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CONDENSED

IN THE COURT OF THE STATE OF OREGON

In the Matter of
HAYNES VERSUS ADAIR HOMES
CASE NO. CCV0211573



HEARING
FEBRUARY 18, 2005
CD TRANSCRIPTION
CD 1

BE IT KNOWN THAT, the above-referenced Transcript of Proceedings was transcribed from compact disc on March 15, 2005.

Court's Ex. 2
Case # _____
Rec'd _____
Dept _____ Clk _____

Page 1

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 21 ---
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 24 Proceedings was transcribed from compact disc on March
 25 15, 2005.

Page 2

1 DEFENSE: Defense calls Dr. Bruce
 2 Kelman.
 3 JUDGE VANDYK: All right.
 4 COUNTY CLERK: Under penalty of
 5 perjury, do you swear or affirm that the testimony
 6 you're about to give in the matter is the truth, the
 7 whole truth, and nothing but the truth?
 8 BRUCE KELMAN: I do.
 9 COUNTY CLERK: Can you please your
 10 full name and spell your last name for the record?
 11 BRUCE KILLMAN: Bruce J. Kelman.
 12 K-E-L-M-A-N. And, can I have just a second to take
 13 the files out?
 14 JUDGE VANDYK: To take the files
 15 out?
 16 UNIDENTIFIED SPEAKER: Oh, yes.
 17 BRUCE J. KELMAN: Just my reference
 18 materials?
 19 JUDGE VANDYK: Sure. Certainly.
 20 BRUCE J. KELMAN: Okay.
 21 JUDGE VANDYK: Precede, Mr. Keckle.
 22 MR. KECKLE: Dr. Kelman, are you
 23 currently employed?
 24 BRUCE J. KELMAN: I have an
 25 ontotoxicology practice. It consists of some forensic

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1 toxicology. We have [inaudible] medical toxicologist.
 2 I do testing for -- safety testing of new products,
 3 in terms of the toxicology. So, safety testing of
 4 drugs and chemicals, and I have an industrial hygiene
 5 group.
 6 MR. KECKLE: Tell us a little bit
 7 about your education.
 8 BRUCE J. KELMAN: I have a PHD
 9 from the University of Illinois. I did my research
 10 on animal models of human disease in the Department
 11 of Physiology and Pharmacology at the university.
 12 Let's see, I was awarded PHD in 1975, and I did a
 13 two-year post-doctoral study of toxicology at the
 14 Oakridge National Laboratory through the University of
 15 Tennessee.
 16 MR. KECKLE: What professional
 17 certifications do you have, Doctor?
 18 BRUCE J. KELMAN: I'm board
 19 certified by the American Board of Toxicology in
 20 General Toxicology. And, I've been -- I actually had
 21 forgotten how many I've been re-certified. We have
 22 a requirement that we have to be re-certified every
 23 five years. So, you get to take the exam a number
 24 of times.
 25 MR. KECKLE: And, you've been

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1 re-certified every five years since, what 1985, is
 2 that what you said?
 3 BRUCE J. KELMAN: Since 1980 was
 4 my initial certification.
 5 MR. KECKLE: 1980. Okay. Now, Dr.
 6 Kelman, you're not a medical doctor, correct?
 7 BRUCE J. KELMAN: That's correct.
 8 I'm a toxicologist and scientist.
 9 MR. KECKLE: And, what's the
 10 difference?
 11 BRUCE J. KELMAN: Well, I wouldn't
 12 see a physician -- or, I'm sorry, I wouldn't see a
 13 patient, or examine a patient. A scientist is
 14 trained to, as opposed to diagnosing a disease, look
 15 into the -- try and answer the condition of -- or
 16 the situation why that there's -- that disease has
 17 occurred. What does the medical literature say?
 18 What does the scientific literature say? What is the
 19 possibility that -- or, is it even possible that that
 20 disease could be due to exposure to the material that
 21 it's claimed to be.
 22 MR. KECKLE: And, do you have any
 23 -- have you had any teaching appointments?
 24 BRUCE J. KELMAN: Yes, I've -- I'm
 25 an [inaudible] professor at Mexico State University.

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1 and I helped them start their toxicology program
2 there.

3 MR. KECKLE: What about, you know,
4 research experience?

5 BRUCE J. KELMAN: Well, I did --
6 I've done laboratory research -- I did laboratory
7 research more than 20 years. Again, all on animal
8 models of human disease, and more recently have done
9 research more focused on existing literature and
10 evaluating that literature.

11 MR. KECKLE: What professional
12 societies do you belong to in your field?

13 BRUCE J. KELMAN: Well, I'm one of
14 six or so PhD's that's been admitted to the American
15 College of Occupational and Environmental Medicine.
16 It's primary physicians, but there's a few PhDs that
17 have been admitted. I'm a full member of the Society
18 Toxicology, I'm American College of Toxicology,
19 American Society for Terminal Therapeutics, and what's
20 the -- American Society of Pharmacology and
21 Experimental Therapeutics.

22 MR. KECKLE: And, I notice on your
23 resume that you have -- did you -- I don't know if
24 you said this one, Society of Experimental Biology and
25 Medicine.

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1 MR. KECKLE: Well, have any of
2 those publications dealt with mold and micro toxins?

3 BRUCE J. KELMAN: Yes. The -- I'm
4 gonna be talking about some calculations I've done,
5 which have been published in a [inaudible] journal.
6 And, I was also one of the co- authors of the Fact
7 Based Physician statement that came out from American
8 College of Occupational and Environmental Medicine in
9 2002.

10 MR. KECKLE: Okay. Thank you,
11 doctor. Now, as a part of your profession you look
12 at toxicology and causation, is that correct?

13 BRUCE J. KELMAN: Well, the -- the
14 way I'd state that is one of the things I do is
15 evaluate whether exposure to a chemical, in this case
16 micro toxins are a chemical, has caused an injury.

17 MR. KECKLE: Okay. And, that's
18 one of the things that you specialize in?

19 BRUCE J. KELMAN: Yes, that's the
20 basic process, at least for what I do in forensic
21 toxicology.

22 MR. KECKLE: Okay. Well, what it
23 -- what is the study of adverse affect of chemicals?
24 How does that happen?

25 BRUCE J. KELMAN: Well, the heart

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1 BRUCE J. KELMAN: Well, actually I
2 tripped over that, but that's the other one that I'm
3 active in --

4 MR. KECKLE: Okay.

5 BRUCE J. KELMAN: -- Society for
6 Experimental Biology and Medicine.

7 MR. KECKLE: And, do these
8 societies require any certain qualifications to be a
9 member?

10 BRUCE J. KELMAN: Yes, they all
11 do. The Society of Toxicology requires a substantial
12 amount of experience, substantial recognition, and a
13 focus on the practice of toxicology. American College
14 of Occupational and Environmental Medicine requires --
15 or for me as a PhD, they required me to have a
16 substantial interest in the conduct of occupational
17 and environmental medicine.

18 MR. KECKLE: And, publications,
19 have you been published?

20 BRUCE J. KELMAN: Yes.

21 MR. KECKLE: Approximately how many
22 times?

23 BRUCE J. KELMAN: Actually, it's
24 somewhat in excess of one hundred publications. I
25 don't remember exactly how many.

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1 of toxicology, the most important part of toxicology
2 is something called dose response. And, actually
3 everyone is familiar with dose response, and if I can
4 use the --

5 MR. KECKLE: Please. And, Your
6 Honor, would it be okay if Dr. Kelman stood with me?

7 JUDGE VANDYK: Absolutely.

8 BRUCE J. KELMAN: -- Thank you.

9 JUDGE VANDYK: If you -- just a
10 one admonition, Dr. Kelman, keep your voice up so our
11 recording devices will pick you up.

