to you why he left</p> <p>25 Monsanto and went to I.B.T.?</p>                                |
| <p style="text-align: right;">Page 178</p> <p>1 toxicological studies at I.B.T.?</p> <p>2 A I do not know if details of the indictment.</p> <p>3 Q Was he convicted in a jury trial of</p> <p>4 falsifying studies?</p> <p>5 A He was convicted. I don't know of what he</p> <p>6 was convicted. I don't know whether it was a jury trial</p> <p>7 or a judge, I do not know.</p> <p>8 Q Did he serve time in prison?</p> <p>9 A That I don't know either.</p> <p>10 Q When Paul Wright left Monsanto to go to</p> <p>11 I.B.T. did you, and by you I mean you yourself, have an</p> <p>12 understanding that when he finished at I.B.T. he would be</p> <p>13 welcome back at Monsanto?</p> <p>14 A No. In fact I have really no recollection of</p> <p>15 when Paul went up there, because he wasn't working in the</p> <p>16 medical department at that time. He was working in the</p> <p>17 agricultural research department.</p> <p>18 Q Dr. Kelly, do you understand that we cannot</p> <p>19 take the deposition of Dr. Kelly -- or Dr. Wright, do you</p> <p>20 understand that?</p> <p>21 A I don't know.</p> <p>22 MR. CARNEY: I'm going to object to that.</p> <p>23 A I mean, I don't know anything about the legal</p> <p>24 ramifications of what you can or you can't do in this</p> <p>25 case.</p>                                                                                                                    | <p style="text-align: right;">Page 180</p> <p>1 A There may have been, but it didn't seem like</p> <p>2 a big deal to me one way or the other. He was a man going</p> <p>3 into a toxicological laboratory; I guess he wanted do some</p> <p>4 work in toxicology.</p> <p>5 Q Do you know that while he was at I.B.T. he</p> <p>6 was involved in Monsanto's toxicological studies of the</p> <p>7 long term or chronic effects of PCB's?</p> <p>8 A He may. I may have known that or may not. I</p> <p>9 don't know whether he was or not. I didn't -- I don't</p> <p>10 know whether he was. His name may be on some of those</p> <p>11 reports. I don't know. If they are on the reports</p> <p>12 obviously he was.</p> <p>13 Q Did you receive any updates from Paul Wright</p> <p>14 while he was working at I.B.T. on the Monsanto PCB long</p> <p>15 term studies?</p> <p>16 MR. CARNEY: By updates are you talking about</p> <p>17 anything prior to the formal report?</p> <p>18 MR. McCREA: Correct.</p> <p>19 A There were quarterly reports, whether they</p> <p>20 were quarterly or semiannual reports sent by I.B.T. Paul</p> <p>21 Wright may have been one of the signatures on those.</p> <p>22 Usually there was a more senior person than Dr. Wright on</p> <p>23 these reports. So Paul's name may very well have been on</p> <p>24 one of those.</p> <p>25 But I believe that Paul was not only working for on</p> |