12 BRUCE J. KELMAN: All right.

13 Actually, dose response is -- it's probably not a
14 terminology you've heard before, but it's not a
15 secret. And, most of you have probably experience
16 it. An example that I use to teach my graduate
17 classes starts with coffee, drinking coffee. If you
18 were to drink one cup of coffee, a few cups, the
19 cups I'm talking about here are five ounce cups, so
20 that the cups of coffee you might get at, oh, at
21 Starbucks can go up to 20 ounces. So, that would be
22 four of these cups. If you drink a couple cups of
23 coffee it may taste good, but it doesn't make much
24 difference, in terms of your feeling alert, for most
25 people. But, if you go on to drink six or seven

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1 cups of coffee you'd start feeling actually much more
 2 alert, maybe even a little bit jittery, and depending
 3 on the individual. And, of course, here we're still
 4 talking about these five-ounce cups of coffee. So,
 5 that means that -- oh -- a vente is 20 ounces, so a
 6 couple of ventes you'd start feeling a bit jittery.
 7 If you consume the amount of caffeine that's in 20
 8 cups of coffee, and to do that -- on first glance
 9 you might say, "Well, that's not likely to happen,"
 10 and that's true. That's one of the reasons that
 11 coffees actually pretty safe to drink. But, if you
 12 happen to be taking a diet pill that had caffeine in
 13 it, and you were drinking coffee, and you were a
 14 college student taking [inaudible] on top of that,
 15 it's quite possible to drink the amount of caffeine,
 16 and equivalent amount of caffeine. And, in that
 17 case, if you got up to the 20 cups, you'd feel
 18 really jittery. In fact, if you held your hand out
 19 you'd have what's called a fine tremor and shake a
 20 little bit. And, your stomach would probably be
 21 pretty upset too. Now, let's say you lost all track,
 22 you took too many of those [inaudible], and you were
 23 staying up all night drinking the coffee. Now, in
 24 that case, it is possible to get up to 50 cups of
 25 coffee, at the amount of caffeine that's in the

Page 11

1 of the bucket. And, when the water comes over the
 2 edge you've reached the threshold, in this case you're
 3 considering death. And, you get an effect after the
 4 threshold. As long as the water is below the level
 5 of the threshold you don't have an effect for that
 6 particular [inaudible]. Finally, for the most basic
 7 part, the question of time comes in. And, actually
 8 the caffeine in coffee you metabolize, you change its
 9 form in your body so it can be excreted. And, I've
 10 shown metabolism and excretion by punching two holes
 11 in the bottom of the bucket. And, as the water runs
 12 out, by being either excreted or metabolized, it makes
 13 it more difficult to reach that threshold. So, those
 14 concepts are the heart of toxicology. And, that's
 15 the reason when a toxicologist is faced with a
 16 situation, or asked the question, "Has exposure caused
 17 an injury?" The first thing that they're gonna ask
 18 is, "Well, how much are we talking about?" And, in
 19 situations where a toxicologist doesn't know how much
 20 you're talking about, we put together what's called a
 21 maximum exposure. It's the biggest exposure you can
 22 think of over the most ridiculous conditions. And,
 23 if that biggest exposure isn't sufficient to cause the
 24 adverse effect that you're looking at then the lower
 25 exposures don't matter. They're not gonna cause the

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1 equivalent of 50 cups of coffee, you'd feel sick. In
 2 fact, you might even become unconscious. And yet,
 3 this is coffee that with all of the strength. Now,
 4 one of the basic tenants of toxicology is that
 5 there's a fatal dose for every, single chemical. So,
 6 in this case we're talking about coffee. 75 to 85
 7 cups of coffee is a fatal dose for an adult unit.
 8 Now, obviously, that would be really hard to drink 75
 9 or 85 cups of coffee, even over an evening, which is
 10 why we can consume coffee and not need to worry about
 11 it killing us. But, there is a fatal dose of that.
 12 So, the basic idea is as you have less of a chemical
 13 you have less response. And, as you consume more, or
 14 are exposed to more, you have a bigger response.
 15 And, in fact, for every chemical there's an amount
 16 that's fatal and there's an amount that has no effect
 17 at all. Now, what that means is that talking about
 18 exposure to a chemical is not very [inaudible], or
 19 exposure to mica toxins. The real question that one
 20 has to ask is, "Are you exposed to enough to cause
 21 an injury?" Now, that concept of there's a certain
 22 amount you can be exposed to and it won't cause any
 23 effect, is called threshold. And, you've watched the
 24 bucket fill up with coffee. The threshold in this
 25 case would be the edge of the [inaudible], the edge

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1 effect.
 2 MR. KECKLE: Well, how do you use
 3 this -- this dose exposure -- how is that used to
 4 determine whether a chemical has in fact caused an
 5 effect?
 6 BRUCE J. KELMAN: Well,
 7 toxicologists have reached a generally accepted way of
 8 doing this, and it involves five different ideas.
 9 And, there actually -- when you say them out loud
 10 they sound -- they're pretty basic. So, the first
 11 question you ask is, "Has the chemical," or in this
 12 case the mica toxin, "Been shown to be present?" The
 13 second question you'd ask is, "Has the mica toxin
 14 ever been shown to cause the effect?" Now, to show
 15 that a mica toxin causes an effect you would have to
 16 go to either a clinical study, which unless it's a
 17 cancer study, is very unlikely because we aren't gonna
 18 expose people intentionally to something that could
 19 hurt them, or what's called an epidemiological study.
 20 And, the first place you go is data in people,
 21 because you're interested in people. If there's not
 22 data in people then there is a way to use animal
 23 models, but the first place you go is for data in
 24 people. An epidemiology study allows you to compare
 25 one group that's been defined against -- and

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1 supposedly exposed, against another group that hasn't
 2 been exposed. And, the reason you have to do that
 3 comparison is for most injuries and most disease
 4 processes there's a baseline that occurs. It's not
 5 that the injury never occurs, or the disease never
 6 occurs, it's that you'd expect it to increase in the
 7 exposed group. Oh, I'm sorry. I only got to the
 8 second and I told you there were five. The third
 9 one's what we were just talking about, dose response.
 10 "Was there enough present for a long enough period of
 11 time, and the right timeframe, to have any possibility
 12 of causing an injury?" And, then the fourth one has
 13 to do with timing. If you have a disease that's
 14 present before an exposure, well, then you could never
 15 say the exposure caused the disease cuz it was
 16 already there. And, if it's a -- a mica toxin, or
 17 a chemical that's metabolized quickly then many months
 18 or years after the exposure, unless the injury
 19 occurred right then, you wouldn't expect just to see
 20 the disease. So, the timing is very important. And,
 21 then the last one is, "Is there a better alternative
 22 explanation?" And, that last piece is normally what
 23 a physician does, because they're dealing with
 24 individuals.
 25 MR. KECKLE: Okay. Thank you,

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1 doctor. You were provided several materials to
 2 review, with respect to this case, is that correct?
 3 BRUCE J. KELMAN: Yes, quite a
 4 bit.
 5 MR. KECKLE: Okay. And, among
 6 those materials were medical records?
 7 BRUCE J. KELMAN: Yes.
 8 MR. KECKLE: Okay. And, you saw
 9 the stack of medical records that Mr. Vance and
 10 [inaudible] front, Dr. Marankavitch (Phonetic), I
 11 believe. Did you see that stack?
 12 BRUCE J. KELMAN: Yes.
 13 MR. KECKLE: Is it still up there?
 14 BRUCE J. KELMAN: No.
 15 MR. KECKLE: Okay. Okay. And,
 16 the stack that you reviewed was that as large, or
 17 larger than that?
 18 BRUCE J. KELMAN: Well, I couldn't
 19 really tell. I have three of these mostly double
 20 sided, and a fourth one that's a little bit smaller.
 21 So, there's quite a bit.
 22 MR. KECKLE: Several hundred pages,
 23 correct?
 24 BRUCE J. KELMAN: At least.
 25 MR. KECKLE: Or several thousands

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1 of pages probably.
 2 BRUCE J. KELMAN: It's probably
 3 closer.
 4 MR. KECKLE: Okay. And, isn't it
 5 true that you reviewed medical records dating back to
 6 19 -- I believe, ear -- late -- mid, late 80's?
 7 BRUCE J. KELMAN: I believe they
 8 went back that far for --
 9 MR. KECKLE: Renee Haynes, I'm
 10 sorry.
 11 BRUCE J. KELMAN: Yes.
 12 MR. KECKLE: Yes. I'm sorry, Mr.
 13 Haynes,
 14 BRUCE J. KELMAN: For Mrs. Haynes.
 15 MR. KECKLE: Did you also review
 16 any industrial hygiene reports?
 17 BRUCE J. KELMAN: Yes.
 18 MR. KECKLE: Okay, of mold testing
 19 in the home?
 20 BRUCE J. KELMAN: Yes.
 21 MR. KECKLE: Okay. Now, were Mrs.
 22 Haynes, and Michael, and Liam Haynes, were they
 23 exposed to mold?
 24 BRUCE J. KELMAN: Oh, yes, of
 25 course. There's nothing new about mold. Mold's

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1 everywhere. It's -- I don't know anybody that hasn't
 2 had mold grow in their showers at some time. In
 3 fact, mold is a quarter of the biomass of the earth.
 4 If it wasn't for mold things wouldn't get to be --
 5 they wouldn't digest, or they wouldn't decompose.
 6 MR. KECKLE: Well, I'm sorry --
 7 BRUCE J. KELMAN: In fact, the --
 8 all the molds that you find inside a house, are found
 9 outside. Stackybotris (Phonetic), the famous black
 10 mold, which actually is no more toxic than any other
 11 mold, is -- originally comes from decaying leaves and
 12 normally finds its way into the house, not through
 13 the air cuz it's too heavy, but tracked on people's
 14 feet. Well, there's a lot of decaying leaves out
 15 there, and every time you see a black mold there's a
 16 good change that that's stackybotris, cuz stackybotris
 17 likes to eat cellulose. And, those leaves wouldn't
 18 decay without it. All the other molds that you find
 19 inside growing on building materials grow outside as
 20 well.
 21 MR. KECKLE: And, what effect can
 22 someone get from mold?
 23 BRUCE J. KELMAN: Well, the
 24 American College of Occupational and Environmental
 25 Medicine has divided effects into three areas, and

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1 this is in their positions statement. And, I think
 2 it's important to understand the physician statement,
 3 although I said I was one of the authors I only
 4 began the process. So, I and two other authors were
 5 asked to put the report, the statement, together, but
 6 then went to a committee on scientific affairs. This
 7 committee on scientific affairs has twenty some
 8 physicians in it, they reviewed it, they sent it out
 9 to many more physicians, went to the board of
 10 directors, they reviewed it. I was told by the head
 11 of that committee that somewhere in the order of one
 12 hundred very critical physicians reviewed that paper.
 13 So, by the time it gets to the end of the process,
 14 the college adopts it as their position statement.
 15 And, their position statement says we have three
 16 possible effects. We have allergies, and 20% of the
 17 population develops allergies. About a quarter of
 18 those will develop allergies to mold. It's quite
 19 common actually. Infections, those are very special
 20 situations, and in general, the stuff that grows on
 21 building materials doesn't grow on people. The
 22 special molds grow on people. And, then what's
 23 called -- well, toxicity due to exposure to the
 24 toxins found in mold. The term is micatoxicosis
 25 (Phonetic), which if you've had a drink you won't be

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1 able to say very quickly. Toxicosis means toxic, and
 2 the mica refers to originating from fungi. So, those
 3 are the three effects. Sometimes you hear something
 4 about irritation. Irritation is always a combination
 5 of those three effects.
 6 MR. KECKLE: Okay. Well, were
 7 Renee -- I'm sorry, or Mr. Haynes [inaudible] were
 8 Mrs. Haynes, Michael, and Liam, were they exposed to
 9 sufficient levels of mica toxins to make them sick?
 10 BRUCE J. KELMAN: Well, actually,
 11 because you've got -- molds produce mica toxins
 12 sometimes. They don't always produce mica toxins.
 13 And, in fact, the fact that you've got mold present
 14 tells you nothing about what mica toxins are present,
 15 or how much is present. So, even in the laboratory
 16 where you're carefully controlling the conditions and
 17 trying to force the mold to grow mica toxins, to
 18 excrete mica toxins, scientists are not very
 19 successful doing that. So, to begin with, and as the
 20 first step of evaluation, I would look to see, "Do we
 21 have any measurements of mica toxins?" And, the
 22 answer is, "No." So, we really don't know whether
 23 there's any mica toxins present.
 24 MR. KECKLE: So, there's no data
 25 in this case, as to whether or not mica toxins were

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1 present in the -- in the indoor air in the Haynes
 2 home?
 3 BRUCE J. KELMAN: That's -- yes,
 4 that's correct.
 5 MR. KECKLE: And, I believe that's
 6 what Dr. Morankavitch also testified too, that he has
 7 no knowledge as to whether any mica toxins were
 8 actually present.
 9 BRUCE J. KELMAN: That's correct.
 10 MR. KECKLE: And, the industrial
 11 hygiene reports that you reviewed, did they have any
 12 testing, or any indication, as to whether mica toxins
 13 were actually present?
 14 BRUCE J. KELMAN: No.
 15 MR. KECKLE: I'm sorry. I didn't
 16 mean to interrupt.
 17 BRUCE J. KELMAN: Well, what we
 18 can use -- do is say in those circumstances, "Well,
 19 we don't know if mica toxins are present, but if they
 20 were what -- how much mica toxin could be present?"
 21 And, I think you heard this characterized as a
 22 [inaudible], but there's actually some relatively
 23 simple calculations we can do to see what's the
 24 highest amount of mica toxins somebody could be
 25 exposed to. Is this the right time to show that?

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1 MR. KECKLE: Oh, have you -- did
 2 you do those calculations?
 3 BRUCE J. KELMAN: Yes.
 4 MR. KECKLE: Well, let's -- did
 5 you do them for all the family members?
 6 BRUCE J. KELMAN: Yes.
 7 MR. KECKLE: Well, why don't we
 8 start with Mrs. Haynes and you can explain to the
 9 jury what the calculations are and what they mean.
 10 BRUCE J. KELMAN: Okay, I'm gonna
 11 need some help holding this up.
 12 JUDGE VANDYK: There's also an
 13 easel there, Dr. Kelman. It's laying back against
 14 the wall. Put it right here.
 15 BRUCE J. KELMAN: Okay. Now, I
 16 promise I'm not gonna test you on this, but this is
 17 almost [inaudible] divided. So, there's no real
 18 advanced math involved, but there's a lot of careful
 19 consideration. And, what I'm gonna do is I'm gonna
 20 start with the first line with a mica toxin that's
 21 called fumitremmagin (Phonetic). Tremor is the word we
 22 take out. And, this is a compound, and I'll show
 23 you later, where if it's administered to test animals,
 24 will cause a fine tremor, just like the coffee find
 25 here. If you give enough you can kill the animal,

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1 but the effect that I'm gonna compare this to is fine
2 tremor. And, I wanted to use just this first one as
3 an example, cuz you'll die if I go through all of
4 them. The first thing we did is we went to the
5 literature, and we said, "Okay, can we -- what's the
6 highest concentration of mica toxin that we can find,
7 per spore, in [inaudible]?" So, if you try and
8 produce mica toxin in these pores, what's the highest
9 amount? And, we found, in fact, it was -- well, we
10 had a number of pores. Just the way you read this
11 number, this [inaudible] means 10 to the minus eleven,
12 which is a number way too small for me to measure.
13 Then we'd say, "What's the highest indoor level of
14 spores we've got data on?" Now, I can speculate that
15 the levels are higher or lower, but in fact the
16 report that is closest to, in time, to when the
17 Haynes lived in the house, showed that the highest
18 concentration, [inaudible] spores, was 48/78.

19 MR. KECKLE: Now, Dr. Kelman,
20 before you move on. You've used the term, "The
21 literature," a couple times. What is that? What are
22 you referring to?

23 BRUCE J. KELMAN: When I do a
24 literature search, we're referring to the peer review,
25 scientific, and medical literature, and for these

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1 For breathing rate, because you have to get the
2 spores into you. Just the fact that spores are here
3 doesn't -- if they're growing here, they may look
4 disgusting, but they don't really -- they won't hurt
5 you. They have to get to you. For the most common
6 way, and the most effective way, is inhalation. And,
7 I'm using a breathing rate here that it's actually
8 BPA average rate. Now, that's too high for indoors,
9 cuz most of us don't exercise [inaudible] and the
10 average covers both sleeping and exercising. And, I'm
11 gonna assume that all the spores you bring in -- you
12 breath in, stay in. Now, actually, people are not
13 really vacuum cleaners. It doesn't work that way,
14 cuz we're breathing in spores all the time. Most of
15 the spores you breathe in, you breathe back out
16 again, a small fraction stay inside. But, for
17 purposes -- remember I was trying to go, "What's the
18 biggest amount?" I'm gonna say everything you breath
19 in stays in. For how long? Remember I told you
20 concentration and duration, which means the length of
21 time? Well, again, we're going use the maximum. You
22 can't do better than 24 hours a day. So, we'll
23 assume the person lived in that house 24 hours a day
24 in that environment, never left. For body weight, I
25 use 74.8 as a reasonable body weight for Mr. Haynes.