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| <p style="text-align: right;">Page 181</p> <p>1 Monsanto projects. He wasn't working just on PCB's. I<br/> 2 don't know how many various compounds the I.B.T. was<br/> 3 working on at that time. I don't know if Paul was in<br/> 4 charge of the acute testing, chronic testing or what kind<br/> 5 of testing.<br/> 6 Q (By Mr. McCrea) Were the studies done by<br/> 7 I.B.T. for Monsanto on the long term effects of PCB's done<br/> 8 in a scientifically appropriate manner?<br/> 9 A Yes.<br/> 10 Q Were the studies done by I.B.T. reliable?<br/> 11 A On PCB's?<br/> 12 Q On the long term effects of PCB's?<br/> 13 A Yes, they certainly were.<br/> 14 Q Were the studies trustworthy?<br/> 15 A Yes.<br/> 16 Q Were the studies accurate?<br/> 17 A Yes.<br/> 18 Q Were the studies honest?<br/> 19 A Yes.<br/> 20 Q And do you believe the United States<br/> 21 government should rely on those studies?<br/> 22 A Yes. They do.<br/> 23 Q And do you believe that the citizens of this<br/> 24 country should rely on those studies?<br/> 25 A Yes.</p>                                                                                                                                | <p style="text-align: right;">Page 183</p> <p>1 MR. CARNEY: Are you talking about<br/> 2 conclusions or summaries of the findings? I don't know<br/> 3 what you mean.<br/> 4 Q (By Mr. McCrea) Did Monsanto ever change the<br/> 5 conclusions on reports done by I.B.T. on toxicological<br/> 6 studies on PCB's?<br/> 7 A No. They did not change the conclusions<br/> 8 there may be some changes suggested as to how the<br/> 9 conclusions should be worded.<br/> 10 Q What do you know about that?<br/> 11 A Well, there was a question whether something<br/> 12 should be called tumorigenic or not carcinogenic.<br/> 13 Q Did you participate in that decision-making<br/> 14 process?<br/> 15 A No, I did not.<br/> 16 Q Tell us what happened in that regard.<br/> 17 A Well, I don't know. I mean, all I know is<br/> 18 what I saw during one of these depositions the last six<br/> 19 years or something.<br/> 20 Q Since you last worked at Monsanto in '74 the<br/> 21 only information you have is what you saw at a deposition?<br/> 22 A Well, I may have seen some Monsanto papers.<br/> 23 I may have been, there may have been some anecdotal<br/> 24 remarks made. I don't know if I'm having lunch out there<br/> 25 and the question comes up I may hear about it. But I've</p>                                                            |
| <p style="text-align: right;">Page 182</p> <p>1 Q Dr. Kelly, isn't it a fact that<br/> 2 representatives of Monsanto Company were highly critical<br/> 3 of the work done at I.B.T., its reliability, its veracity,<br/> 4 and its accuracy?<br/> 5 A I don't believe that's correct. I would like<br/> 6 you to show me those papers.<br/> 7 Q All right, sir. Have you seen any documents<br/> 8 that have been prepared by individuals on be half of<br/> 9 Monsanto Company which sharply criticized the work done at<br/> 10 I.B.T., its accuracy, veracity and reliability?<br/> 11 A No, sir.<br/> 12 MR. CARNEY: I'm going to object to the<br/> 13 question. I done know what you mean by sharply<br/> 14 criticized. I assume you're talking about PCB studies?<br/> 15 A Are you talking about PCB now?<br/> 16 Q (By Mr. McCrea) Yes, sir.<br/> 17 A No, I never seen any. On PCB's?<br/> 18 Q Right.<br/> 19 A No, sir. I never seen any.<br/> 20 Q Did Monsanto ever change the wording on<br/> 21 studies prepared by I.B.T.?<br/> 22 MR. CARNEY: I object here. I think the<br/> 23 question is vague. And to be talking about the actual<br/> 24 findings?<br/> 25 MR. McCREA: No.</p> | <p style="text-align: right;">Page 184</p> <p>1 had no reports that I have seen or discussions as to if or<br/> 2 when or why Monsanto would have wanted to do some<br/> 3 editorial comment on the reports.<br/> 4 Q Have you ever changed the wording on a<br/> 5 conclusion of a toxicological study?<br/> 6 A I can't --<br/> 7 MR. CARNEY: Are you talking about a summary<br/> 8 or a conclusion?<br/> 9 MR. McCREA: Just what the question says?<br/> 10 A Well, you said the wording.<br/> 11 Q (By Mr. McCrea) Right.<br/> 12 A Well, a person may have used a particular<br/> 13 term and I may have said this is what you want to change<br/> 14 it to, yes. I certainly also changed it on the Drinker<br/> 15 study when it came out and called chlorinated diphenyl and<br/> 16 I called him up and said, "Look, this isn't -- How do you<br/> 17 know this is a chlorinated diphenyl?" So I think I'm<br/> 18 responsible for his next paper. That not only changed the<br/> 19 study, it changed the paper.<br/> 20 Q Did the studies at I.B.T. establish that<br/> 21 PCB's were slightly tumorigenic?<br/> 22 A Yes, I don't know whether they said slightly.<br/> 23 I don't know if that was the term. They did say that at<br/> 24 some levels there were non-malignant tumors found.<br/> 25 Q And do you understand how the PCB's produced</p> |

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| <p style="text-align: right;">Page 185</p> <p>1 the non-malignant tumors?</p> <p>2 MR. CARNEY: Could you read that question</p> <p>3 back?</p> <p>4 (Reporter read back from the record as directed:</p> <p>5 Q "And do you understand how the PCB's</p> <p>6 produced the non-malignant tumors?")</p> <p>7 A I do not believe that the secret of how</p> <p>8 chemicals cause tumors is understood. It certainly isn't</p> <p>9 understood by me and I don't know if by people much</p> <p>10 smarter than I have written down how a particular compound</p> <p>11 causes a tumor.</p> <p>12 Q (By Mr. McCrea) Did Monsanto -- Strike the</p> <p>13 question. Were the studies at I.B.T. peer reviewed by the</p> <p>14 independent scientists?</p> <p>15 A Well, if you give them to the scientists of</p> <p>16 the government -- I don't really know what you mean by</p> <p>17 peer review, now, Mr. McCrea. If you send a compound to a</p> <p>18 laboratory they do the work and send it back to you. Do</p> <p>19 they send it out to competing laboratories and say, "Hey</p> <p>20 look, did we do this all right?" That's never done.</p> <p>21 But we sent this data to the government, it</p> <p>22 certainly was peer reviewed by the government because they</p> <p>23 had the data. The sliding were peer reviewed by the</p> <p>24 government, if that's what you mean. But if you think or</p> <p>25 you're equating that a report you get from an independent</p> | <p style="text-align: right;">Page 187</p> <p>1 Q And to what did the advice of counsel relate?</p> <p>2 A I didn't believe that was my business.</p> <p>3 Q Why did you call him and ask him about Texas?</p> <p>4 A Well, I wanted to know why he didn't want to</p> <p>5 testify.</p> <p>6 Q What?</p> <p>7 A I wanted to know why he didn't want to</p> <p>8 testify.</p> <p>9 Q Is that the only reason?</p> <p>10 A I think that's a -- that was a good enough</p> <p>11 reason. I mean, whatever a counsel may have said, Paul</p> <p>12 doesn't want to testify on the advice of counsel, do you</p> <p>13 want to talk to him and see if you can get any reasons?</p> <p>14 Q And do you know the reason?</p> <p>15 A No, I didn't inquire that much. That was his</p> <p>16 business. I just wanted to be sure that he was definite</p> <p>17 in his mind on the advice of counsel he didn't want to</p> <p>18 testify.</p> <p>19 Q Other than that conversation have you talked</p> <p>20 to Paul Wright since he was indicted?</p> <p>21 A No, sir.</p> <p>22 Q Have you ever asked Paul if he falsified</p> <p>23 data?</p> <p>24 A No.</p> <p>25 Q Have you ever asked --</p>                                                                                                                                              |
| <p style="text-align: right;">Page 186</p> <p>1 commercial laboratory with a paper in the New England</p> <p>2 journal of medicine, they are worlds apart.</p> <p>3 Q All right, sir, that's exactly what I meant.</p> <p>4 A Yes. They are never peer reviewed in that</p> <p>5 sense, no.</p> <p>6 Q Did you know that Monsanto paid the</p> <p>7 attorney's fees for Paul Wright?</p> <p>8 A I don't know, myself. I've heard --</p> <p>9 MR. CARNEY: You've already asked that.</p> <p>10 A -- anecdotal rumors, but I don't know.</p> <p>11 Q (By Mr. McCrea) Have you talked to Paul</p> <p>12 Wright since he was indicted?</p> <p>13 A Yes.</p> <p>14 Q Can you tell us when you talked to him and</p> <p>15 what you said to him and what he said to you?</p> <p>16 A Sure.</p> <p>17 Q All right.</p> <p>18 A I said, "Paul, there's a case down in Texas,</p> <p>19 I understand you don't want to testify," and he said, "No,</p> <p>20 I don't want to testify on advice of counsel." I said</p> <p>21 "Okay, fine. How's everything else going?" That's the</p> <p>22 extent of it.</p> <p>23 Q Did he tell you why he did not want to</p> <p>24 testify in a PCB case?</p> <p>25 A Yeah. On advice of counsel.</p>                                                                                                                                                                                                                                                    | <p style="text-align: right;">Page 188</p> <p>1 A I didn't believe he would.</p> <p>2 Q But you've never asked him?</p> <p>3 A No, I never asked him.</p> <p>4 Q Have you ever questioned him about the</p> <p>5 accuracy of the I.B.T. studies?</p> <p>6 MR. CARNEY: You know, I think this is</p> <p>7 misleading in that I believe this all occurred after Dr.</p> <p>8 Kelly was retired from the company and I don't know that</p> <p>9 he has any right to pry into somebody's life and ask them</p> <p>10 personal questions of the sort you're suggesting. I think</p> <p>11 you ought to at least make it clear to the jury that Dr.</p> <p>12 Kelly was no longer employed by Monsanto, but retired, to</p> <p>13 put it in context.</p> <p>14 Q (By Mr. McCrea) The I.B.T. studies were done</p> <p>15 from '70 to '75?</p> <p>16 A If you show me the final report I'll be able</p> <p>17 to -- Let's be accurate on this.</p> <p>18 Q All right, sir.</p> <p>19 A If you just show me the final report I could</p> <p>20 give you an estimation.</p> <p>21 Q Was the entire series of studies done</p> <p>22 pursuant to authorization?</p> <p>23 A Yes, in conjunction with the United States</p> <p>24 government, the Department of Food and Drug</p> <p>25 Administration. We went up there before we started these</p> |