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1 purposes [inaudible] differentiate between those two.
2 Now, you've heard a kind of strange definition of
3 peer review. Peer review means that the person who
4 reviewed the article has no relationship to the person
5 who wrote it. The person who wrote it doesn't know
6 who's doing the reviewing. That's really important,
7 because otherwise the reviewers don't feel free to
8 severely criticize the article. I mean, I'm not
9 gonna criticize my friend's article, particularly if I
10 know that he knows that I reviewed it. So, I use
11 the peer review scientific literature. And, I will
12 admit, I constrain myself to the scientific
13 literature, [inaudible] chemistry and physics. So, we
14 went and the way we get this is with a very
15 sophisticated search mechanism on the computer that
16 examines a huge number of databases, and I don't
17 really know how many. Looking at the literature for
18 the subject. So, in this case we would go, "Okay,
19 what's the highest concentration of hemotremorgin
20 (Phonetic)?" We get a whole bunch of articles from
21 the laboratory, peer review laboratory studies, and
22 that was the highest number. Okay, we talked about
23 where this number came from. That was the highest
24 total spore count we found indoors. It was a little
25 bit after the occupation period, but not too far.

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1 And, if we multiply all of these together we come up
2 with a number. The number is expressed in the amount
3 of mica toxin per unit of weight for the person, and
4 that's just the designation a toxicologist use for
5 dose. So, once we have the maximum --
6 MR. KECKLE: Now, doctor, before
7 you take that exhibit down. That number you have
8 maxed -- I think I got a correct copy of it here.
9 You have maximum -- is that maximum indoor spore
10 concentration?

11 BRUCE J. KELMAN: Right.

12 MR. KECKLE: Okay. And, that --
13 and what is that number again?

14 BRUCE J. KELMAN: This is 4878 and
15 it comes from the industrial hygiene report that was
16 closest to the time [inaudible] moved in the house.

17 MR. KECKLE: Okay. And, that was
18 a report that -- and that was from testing done by
19 Mr. McConnell?

20 BRUCE J. KELMAN: Yes.

21 MR. KECKLE: He's here in the
22 courtroom today, and he was -- did the testing here,
23 at the request of Mr. And Mrs. Haynes, I believe is
24 what he testified to yesterday. Okay. Go ahead. I
25 didn't mean to interrupt.

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1 BRUCE J. KELMAN: I promise this
 2 is the last time we do [inaudible]. The -- so, this
 3 is the number that corresponds to this number down
 4 here. I just ran out of space. So, this is the
 5 maximum possible dose in milligrams per kilogram.
 6 That's the amount per unit of body weight. Okay.
 7 So, we've got this amount, what do we do with that?
 8 Well, now we want to compare it to some level that's
 9 an effects level. In other words, do we know
 10 anything about this hemotremorin? Well, we don't
 11 have any data [inaudible], cuz we're not gonna do the
 12 experiment on humans, but -- again, I looked
 13 extensively in the literature, and I looked for the
 14 lowest level that there's a reported effect. And, in
 15 this case, the effect was a perceptible tremor in a
 16 few mice that had been injected with this, but no
 17 deaths. And, I could compare the two numbers, but
 18 frankly, when you get down the numbers this small
 19 even I can't conceptualize them. So, I compared an
 20 exhibit that kind of gives you an idea of this
 21 difference. And, if I could have that --
 22 MR. KECKLE: Is this correct?
 23 BRUCE J. KELMAN: Okay. So,
 24 actually, that comes up [inaudible] building. If the
 25 maximum dose is one that we calculated, under all

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1 those ridiculous conditions, highest concentration per
 2 spore, living in the dwelling 24 hours a day and
 3 never coming out, high breathing rate, the highest
 4 regiment that we obtained. If you put all of those
 5 factors together and you represented the maximum
 6 exposure as the edge of this piece of paper --
 7 [inaudible] piece of paper, then the amount that would
 8 cause a perceptible tremor in a few mice that had
 9 been injected IP [inaudible], would be two Empire
 10 State Buildings stacked on top of each other. Now,
 11 for a toxicologist for that difference that means
 12 talking about things like, "Oh, what if there's more
 13 than one mica toxin?" There may be more than one
 14 mica toxin, but we're so far away [inaudible]. What
 15 if there's some interaction between the mica toxins
 16 that makes them more potent than just being alone?
 17 Well, again, this is such a huge difference it
 18 doesn't matter. In fact, in toxicology there is a
 19 way to deal with that, it's called safety factors. I
 20 won't go into those other than there is a way to
 21 deal with those kinds of uncertainties. So, using
 22 this example of hemotremorin [inaudible] -- I'm
 23 sorry, Mrs. Haynes, the dose is the edge of the piece
 24 of paper, and the level at which you'd have an effect
 25 in the experimental model is two Empire State

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1 Buildings stacked on top of each other. Now, we have
 2 similar, large discrepancies between the possible dose
 3 and the [inaudible] effect for a number of different
 4 mica toxins that I considered, that represent the
 5 range of different kinds of mica toxins. But, I
 6 think one of the most interesting ways of looking at
 7 that, and this is [inaudible] earlier is, well, what
 8 if those spores were stuffed with micotyne
 9 [inaudible]? Now, we're all allowed to eat
 10 [inaudible] and yet it is a very powerful mica toxin.
 11 And, in fact the most sensitive population, the people
 12 [inaudible] protect are kids [inaudible]. And, in --
 13 for this particular case, if we used the same
 14 exposure conditions and stuff those spores with
 15 affotoxin (Phonetic), which by the way you don't find
 16 growing on building materials. You find it growing
 17 on grain. But if you took that most powerful one
 18 [inaudible] the level that the FDA, the Food and Drug
 19 Administration, has said is safe to consume, this dose
 20 would be about a tenth of that, that's safe to
 21 consume, with all the safety factors that are built
 22 in there to protect kids [inaudible] peanut butter.
 23 So, we're just a long ways from any possible adverse
 24 affect from mica toxin. And, I will -- I want to
 25 remind you that this really doesn't apply to allergies

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1 or infections. That's a different kind of calculation
 2 that you do.
 3 MR. KECKLE: Now, did you do
 4 similar calculations for the children, Michael and
 5 Liam?
 6 BRUCE J. KELMAN: Yeah. I did.
 7 MR. KECKLE: And, what -- in the
 8 interest of time, what was your conclusions based on
 9 those similar?
 10 BRUCE J. KELMAN: Because children
 11 are smaller and the exposure parameters are a little
 12 bit different, the numbers don't come out the same,
 13 but there is huge differences. [Inaudible] for
 14 example, looking at that same neurotoxin. If the
 15 maximum dose that I calculated is the size of a coke
 16 can, then the dose where you hit these tremors would
 17 be three [inaudible] stacked on top of each other.
 18 That would be true -- I think that was for Michael.
 19 MR. KECKLE: I'm sorry.
 20 [Inaudible] right order. Yes, I believe that was
 21 correct.
 22 BRUCE J. KELMAN: Okay. And, it's
 23 similar for Liam, because they're about the same size.
 24 MR. KECKLE: So, based on -- based
 25 on your experience and your review of the information