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| <p style="text-align: right;">Page 189</p> <p>1 studies. We told them where we were going to go, what we<br/> 2 were going to do and do you have any suggestions. It's<br/> 3 those big thick ones down there.<br/> 4 Q Thank you. All right, Dr. Kelly, I'll look<br/> 5 at this with Counsel. Exhibit K-71, Report to Monsanto<br/> 6 Chemical Company. Subacute Dermal Toxicity of Aroclor<br/> 7 1248?<br/> 8 A Oh, no, that isn't the one, because that only<br/> 9 takes two months to do.<br/> 10 Q That was 1963?<br/> 11 A Right.<br/> 12 MR. CARNEY: I thought you were talking about<br/> 13 the long term studies?<br/> 14 MR. McCREA: I am, excuse me.<br/> 15 (Whereupon, a discussion was held off the record.)<br/> 16 A Here it is, K-76. The final report was dated<br/> 17 November the 21st, 1971. They were probably started<br/> 18 sometime in the latter months of 1968 because to run a two<br/> 19 year testing you have got to run a range finding to be<br/> 20 sure you've got a dose that the animals can take for two<br/> 21 years, so you're fooling around with those doses until you<br/> 22 get the right dose.<br/> 23 Then after you sacrifice the animals after two<br/> 24 years you've got to fix the tissues and wait around to get<br/> 25 the pathologist to read the slides which also takes time.</p> | <p style="text-align: right;">Page 191</p> <p>1 Q That's not what we're talking about?<br/> 2 A What were we talking about?<br/> 3 Q The long term studies?<br/> 4 A I thought we were off that. The long term,<br/> 5 dermal is not long term. That was started presumably in<br/> 6 1968 sometime.<br/> 7 Q And ended in '71?<br/> 8 A That's right.<br/> 9 Q Were there studies subsequent to that?<br/> 10 A I don't know when the chickens were done. We<br/> 11 had some testing done on chickens. I thought that was<br/> 12 subsequent to these.<br/> 13 Q All right. Maybe we can take some time<br/> 14 during the break and line those dates up. Dr. Kelly, if<br/> 15 an individual called you from Westinghouse Electric<br/> 16 Corporation and asked to summarize the results of the long<br/> 17 term or chronic studies what would you have told them?<br/> 18 MR. CARNEY: Well, I'm going to object<br/> 19 because I think it's overbroad as to what area. I mean,<br/> 20 they --<br/> 21 A I would have told them I will sit down and<br/> 22 make a summery of these and send it to you.<br/> 23 Q (By Mr. McCrea) You couldn't answer that<br/> 24 question --<br/> 25 A Right off the top of my head, no. We're</p>                                                                                                                                                                                                                                       |
| <p style="text-align: right;">Page 190</p> <p>1 Then you've got to the get the report together. So it's<br/> 2 at least three years and we started these sometime in<br/> 3 1968.<br/> 4 Q (By Mr. McCrea) Do you know if when they<br/> 5 started Paul Wright was working for I.B.T.?<br/> 6 A I don't know that.<br/> 7 Q Now were there additional studies, Dr. Kelly,<br/> 8 other than the one that ended November of '71?<br/> 9 A Well, sure they were doing some on ducks or<br/> 10 chickens, they were doing skin testing on rabbits.<br/> 11 Q Were those done pursuant to your authority or<br/> 12 someone else?<br/> 13 A No, mine.<br/> 14 Q And when did those studies end?<br/> 15 A Well, you have them there and I'll tell you.<br/> 16 Q I don't see it.<br/> 17 A Don't you have chickens there someplace?<br/> 18 It's not a big thick one. You've got a dermal, which is<br/> 19 skin on rabbits, and you've got -- I think a chicken<br/> 20 study.<br/> 21 Q I'll have to have you locate that.<br/> 22 A The dermal toxicity was finished in March of<br/> 23 1963.<br/> 24 Q That's not what we're talking about, is it?<br/> 25 A Uh-huh.</p>                                                                                                                                                                           | <p style="text-align: right;">Page 192</p> <p>1 dealing remember with three different substances, three<br/> 2 different levels, two different species and I wanted to<br/> 3 give him the figures on all of them.<br/> 4 Q If an individual from Westinghouse Electric<br/> 5 Corporation called you in 1973 and asked you if based on<br/> 6 the studies which were done at I.B.T. if you felt there<br/> 7 was any cause of concern for the workers in the<br/> 8 Bloomington, Westinghouse plant from the long term effects<br/> 9 of PCB's what would your answer have been?<br/> 10 A Well, I'd say, "What is your exposure?" I<br/> 11 don't know how they're working with the material.<br/> 12 Q If he said that the exposure was moderate<br/> 13 what would you tell him, what advice would you give him<br/> 14 based on the studies at I.B.T.?<br/> 15 MR. CARNEY: Objection to the use of the word<br/> 16 moderate as vague?<br/> 17 A Any information I would give a worker at any<br/> 18 plant would be based on several things. It would be based<br/> 19 on the testing we did back in 1954, an analysis of air<br/> 20 test, inhalation studies for ninety days. It would be<br/> 21 based on information in the literature on PCB's in 1963.<br/> 22 I don't think there was much at that time. It would be<br/> 23 based on lack of information or the lack of any positive<br/> 24 results.<br/> 25 It would be based on my own experience, that with</p> |

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| <p style="text-align: right;">Page 193</p> <p>1 our own workers, so I would take into account the PCB<br/> 2 studies at I.B.T., yes, and I would say you have a product<br/> 3 that you should avoid breathing at elevated temperatures<br/> 4 or in confined spaces, you should avoid repeated or<br/> 5 prolonged skin contact.<br/> 6 Q Based on the I.B.T. studies, you would tell<br/> 7 them that?<br/> 8 A I said based on all three.<br/> 9 MR. CARNEY: I think we've got no time.<br/> 10 MR. McCREA: Break.<br/> 11 (Whereupon, a short break was taken.)<br/> 12 MR. CARNEY: I'd just like to say when we<br/> 13 took this last break to change tapes we had agreed to go<br/> 14 one more tape or one more hour and now when we're ready to<br/> 15 start up Mr. McCrea has indicated he wants to quit. I<br/> 16 would be prepared to go a couple more hours and I think<br/> 17 Dr. Kelly would, too. I can understand putting some<br/> 18 reasonable time limit on it.<br/> 19 On the other hand, I think we have been going at<br/> 20 this for a long time and we were told, Mr. McCrea, when we<br/> 21 broke last time early and decided to not make a formal<br/> 22 objection to going the next day and this deposition was<br/> 23 supposed to continue until concluded, that you would<br/> 24 complete the deposition in one more day.<br/> 25 Now we're at 4:00 o'clock or it's now 4:15 on this</p> | <p style="text-align: right;">Page 195</p> <p>1 MR. CARNEY: Well, I --<br/> 2 MR. McCREA: I might, but look --<br/> 3 MR. CARNEY: It seems to me and I'm not<br/> 4 trying to be difficult but we're -- This thing's getting<br/> 5 stretched out over a lengthy period, you know, we're<br/> 6 talking about trial testimony and here we have had a week<br/> 7 intermission already and we came back thinking that one<br/> 8 day would do it and I agreed to that. I'd prefer to get<br/> 9 the deposition done in consecutive days. I was prepared<br/> 10 to do that, the --<br/> 11 MR. McCREA: We're driving from Bloomington,<br/> 12 Indiana to St. Louis to do this deposition so it's no<br/> 13 picnic from our standpoint. Secondly, we've got a hundred<br/> 14 and eight documents here, none of which I had. I was not<br/> 15 given copies. I did give you copies of my exhibits, which<br/> 16 Dr. Kelly has and you have. I didn't receive copies of<br/> 17 yours and I think you get to the point of diminishing<br/> 18 returns when you extend things to a point where it's just<br/> 19 not productive, so my recommendation is we do three tapes<br/> 20 tomorrow.<br/> 21 I absolutely have got to be back in Bloomington by<br/> 22 3:00 o'clock or 3:30 or 4:00 to interview a client who has<br/> 23 a work comp hearing the next day, Thursday, and I mean I<br/> 24 have to be there. His name is a Larry Martin. So<br/> 25 that's -- I think if we can get in three tapes tomorrow</p> |