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1 you were provided, the review of the literature, do
 2 you have an opinion based on reasonable scientific
 3 certainty, or probability, as to whether or not there
 4 was -- could possibly be enough mica toxins in this
 5 house to have caused any illness to either?
 6 JUDGE VANDYK: We'll get it taken
 7 care of. Let's answer this question first. Why
 8 don't you restate it, okay?
 9 MR. KECKLE: Okay.
 10 BRUCE J. KELMAN: I'm sorry.
 11 JUDGE VANDYK: That's all right.
 12 MR. KECKLE: Based on the studies
 13 that you have done, the literature that you had
 14 reviewed, the peer review literature that you have
 15 discussed, and your experience and training, have you
 16 formed an opinion based on reasonable scientific
 17 probability or certainty as to whether or not there
 18 was enough mica toxin in the home to have caused any
 19 illness to Mrs. Haynes, Michael Haynes, or Liam
 20 Haynes?
 21 BRUCE J. KELMAN: Yes.
 22 MR. KECKLE: And, what is that
 23 opinion, doctor?
 24 BRUCE J. KELMAN: There could not
 25 be. I mean, the differences between the maximum dose

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1 relationship between it. You can't predict one from
 2 the other, primarily because there's so much mold that
 3 present in the environment anyway.
 4 MR. KECKLE: Now, you've looked at
 5 the types of symptoms and effects that the Haynes
 6 family have claimed. A few of them, in the interest
 7 of time I'll only talk about a few of them. And,
 8 with Mrs. Haynes a few of the problems that she has
 9 been claiming are respiratory problems, hearing loss,
 10 memory loss, dizziness, neurological deficits, and
 11 depression. Now, in your professional opinion,
 12 doctor, are any of these -- well, have -- let me ask
 13 you this, have you formed an opinion, based on
 14 reasonable degree of scientific certainty, as to
 15 whether any of those symptoms can potentially be
 16 caused or are consistent with mica toxins?
 17 BRUCE J. KELMAN: Yes.
 18 MR. KECKLE: What is that opinion?
 19 BRUCE J. KELMAN: Well, first, I
 20 have to admit I do have a limitation here, because my
 21 limitation is the scientific literature, the scientific
 22 and medical literature, and basic laws of chemistry
 23 and physics. And, I'm not making up any new
 24 hypothesis on the spot. Well, based on the
 25 literature and what we know about how these things

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1 that we could come up with and the level at which we
 2 see effects for a broad range of mica toxins, is just
 3 too great.
 4 JUDGE VANDYK: All right. Now,
 5 we'll get this out of our way here. Okay.
 6 MR. KECKLE: There has been and
 7 will be a -- there's an assertion in this case by
 8 the Haynes family that they had to discard, and/or
 9 leave behind personal property that was exposed to
 10 mold spores. In your professional opinion, is that a
 11 reasonable thing to do? Does that need to be done?
 12 BRUCE J. KELMAN: Generally not.
 13 Remember there's mold spores everywhere. It doesn't
 14 matter what surface you take a measurement off of you
 15 can find mold spores. In our experience, particularly
 16 our industrial hygiene experience, if the item does
 17 not smell mold and you can't see mold growing on it,
 18 it's generally clean enough that you really don't need
 19 to do anything, because there's not indication that
 20 there's more mold spores on that item than there
 21 would be anywhere else sitting around. And, there's
 22 no correlation between mold, for example, growing on a
 23 wall and mold that's being inhaled by an individual
 24 or reaching a surface. In some circumstances you get
 25 higher levels, but there's just -- there's no

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1 behave, the scientific literature -- there's nothing
 2 in it that would show, using human data, that for
 3 example, memory loss. We have people who've studied
 4 it. There's not data that shows, with an
 5 epidemiological study, cuz we wouldn't do this in a
 6 clinical setting, that exposure to mica toxins, in
 7 inhaled mica toxins in an indoor setting causes memory
 8 loss. I could not -- I searched the world's
 9 literature and the only literature that appears to
 10 exist is the non-peer reviewed literature, where it's
 11 the opinion of single individuals. And, that's
 12 completely consistent with the conclusions of what we
 13 call learned bodies, of which the Institute of
 14 Medicine is considered a very high level of learned
 15 body. The Institute of Medicine is a branch of the
 16 National Academy of Sciences. I participated in that
 17 process. The committees are very, carefully chosen to
 18 represent a broad range of views. And, the academy
 19 itself is commissioned by the congress to conduct its
 20 studies.
 21 JUDGE VANDYK: Mr. Keckle I'm
 22 concerned --
 23 MR. KECKLE: [inaudible] two more
 24 questions.
 25 JUDGE VANDYK: -- about the

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1 opportunity to cross-examine. I wouldn't be much
2 concerned if Dr. Kelman could be made available again
3 as a witness.

4 MR. KECKLE: And, he can
5 [inaudible].

6 JUDGE VANDYK: And, he cannot even
7 by telephone.

8 MR. KECKLE: I don't know. Dr.
9 Kelman, would telephone be an option?

10 BRUCE J. KELMAN: That's actually
11 possible. I hadn't considered that.

12 JUDGE VANDYK: All right. Continue
13 with your questions.

14 MR. KECKLE: Thank you, Your Honor.
15 And, I should be able to finish up real quick.
16 Again, in the interest of time, with respect to the
17 children, Michael and Liam Haynes, just a few of the
18 symptoms -- there has been allegations of candida
19 (Phonetic), neurological damage, impaired neurological
20 development, impaired social development, and sensory
21 integration disorder, and compromised immune system for
22 Michael Haynes. Same question to a reasonable degree
23 of medical certainty as to whether there -- those
24 could be caused by Mica toxins?

25 BRUCE J. KELMAN: Just so that I

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1 tell me your understanding of the steps that were
2 taken by the Institute of Medicine in preparing this
3 step?

4 BRUCE J. KELMAN: Well, I would
5 have to do that from my general knowledge from having
6 served on other committees, and there was no
7 indication that this process was any different. The
8 individuals were chosen to represent a broad range of
9 views. The individuals write a text and then they
10 come together for a conclusion. If any individual
11 disagrees with the conclusions then they have the
12 right to write a minority report, and sometimes the
13 Institute of Medicine and National Academy committees
14 do write minority reports. In this case, there was
15 no minority report. And, the basic conclusions, which
16 I'd actually rather have in front of me --

17 MR. KECKLE: And, I also want to
18 ask you is the -- is this the committee that was
19 kept together for that study that's listed there?

20 BRUCE J. KELMAN: Yes.

21 MR. KECKLE: Okay. With respect
22 to the committee, can you just briefly identify a few
23 of those, and who they're affiliated with?

24 BRUCE J. KELMAN: Noreen Clark, the
25 Chairperson, is the Dean and she's also a Professor

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1 can get my hands around an answer, let me kind of
2 group that into two different groups. One is it
3 seemed like it was primarily neurological effects.
4 The neurological effects are very straightforward.
5 The peer review scientific literature just does not
6 support those effects. For effects, toxic effects, on
7 the immune system, which is different than allergic
8 effects, you can't argue both directions. If you had
9 an allergy developed to a mica toxin, which there's
10 not evidence of at all, the allergy means the immune
11 system is increased in function, it's overreacting.
12 You could have allergies to mold, but you can't have
13 an allergy and immune suppression at the same time,
14 cuz that's a decrease. Now, the scientific literature
15 does not support, again, a decreased functioning of
16 the immune system from exposure to molds in indoor
17 environments. I've looked and looked and it's just
18 not there. The allergy part definitely is.

19 MR. KECKLE: My final question,
20 doctor. Are you familiar with damp, indoor spaces?

21 BRUCE J. KELMAN: Yes.

22 MR. KECKLE: And, were you aware
23 that the study was going on, when it was going on?

24 BRUCE J. KELMAN: Yes, I was.

25 MR. KECKLE: Okay. And, can you

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1 of Public Health, and Professor of Pediatrics at the
2 University of Michigan.

3 MR. KECKLE: Are there any
4 political affiliations in that committee?

5 BRUCE J. KELMAN: No.

6 MR. KECKLE: Those are all --

7 BRUCE J. KELMAN: There's certainly
8 a wide range of views, but there -- I mean, the idea
9 that this is a political appointment is incredible.

10 MR. KECKLE: Okay. And, can you
11 just in a brief summary fashion describe the
12 conclusion that the Institute of Medicine came to,
13 with respect to mold and health effects?