| <p style="text-align: right;">Page 194</p> <p>1 one more day and we're not only not complete but<br/> 2 apparently another half a day isn't going to complete the<br/> 3 deposition, and so I'm just objecting to that for the<br/> 4 record, and I guess the only other thing I'd like to at<br/> 5 least put on the record is that we are agreeable that<br/> 6 we're going to start at 7:30 and going until 11:30<br/> 7 tomorrow?<br/> 8 MR. McCREA: That's awful early to start. I<br/> 9 would agree to 8:30. I just -- I don't, 8:30 to 11:30, I<br/> 10 think, 7:30 is awful early.<br/> 11 MR. CARNEY: Well, we're only going to do --<br/> 12 I thought we had an agreement, Mr. McCrea. We asked the<br/> 13 studio if they would come in early so they could start at<br/> 14 7:30. I thought we had an agreement. Now we're not only<br/> 15 quitting early but we in an effort to try to get this<br/> 16 done. I thought we had an agreement that we start at<br/> 17 7:30.<br/> 18 MR. McCREA: Let's make it 8:00 o'clock. If<br/> 19 we can do three full tapes tomorrow morning -- how long<br/> 20 are the tapes, an hour?<br/> 21 MR. CARNEY: Yes.<br/> 22 MR. McCREA: We can do three tapes tomorrow<br/> 23 that should take us to about 11:30.<br/> 24 MR. CARNEY: Are you going to finish?<br/> 25 MR. McCREA: I doubt it.</p>                                                                          | <p style="text-align: right;">Page 196</p> <p>1 that would be productive.<br/> 2 Also on the record I need to know the cases in<br/> 3 which Dr. Kelly testified and you stated you were going to<br/> 4 ask Monsanto for those and I would like to have those<br/> 5 before tomorrow if you can get them.<br/> 6 MR. CARNEY: Well, you know, Dr. Kelly has<br/> 7 given you all of the information --<br/> 8 MR. McCREA: Well --<br/> 9 MR. CARNEY: -- that he has on that and I<br/> 10 simply don't know whether there's any other information to<br/> 11 be had.<br/> 12 THE WITNESS: One Market Plaza, One Market<br/> 13 Plaza, that's whatever, A.D.R or something like that.<br/> 14 MR. CARNEY: Well, let's --<br/> 15 MR. McCREA: Maybe we can go off the record<br/> 16 and figure out some of those other cases.<br/> 17 MR. CARNEY: Let me just while you're on the<br/> 18 record you made some comments about the exhibits. I<br/> 19 believe that we have had an extra copy of the exhibits in<br/> 20 the courtroom or in the studio here and you have been<br/> 21 looking at those from time to time during the three days<br/> 22 that we have had the depositions.<br/> 23 I just for the first time this morning you handed<br/> 24 me some exhibits that you intend to use. I haven't had<br/> 25 time to look at them but I don't think it's fair to say</p>                                                                                                                                    |