14 BRUCE J. KELMAN: Yes. There's --
15 actually, the one I just pulled up was [inaudible]
16 environments. Here we go. They've divided these
17 things into four categories. And, in the language of
18 science there's always a possibility, a chance, that
19 there's a new study going to come out that will show
20 something different. So, the best one can say in
21 science is there's not just -- not sufficient data to
22 reach some kind of conclusion. And, I think most
23 telling is under the category of sufficient evidence
24 of a causal relationship, in other words, that
25 exposure to mold causes a particular disease, no

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1 outcomes met this definition. For sufficient evidence
2 of an association, which is different than cause and
3 affect. Association is storks and babies. You can
4 kill storks, it won't prevent babies. But, for an
5 association, sufficient evidence of association, upper
6 respiratory, nasal and throat [inaudible] symptoms,
7 cough, wheeze, asthma symptoms, in sensitive people.
8 Those are people who are allergic to molds. And
9 that's consistent with what we know about antibody
10 formation. Limited or suggested evidence of an
11 association is shortness of breath and upper
12 respiratory illness in other healthy -- otherwise
13 healthy children. So, this is just kind of a hint
14 of an association. Inadequate or insufficient
15 evidence to determine whether an association even
16 exists, not whether there's causal relationship, but
17 even the storks and the babies is airflow obstruction,
18 mucous membrane irritation syndrome, chronic
19 obstructive pulmonary disease, inhalation fevers, lower
20 respiratory illness, particularly what's called
21 pulmonary [inaudible] in infants, which is what the
22 CVC story was about. Skin symptoms, gastrointestinal
23 tract problems, fatigue, neuro psychiatric symptoms,
24 cancer, reproductive effects, and uminological
25 (Phonetic) type effects. So, this learned body came

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1 to the conclusion that there was insufficient evidence
2 to even show an association for the ones I just read
3 off.
4 MR. KECKLE: Okay. Thank you,
5 doctor. One just last, final question. You
6 indicated that the committee was appointed, or on the
7 committee that prepared that has a wide range of
8 views. What do you mean by that?
9 BRUCE J. KELMAN: Well, sorry. I
10 have to get my glasses back out again. There -- no
11 one is allowed on the committee who has a position
12 that could never change, cuz there wouldn't be any
13 point in having them on the committee. However, I
14 personally know Harriet Deman (Phonetic) who is one of
15 the members, and she has a strong believe that
16 there's at least the possibility that there's some
17 kind of relationship beyond what I was talking about.
18 She's expressed that in private. As a group when she
19 came to a consensus opinion, meaning she had the
20 right to right a minority opinion, she agreed with
21 these conclusions. I believe Dr. Gurnsy (Phonetic)
22 was kind of on the other side of the spectrum. She
23 didn't really think it was there, but she was
24 certainly willing to look at the data to see it.
25 And, that's what I mean by a spectrum of views.

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1 MR. KECKLE: The committee
2 consisted of people that both supported health effects
3 in mold and those that were skeptical of it?
4 BRUCE J. KELMAN: Yes.
5 MR. KECKLE: Together this is what
6 they conclude.
7 BRUCE J. KELMAN: That's correct.
8 MR. KECKLE: Thank you. Before I
9 conclude I'd like to request that Exhibit Number 175,
10 which is Dr. Kelman's critical [inaudible] be admitted
11 [inaudible].
12 JUDGE VANDYK: Any objection?
13 UNIDENTIFIED SPEAKER: No, Your
14 Honor.
15 JUDGE VANDYK: Exhibit 175 is
16 received.
17 MR. KECKLE: Thank you.
18 JUDGE VANDYK: All right. Mr.
19 Vance?
20 MR. VANCE: Yes, Your Honor. I'll
21 be brief, which may surprise you, but I'll try.
22 JUDGE VANDYK: It won't surprise
23 me. Go ahead.
24 MR. VANCE: Mr. Kelman, you're from
25 the Seattle area, is that right?

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1 BRUCE J. KELMAN: That's correct.
2 MR. VANCE: Well, welcome to
3 Oregon, Mr. Kelman.
4 BRUCE J. KELMAN: It's not too
5 far.
6 MR. VANCE: I'm sorry, Dr. Kelman.
7 But, you're not a medical doctor. You were straight
8 up about that. You said that, "I'm not a medical
9 doctor." Right?
10 BRUCE J. KELMAN: That's correct.
11 MR. VANCE: You studied at the
12 University of Illinois and you took some courses on
13 veterinarian -- veterinarian medicine, what do they
14 call that? Veterinary science?
15 BRUCE J. KELMAN: Well, the general
16 category is in the veterinary science area. The
17 research I conducted was within the veterinary school,
18 because they're the only ones -- I did my
19 experimentation on animals, and they're the only ones
20 that were qualified to handle animals.
21 MR. VANCE: So, you didn't achieve
22 a degree in -- as a veterinarian then?
23 BRUCE J. KELMAN: No. That wasn't
24 my intent of studying at the -- at the time I was
25 interested in research.

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1 MR. VANCE: Okay. I understand.
2 BRUCE J. KELMAN: And, the
3 veterinarian degree is a clinical degree.
4 MR. VANCE: And, now what you do
5 is you work for drug companies and you try to analyze
6 their drugs and help them with getting those drugs
7 approved by the Food and Drug Administration, isn't
8 that correct?
9 BRUCE J. KELMAN: That's one of a
10 broad range of -- of activities. There's a certain
11 number of tests, certain prescribed amount of testing
12 that has to be done by drugs before the FDA will
13 even consider them for release.
14 MR. VANCE: But, among your
15 cliental, you would include pharmaceutical companies?
16 BRUCE J. KELMAN: Yes.
17 MR. VANCE: How does that work?
18 If they hire you to help them with some study or to
19 get a drug approved is it like a confidential
20 relationship? You share information back and forth
21 and you talk about the properties of the drug and
22 what potential side effects are?
23 BRUCE J. KELMAN: Well, yes. I
24 mean, the discussion of the drug is confidential.
25 MR. VANCE: All right.

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1 BRUCE J. KELMAN: The testing
2 results are not.
3 MR. VANCE: Okay. Now, the
4 testing results; do you actually do these tests are
5 does someone else do the tests and you review them?
6 BRUCE J. KELMAN: Well, I did them
7 for a number of years and now I do what's called
8 directing them. So, I'll come into the laboratory
9 and inspect and make sure they're doing the tests
10 correctly.
11 MR. VANCE: And, then you help
12 write a report of some nature?
13 BRUCE J. KELMAN: Yes.
14 MR. VANCE: Okay. You mentioned,
15 I believe, dose response. And, I was curious about
16 that because I wanted to ask you about anaphylactic
17 shock, do you know what that is?
18 BRUCE J. KELMAN: Yes, I do.
19 MR. VANCE: And, are you familiar
20 with what they call the peanut allergy?
21 BRUCE J. KELMAN: Yes, I think the
22 key word is allergy.
23 MR. VANCE: Oh -- I was going to
24 ask you if you're familiar with the fact that you
25 don't need an awful lot of exposure to peanuts if you

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1 have that particular allergy, isn't that correct?
2 BRUCE J. KELMAN: The allergic
3 response is different. It's quite -- it's easy to
4 diagnose.
5 MR. VANCE: Okay. And, there are
6 people that are allergic to certain kinds of medicines
7 and if they get the wrong kind of prescription from
8 their pharmacist they could be in a lot of trouble
9 after just taking a few pills, isn't that true?
10 BRUCE J. KELMAN: Well, the
11 allergic process is completely different.
12 MR. VANCE: Well, isn't it true --
13 BRUCE J. KELMAN: Yes, the dose
14 response -- I think I indicated that when I was
15 showing this, the dose response for a chemical effect,
16 which is what I'm talking about, is different than
17 the dose response for an affect from antibodies.
18 MR. VANCE: Okay. And, people
19 that happen to be allergic to bee stings. If they
20 get stung by a bee they can go into anaphylactic
21 shock with a single bee sting, isn't that true?
22 BRUCE J. KELMAN: Yes.
23 MR. VANCE: So, the dose response
24 wouldn't really apply to certain individuals that
25 might have a predisposition or a certain allergy,

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1 isn't that a fair statement?
2 BRUCE J. KELMAN: No. That's not
3 correct at all. It's a different dose response.
4 MR. VANCE: Well, what we're
5 talking about --
6 BRUCE J. KELMAN: There is an
7 amount that they can be exposed to that they will not
8 react to.
9 MR. VANCE: But, the dose response
10 theory, you're not trying to apply that then to
11 people that have a certain susceptibility? You're
12 trying to apply that to people that don't have a
13 certain sensitivity. Am I understanding that correct?
14 BRUCE J. KELMAN: No. The dose
15 response -- you can still give some amount of antigen
16 without the body recognizing that antigen. The
17 difference is we call it -- the dose response is very
18 steep for the allergic response, and it has a
19 slightly different shape. But, there are some toxins
20 that are exquisitely toxic also, for example,
21 botchilism (Phonetic). I don't know if -- that's
22 what you get in [inaudible]. It's been calculated it
23 only takes 12 botchilium (Phonetic) molecules to
24 cause death in a human. That's a very steep dose
25 response, and that would be similar to an antibody

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1 response in that it's a steep response.
 2 MR. VANCE: Thank you, Dr. Kelman.
 3 Thank you. I think it answers my questions. Dr.
 4 Kelman, you're not saying that there's no medical
 5 literature -- and that there's [inaudible] or that
 6 there's no medical literature out there connecting
 7 mold with health problems are you?
 8 BRUCE J. KELMAN: Certainly not.
 9 MR. VANCE: Okay.
 10 BRUCE J. KELMAN: We know that
 11 people can be allergic to mold.
 12 MR. VANCE: Thank you. And, you
 13 mentioned -- what was it the American Congress of
 14 Occupational and Environmental Medicine?
 15 BRUCE J. KELMAN: No. It's the
 16 American College of Occupational and Environmental
 17 Medicine.
 18 MR. VANCE: American College. Now,
 19 this isn't a university, is it?
 20 BRUCE J. KELMAN: No. This is a
 21 professional college.
 22 MR. VANCE: Well, it's more of a
 23 trade association, isn't it? It's a group, it's an
 24 association of doctors and people that study certain
 25 things?

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1 BRUCE J. KELMAN: No. Actually,
 2 it's a learned body. So, calling it a trade
 3 association is ridiculous.
 4 MR. VANCE: Well, I just went to
 5 the website and they call themselves an association.
 6 And, that's why -- and you can go to their website
 7 and you can look them up and you can see [inaudible]
 8 their an association, correct?
 9 BRUCE J. KELMAN: Well, they are
 10 an association. There's lots of different of
 11 associations.
 12 MR. VANCE: Well, I understand
 13 that, but I'm talking about this particular college.
 14 It's not a university --
 15 BRUCE J. KELMAN: You used the
 16 word trade association. It's not a trade association.
 17 MR. VANCE: -- it's not a
 18 university and it's not an educational institution.
 19 It's more of a group of people.
 20 BRUCE J. KELMAN: It's certainly a
 21 learned body, yes.
 22 MR. VANCE: Well, and I'm not
 23 arguing with you, sir. I'm just saying it's a group
 24 of people rather than an educational institution. You
 25 don't go there to get a degree.

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1 BRUCE J. KELMAN: No. You
 2 wouldn't go there to get a degree, although they
 3 teach many, many course.
 4 MR. VANCE: Thank you. Thank you.
 5 Because your testimony was that a few PhDs have been
 6 admitted.
 7 BRUCE J. KELMAN: That's correct.
 8 MR. VANCE: All right. Isn't it
 9 true that you testified in a case in Arizona, Carrie
 10 Killian versus Equity Residential Trust, United States
 11 District Court for the District of Arizona, trial date
 12 on June 22nd, 2004, do you recall your testimony on
 13 that case?
 14 BRUCE J. KELMAN: I recall
 15 testifying. I don't recall exactly what I said.
 16 MR. VANCE: You testified for the
 17 defense in that case, is that right?
 18 BRUCE J. KELMAN: That's correct.
 19 MR. VANCE: All right. And, in
 20 that case -- in your testimony you mentioned that
 21 there are approximately 6,000 members of [inaudible]
 22 College of Occupational and Environmental Medicine, do
 23 you recall that?
 24 BRUCE J. KELMAN: That's the last
 25 -- I don't recall testifying to that, but that's the

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1 last figure I've seen.
 2 MR. VANCE: Okay. 6,000. Now,
 3 membership in that group is not restricted to doctors
 4 or PhDs is it?
 5 BRUCE J. KELMAN: The last I heard
 6 it was, but it's possible if they had [inaudible]
 7 yes, the process is the committee on scientific
 8 affairs puts it together, it's reviewed by the board
 9 of directors and those physicians that they feel will
 10 give it usually the most -- the greatest criticism.
 11 And, of course, you couldn't possibly deal with 6,000
 12 comments.
 13 MR. VANCE: No. But, you could
 14 have -- make it a little bit more democratic than 100
 15 out of 6,000 members, couldn't you? I mean, let's --
 16 don't you think that's fair to be a little more
 17 democratic than that? Dr. [inaudible] I would draw
 18 the question -- Dr. Eckheart Yohanning (Phonetic), do
 19 you know who he is?
 20 BRUCE J. KELMAN: Oh, yes.
 21 MR. VANCE: He's one of the
 22 pioneers on molds and bioaerosols (Phonetic) in the
 23 nations, isn't he?
 24 BRUCE J. KELMAN: I wouldn't use
 25 the word pioneer.

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1 MR. VANCE: Well, he wrote a book
2 on bioaerosols that so long ago that it's not out of
3 print, isn't that true?
4 BRUCE J. KELMAN: He's written a
5 number of them, none of which have been peer
6 reviewed, none of which were subject to criticism or
7 critical review.
8 MR. VANCE: Isn't it fair to say,
9 Mr. Kelman, he was writing books on mold when you and
10 I were still in high school?
11 BRUCE J. KELMAN: Actually, I don't
12 how old he is or when his first review came out.
13 MR. VANCE: Okay. That's fair.
14 That's fair enough. Dr. Yohanning gave a speech in
15 Boston after this paper that you and some others
16 wrote, and he wasn't very happy about it. He said
17 that this so called paper -- he said, "If you look
18 at how it was generated you'll realize," and he says
19 he has legal documents to prove it --
20 MR. KECKLE: This is hearsay.
21 This is hearsay.
22 MR. VANCE: -- that it wasn't
23 objective.
24 JUDGE VANDYK: You haven't laid the
25 foundation --

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1 MR. KECKLE: I'd like to see those
2 documents.
3 JUDGE VANDYK: Hold it, hold it,
4 hold it, hold it. Wait a minute. Wait a minute.
5 MR. VANCE: Have you heard this
6 criticism from Mr. --
7 JUDGE VANDYK: Mr. Vance? MR.
8 VANCE: Your Honor, I'm sorry I did not hear.
9 JUDGE VANDYK: All right. We have
10 an objection.
11 MR. VANCE: I'm sorry, Your Honor.
12 JUDGE VANDYK: And, please don't
13 answer if I -- cuz I have to make a ruling. I got
14 a job too.
15 MR. VANCE: I'm sorry, Your Honor,
16 I didn't hear.
17 JUDGE VANDYK: That's all right.
18 You haven't laid an adequate foundation for this
19 confrontation.
20 MR. VANCE: Fine, Your Honor, I
21 will. I assume you've heard Dr. Yohanning's criticism
22 given his high profile in the medical community.
23 BRUCE J. KELMAN: Well, first of
24 all, I disagree with the characterization of high
25 profile, and I've not heard him speak. So, no, I

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1 haven't heard it, nor have I read it.
2 MR. VANCE: Well, you've heard that
3 he has criticized you study, though, haven't you?
4 BRUCE J. KELMAN: Are you talking
5 about the position statement from the American College
6 of Occupational and Environmental Medicine?
7 MR. VANCE: Yes, sir, I am. I am
8 talking about that?
9 BRUCE J. KELMAN: I'm sure he
10 criticized that.
11 MR. VANCE: All right. So, it
12 doesn't surprise you to learn that he's called it in
13 a speech in Boston, "Undemocratic and not objective"?
14 BRUCE J. KELMAN: Well, I guess I
15 would have trouble with the characterization from Dr.
16 Yohanning of "unobjective". I'd say critical review
17 by 100 critical, very critical, physicians is quite
18 objective, and I would also have to say that normally
19 when one picks a learned body, you don't do it
20 democratically. You pick the people that have the
21 best scientific credentials and the best knowledge of
22 the area.
23 MR. VANCE: Well, I certainly don't
24 expect you to ask medical students to participate in
25 this study. I mean, we have other things to do