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| <p style="text-align: right;">Page 197</p> <p>1 that we have held back on exhibits and that you have given</p> <p>2 us exhibits. I think you have had those exhibits in this</p> <p>3 courtroom.</p> <p>4 MR. McCREA: I'm not saying that, and I</p> <p>5 acknowledge that I think I've been through these exhibits</p> <p>6 but I just, to me, there's not much I want out of this</p> <p>7 stack, okay.</p> <p>8 THE WITNESS: You talking to me now?</p> <p>9 MR. McCREA: No, I can't turn that far. But</p> <p>10 there's not much I want out of this stack, but I think if</p> <p>11 I can take this with me tonight and go through it.</p> <p>12 There's just not a whole lot that I want.</p> <p>13 MR. CARNEY: I'm willing to give you my only</p> <p>14 copy of it. Appreciate your not marking the copies.</p> <p>15 MR. McCREA: I have marked them. I have</p> <p>16 marked them.</p> <p>17 MR. CARNEY: Well, I appreciate since that's</p> <p>18 my only clean copy I'd like to keep those clean. They are</p> <p>19 not working copies. I have got the court reporter's</p> <p>20 exhibits, that's not -- My only other copies are those</p> <p>21 exhibits; I know you have put a quite a few marks on it</p> <p>22 already.</p> <p>23 MR. McCREA: I put a few marks on it.</p> <p>24 THE WITNESS: At what time is it tomorrow?</p> <p>25 MR. CARNEY: 8:00 o'clock tomorrow.</p> | <p style="text-align: right;">Page 199</p> <p>1 NOTARIAL CERTIFICATE</p> <p>2 State of Missouri )</p> <p>3 City of St. Louis )</p> <p>4 I, TOD MINNIGERODE, a Certified Shorthand</p> <p>5 Reporter and a duly commissioned Notary Public within and</p> <p>6 for the State of Missouri, do hereby certify that pursuant</p> <p>7 to agreement there came before me at the offices of</p> <p>8 Communitronics, 1907 S. Kingshighway, St. Louis, Missouri.</p> <p>9 R. EMMET KELLY, M.D.,</p> <p>10 who was by me first duly sworn to testify to the truth and</p> <p>11 nothing but the truth of all knowledge touching and</p> <p>12 concerning the matters of controversy in this cause; that</p> <p>13 the witness was thereupon examined under oath and said</p> <p>14 examination was reduced to writing by me; that the</p> <p>15 deposition is to be continued by agreement of all parties;</p> <p>16 and that this deposition is a true and correct record of</p> <p>17 the testimony given by the witness.</p> <p>18</p> <p>19 I further certify that I am neither attorney</p> <p>20 nor counsel for nor related nor employed by any of the</p> <p>21 parties to the action in which this deposition is taken;</p> <p>22 further, that I am not a relative or employee of any</p> <p>23 attorney or counsel employed by the parties hereto or</p> <p>24 financially interested in this action.</p> <p>25</p> <p>26 IN WITNESS WHEREOF, I have set my hand and</p> <p>27 seal on July 18, 1990.</p> <p>28 My commission expires June 3, 1991.</p> <p>29</p> <p>30 -----</p> <p>31 Notary Public</p> <p>32</p> <p>33</p> <p>34</p> <p>35</p> |
| <p style="text-align: right;">Page 198</p> <p>1 THE WITNESS: And then what's the next time?</p> <p>2 MR. CARNEY: And are we agreeable that if we</p> <p>3 don't conclude tomorrow you will start in the morning on</p> <p>4 8:00 o'clock Friday and go to conclusion.</p> <p>5 MR. McCREA: Did you check the calendar for</p> <p>6 Friday?</p> <p>7 (Whereupon, a discussion was held off the record.)</p> <p>8 MR. McCREA: We can't do it on Thursday</p> <p>9 because of your conflict?</p> <p>10 MR. CARNEY: It's the doctor's conflict and</p> <p>11 your conflict.</p> <p>12 MR. McCREA: True, that's agreed.</p> <p>13 MR. CARNEY: I'd like to just so we have --</p> <p>14 If you don't conclude on Friday can we go into Saturday to</p> <p>15 conclude?</p> <p>16 MR. McCREA: Yes.</p> <p>17 MR. CARNEY: Okay.</p> <p>18 MR. McCREA: There is no way this is going</p> <p>19 to go beyond Friday.</p> <p>20 THE WITNESS: What time we start on Friday?</p> <p>21 MR. CARNEY: 8:00 o'clock.</p> <p>22 THE WITNESS: And what time tomorrow?</p> <p>23 MR. CARNEY: 8:00 o'clock.</p> <p>24 (Deposition continued.)</p> <p>25</p>                                                                                                                                                                                                                                                        | <p style="text-align: right;">Page 200</p> <p>1 COURT MEMO</p> <p>2 IN THE CIRCUIT COURT OF THE CITY OF ST. LOUIS</p> <p>3 STATE OF MISSOURI</p> <p>4</p> <p>5 Glenn Brown, et al, vs. Monsanto Company</p> <p>6 862-00694</p> <p>7</p> <p>8 CERTIFICATE OF OFFICER AND</p> <p>9 STATEMENT OF DEPOSITION CHARGES</p> <p>10</p> <p>11 DEPOSITION OF R. EMMET KELLY, M.D.</p> <p>12 TAKEN ON BEHALF OF THE DEFENDANT</p> <p>13 6/12/1990</p> <p>14 Name and address of person or firm having custody of</p> <p>15 the original transcript:</p> <p>16 Mr. Thomas M. Carney</p> <p>17 Husch &amp; Eppenberger</p> <p>18 190 Carondelet Plaza, Suite 600</p> <p>19 St. Louis, MO 63105</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

1 ORIGINAL TRANSCRIPT TAXED IN FAVOR OF:

2 Mr. Thomas M. Carney

3 Husch & Eppenberger

4 190 Carondelet Plaza, Suite 600

5 St. Louis, MO 63105

6 Total:

7

8 Upon delivery of transcripts, the above

9 charges had not been paid. It is anticipated

10 that all charges will be paid in the normal course

11 of business.

12 GORE PERRY GATEWAY & LIPA REPORTING COMPANY

13 515 Olive Street, Suite 700

14 St. Louis, Missouri 63101

15 IN WITNESS WHEREOF, I have hereunto set

16 my hand and seal on this \_\_\_\_\_ day of \_\_\_\_\_

17 Commission expires

18 \_\_\_\_\_

19 Notary Public

20

21

22

23

24

25

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[consequence - deal]

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[open - pcb's]

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[starting - swelling]

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[switched - think]

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[ulcerative - westinghouse]

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[westinghouse - zero]

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