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1 [inaudible] but --
2 BRUCE J. KELMAN: Wait. Are you
3 talking about the American College of Occupational --
4 MR. VANCE: Yes, I am.
5 BRUCE J. KELMAN: Okay. I could
6 hardly call that a study.
7 MR. VANCE: Well, you paid for
8 that?
9 JUDGE VANDYK: Mr. Vance?
10 MR. VANCE: Yes, Your Honor.
11 JUDGE VANDYK: We're gonna end this
12 here now, unless --
13 MR. VANCE: I just have just a two
14 more -- three or four more question, Your Honor.
15 Please --
16 JUDGE VANDYK: You're gonna hold
17 him to that, okay?
18 MR. VANCE: All right.
19 JUDGE VANDYK: All right.
20 MR. VANCE: You didn't identify
21 who you worked with when you first started testifying.
22 You said that you're from GlobalTox. And now you say
23 you're from GlobalTox, cuz I can see your resume, is
24 that right?
25 BRUCE J. KELMAN: Yes, GlobalTox is

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1 the name of my practice.
 2 MR. VANCE: And, you're actually
 3 one of the owners of GlobalTox, aren't you.
 4 BRUCE J. KELMAN: One's normally an
 5 owner of a practice, yes.
 6 MR. VANCE: Yes. GlobalTox is an
 7 international corporation, isn't that true?
 8 BRUCE J. KELMAN: We have offices
 9 in the US and in Canada, and we work across the US.
 10 MR. VANCE: Okay. Do you have any
 11 offices --
 12 BRUCE J. KELMAN: I mean, I'm
 13 sorry, across the world.
 14 MR. VANCE: You have offices in
 15 Europe?
 16 BRUCE J. KELMAN: No. We do not.
 17 MR. VANCE: Okay. Now, this
 18 revision of the Colleges of Occupation and
 19 Environmental Medicines state --
 20 BRUCE J. KELMAN: What revision?
 21 MR. VANCE: The revision -- you
 22 said that you were instrumental in writing the
 23 statement, and then later on you said you and a
 24 couple other colleagues wrote a revision of that
 25 statement, isn't that true?

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1 BRUCE J. KELMAN: No, I didn't say
 2 that.
 3 MR. VANCE: Well --
 4 BRUCE J. KELMAN: To help you out
 5 I said there were revisions of the position statement
 6 that went on after we had turned in the first draft.
 7 MR. VANCE: And, you participated
 8 in those revisions?
 9 BRUCE J. KELMAN: Well, of course,
 10 as one of the authors.
 11 MR. VANCE: All right. And, isn't
 12 it true that the Manhattan Institute paid GlobalTox
 13 \$40,000 to make revisions in that statement?
 14 BRUCE J. KELMAN: That is one of
 15 the most ridiculous statements I have ever heard.
 16 MR. VANCE: Well, you admitted to
 17 it in the Killian deposition, sir.
 18 BRUCE J. KELMAN: No. I did not.
 19 MR. VANCE: Your Honor, may I
 20 approach. Would you read into the record, please,
 21 the highlighted parts of pages 905 and 906 of the
 22 trial transcript in that case.
 23 MR. KECKLE: Your Honor, I would
 24 ask that Dr. Kelman be provided the rest of the
 25 transcript under the rule of completeness. He's only

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1 been given two pages.
 2 JUDGE VANDYK: Do you have a copy
 3 of the transcript?
 4 MR. KECKLE: I do not.
 5 MR. VANCE: Your Honor, I learned
 6 about Dr. Kelman just a --
 7 JUDGE VANDYK: How many pages do
 8 you have?
 9 MR. VANCE: I have the entire
 10 transcript from pages --
 11 JUDGE VANDYK: All right. Hand
 12 him the transcript.
 13 MR. VANCE: -- I'd be happy to
 14 give it to him, Your Honor.
 15 JUDGE VANDYK: All right.
 16 MR. VANCE: Would you read into
 17 the record the highlighted portions of that
 18 transcript, sir?
 19 BRUCE J. KELMAN: "And, that new
 20 version that you did for the Manhattan Institute, your
 21 company, GlobalTox got paid \$40,000. Correct. Yes,
 22 the company was paid \$40,000 for it."
 23 MR. VANCE: Thank you. So, you
 24 participated in writing the study, your company was
 25 paid very handsomely for it, and then you go out and

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1 you testify around a country legitimizing the study
 2 that you wrote. Isn't that a conflict of interest,
 3 sir?
 4 BRUCE J. KELMAN: Sir, that is a
 5 complete lie.
 6 MR. VANCE: Well, your vouching for
 7 your own self [inaudible]. You write a study and you
 8 say, "And, it's an accurate study."
 9 BRUCE J. KELMAN: We were not paid
 10 for that. In fact, the sequence was in February of
 11 2002, Dr. Brian Harden, and [inaudible] surgeon
 12 general that works with me, was asked by American
 13 College of Occupational and Environmental Medicine to
 14 draft a position statement for consideration by the
 15 college. He contacted Dr. Andrew Saxton, who is the
 16 head of immunology at UC -- clinical immunology at
 17 UCLA and myself, because he felt he couldn't do that
 18 by himself. The position statement was published on
 19 the web in October of 2002. In April of 2003 I was
 20 contacted by the Manhattan Institute and asked to
 21 write a lay version of what we had said in the ACOEM
 22 paper -- I'm sorry, the American College of
 23 Occupational and Environmental Medicine position
 24 statement. When I was initially contacted I said,
 25 "No." For the amount of effort it takes to write a

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<p style="text-align: right;">Page 57</p> <p>1 paper I can do another scientific publication. They 2 then came back a few weeks later and said, "If we 3 compensate you for your time, will you write the 4 paper?" And, at that point, I said, "Yes, as a 5 group." The published version, not the web version, 6 but the published version of the ACOEM paper came out 7 in the Journal of Environmental and Occupational 8 Medicine in May. And, then sometime after that, I 9 think it was in July, this lay translation came out. 10 They're two different papers, two different activities. 11 The -- we would have never been contacted to do a 12 translation of a document that had already been 13 prepared, if it hadn't already been prepared. 14 MR. VANCE: Well, your testimony 15 just a second ago that you read into the records, you 16 stated in that other case, you said, "Yes. GlobalTox 17 was paid \$40,000 by the Manhattan Institute to write 18 a new version of the ACOEM paper." Isn't that true, 19 sir. 20 BRUCE J. KELMAN: I just said, we 21 were asked to do a lay translation, cuz the ACOEM 22 paper is meant for physicians, and it was not 23 accessible to the general public. 24 MR. VANCE: I have no further 25 questions for him.</p>	<p style="text-align: right;">Page 59</p> <p style="text-align: center;">CERTIFICATE</p> <p>1 2 3 4 I, Aimee L. Clem, do hereby certify that 5 the matter herein mentioned on the preceding 6 title page was transcribed via tape recording. I 7 transcribed all testimony adduced and other oral 8 proceedings had in the foregoing matter; and 9 that the foregoing transcript pages constitute a 10 full, true and correct record of such testimony 11 adduced and oral proceeding had and of the 12 whole thereof. 13 14 IN WITNESS HEREOF, I have hereunto set 15 my hand this 15th day of March, 2005. 16 17 18 19 Signature Expiration Date 20 21 22 23 24 25</p>
<p style="text-align: right;">Page 58</p> <p>1 JUDGE VANDYK: All right. Mr. 2 Keckle, can you forgo any redirect with this witness 3 and he can be excused? 4 MR. KECKLE: I can, Your Honor. 5 JUDGE VANDYK: I'm sure he's gonna 6 appreciate that. All right. Thank you, Dr. Kelman. 7 (End of Dr. Kelman's testimony) 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	

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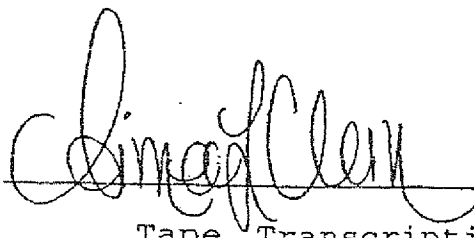
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